1982 AMEDD PSYCHOLOGY

MULTIPLE FUNCTIONS & CHALLENGES

15 - 19 NOVEMBER 1982

DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER

AUGUSTA, GEORGIA

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The Proceedings document the 1982 symposium presentations and group reports. Presentations dealt with: psychological service delivery to Vietnam veterans with stress disorders, psychological effects of high altitude exposure, family therapy, division psychology, neuropsychological assessment, health psychology, combat stress reactions, community mental health, MMPI assessment, and organizational effectiveness. Task reports from committees on division psychology, fitness, policy/professional practice, reserve and National Guard components were made. Articles on division psychology were collected.
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AU#: P003 964 TITLE: The Status of AMEDD Psychology
P003 965 Contributions of AMEDD Psychology: 1950's - 1970's
P003 966 Establishing a Vietnam Veterans Rap Group
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P003 968 Preliminary Report on Tri-Model Treatment Based Stress Management Program for the Psychosomatic Patient
P003 969 Psychological Effects of Soldier Acute High Altitude Exposure: Study Progress Report
P003 970 A Rationale for Family Therapy with Military Populations
P003 971 Stress Management
P003 972 Human Resource Center Concept
P003 973 Division Psychology in Europe
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P003 975 Rapid Evaluation of Family Dynamics: On the Evaluation of Family Crisis Situations
P003 976 How Parenting Can Help Children with Educational Difficulties
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and Participation with a Combat Unit during Continuous Operations

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P003 995 Combat Stress Reactions Occurring in the Israeli Defense Force during the Lebanon Conflict of 1982

P003 996 Battle Stress Casualties in the Israeli Defense Force during the War in Lebanon. Revision

P003 997 Tasks and Functions in Dealing with Combat Stress Reactions
1982 ARMY MEDICAL DEPARTMENT PSYCHOLOGY SYMPOSIUM
MULTIPLE CHALLENGES AND FUNCTIONS
14 - 19 November 1982
DWIGHT DAVID EISENHOWER ARMY MEDICAL CENTER
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MAJ Barry N. Blum, Ph.D., Pediatric Psychologist, Psychology Service, Dwight David Eisenhower Army Medical Center, Fort Gordon, GA.

Dr. Patrick A. Boudewyns, Ph.D., Chief, Psychology Service, Veterans Administration Medical Center, Augusta, GA.

CPT Ralph D. Bruno, Ph.D., Staff Psychologist and Director of Clinical Psychology Internship Training, Dwight David Eisenhower Army Medical Center, Fort Gordon, GA.

LTC Brian H. Chermol, Ph.D., Chief, Behavioral Science Specialist Branch, Behavioral Science Division, Academy of Health Sciences, Fort Sam Houston, TX.

Dr. Robert B. Craft, Ph.D., Neuropsychologist, Neurology Service and Chief, Medical Psychology Section, Veterans Administration Medical Center, Augusta, GA.

MAJ Lloyd I. Cripe, Ph.D., Clinical Neuropsychologist and Director of Neuropsychology Fellowship at Madigan Army Medical Center, Tacoma, WA.

Brigadier General Robert T. Cutting, MA, MPH, MD., Commanding General, Dwight David Eisenhower Army Medical Center, Fort Gordon, GA.


LTC(P) Francis J. Fishburne, Ph.D., Chief, Psychology Service and Clinical Psychology Internship Program, Walter Reed Army Medical Center, Washington, D.C.

MAJ James W. Futterer, Ph.D., Community Mental Health Fellow, Community Mental Health Activity, William Beaumont Army Medical Center, Fort Bliss, TX.

LTC David H. Gillooly, Ph.D., Chief, Community Mental Health Service, Department of Psychiatry Army Medical Center, Fort Sam Houston, TX., Psychology Consultant to Clinical Medical Division, Deputy Chief of Staff, Professional Activities, HQ., US Army Health Service Command, Fort Sam Houston, TX.

CPT James Goodwin, Psy.D., Division Psychologist, 24th Medical Battalion, 24th Infantry Division, Fort Stewart, GA.

MAJ Gary R. Greenfield, Ph.D., Chief, Community Mental Health Activity, William Beaumont Army Medical Center, Fort Bliss, TX.

Dr. Lawrence C. Hartledge, Ph.D., Professor of Neurology, Professor of Pediatrics and Head of Neuropsychology, Medical College of Georgia, Augusta, GA.

CPT Daniel E. Hendricks, Ph.D., USA Human Engineering Laboratory, Aberdeen Proving Ground, Maryland.

CPT C. Alan Hopewell, Ph.D., Chief, Clinical Psychology Service, Brooke Army Medical Center, Fort Sam Houston, TX.

MAJ Robert C. Hulsebus, Ph.D., Psychologist, Alcohol Treatment Facility, 5th General Hospital, Bad Cannstatt MEDDAC, US Army Europe.

CPT Jacklyn E. Hungerland, Ph.D., Project Officer, US Army Training and Doctrine Command, Organizational Effectiveness Center and School, Fort Ord, CA. - Did not attend nor present.

Dr. Leon Hyer, Ed.D., Clinical Psychologist, Veterans Administration Medical Center, Augusta, GA.

LTC Timothy B. Jeffery, Ph.D., Chief, Psychology Service and Clinical Psychology Internship Program, William Beaumont Army Medical Center, El Paso, TX.

Brigadier General France F. Jordan, MA, Chief, Medical Service Corps, Director of Personnel and Commander, US Army Medical Department Personnel Support Agency, Department of the Army, Washington, D.C.

CPT Lawrence E. Klusman, Ph.D., Director of Clinical Psychology Internship Training, Walter Reed Army Medical Center, Washington, D.C.

MAJ Dennis Kowal, Ph.D., Research & Clinical Psychologist, Department of the Army Special Study, Office of Deputy Chief of Staff for Personnel, Department of the Army, Washington, D.C.

MAJ Gregory B. Laskow, Ph.D., Chief, Psychology Service, Letterman Army Medical Center, San Francisco, CA.

LTC Ernest Lenz, Ph.D., Chief, Psychology Service, 130th Station Hospital, Heidelberg MEDDAC and Psychology Consultant, 7th Medical Command, US Army Europe.

CPT Richard L. Luscombe, Ph.D., Psychologist, Mental Health Service, 279th Station Hospital, Berlin MEDDAC, US Army Europe.


LTC James E. McCarroll, MPH, Ph.D., Assistant Chief, Psychology Service, Walter Reed Army Medical Center, Washington, D.C.

LTC(Ret) John C. McCormack, Ph.D., Clinical Psychologist, in private practice. Former Chief of Psychology Service and Clinical Psychology Internship, Dwight David Eisenhower Army Medical Center, Fort Gordon, GA.
CPT Vladimir Nacev, Ph.D., Psychologist and Chief, Mental Hygiene Consultation Service, 5th General Hospital, Bad Cannstatt MEDDAC, US Army Europe. Did not attend nor present.


MAJ Raymond A. Parker, Ph.D., Chief, Psychology Service, Department of Psychiatry, 2nd General Hospital, Landstuhl MEDDAC, US Army Europe. Did not attend nor present.

CPT Steven C. Parkinson, Ph.D., Psychologist, Psychology Service, Walter Reed Army Medical Center, Washington, D.C.

COL Howard Prince, Ph.D., Professor and Head, Behavioral Science and Leadership Department, US Military Academy, West Point, NY. Did not attend nor present.

LTC Frank H. Rath, Jr., Ph.D., Chief, Psychology Service and Clinical Psychology Internship Program, Dwight David Eisenhower Army Medical Center, Fort Gordon, GA.

CPT Kenneth Rollins, Ph.D., Psychologist and Instructor Behavioral Science Specialist Branch, Behavioral Science Division, Academy of Health Sciences, Fort Sam Houston, TX. Did not attend nor present.

MAJ Harold D. Rosenheim, Ph.D., Chief, Psychology Service, Fitzsimons Army Medical Center, Denver, CO.

CPT Richard A. Sherman, Ph.D., Chief, Psychophysiology Service, Department of Clinical Investigation, Dwight David Eisenhower Army Medical Center, Fort Gordon, GA.

MAJ(P) John P. Shoeburg, Ph.D., Child Psychology Fellow, Clinical Psychology Service, Madigan Army Medical Center, Tacoma, WA.

CPT James R. Siebold, Ph.D., Chief, Psychology Service, US Army Community Hospital, Fort Campbell, KY. Did not attend nor present.

MAJ Robert F. Smith, Ph.D., Chief Psychology Service, 97th General Hospital, Frankfurt Army Regional Medical Center, Frankfurt MEDDAC, US Army Europe.

LTC Frank J. Sodetz, Ph.D., Deputy Director, Walter Reed Army Institute of Research and Research Psychology Consultant to The Surgeon General, Department of the Army, Washington, D.C. Funded guest speaker.

CPT Jonathan A. Stave, Ph.D., Staff Psychologist, Clinical Psychology Service, Brooke Army Medical Center, Fort Sam Houston, TX.

CPT(P) Federico Tamayo, Ph.D., Psychologist, Community Mental Health Activity, Ireland Army Hospital, Fort Knox, KY.
COL(Ret) Charles A. Thomas, Ph.D., Director of Alcohol Counseling Service and of Veteran Counseling Service, Lakeview Center, Inc., Pensacola, FL. Funded guest speaker.

MAJ James W. Thompson, Ph.D., Director of Clinical Psychology Internship Training, Silas B. Hays Army Hospital, Fort Ord, CA.

LTC(Ret) E. R. Worthington, Ph.D., Assistant Professor of Management, Business Administration Department, School of Business, West Texas State University, Canyon, TX.

CPT Elaine A. Zitomer, Ph.D., Chief, Psychology Service, 121st Evacuation Hospital, 8th Medical Command, 8th US Army, Korea. Did not attend nor present.

MAJ Anthony C. Zold, Ph.D., Chief, Psychology Service and Fellowship Program, Madigan Army Medical Center, Tacoma, WA. Funded guest speaker.

MAJ Thomas R. Waddell, Ph.D., Assistant Chief, Psychology Service and Director of Clinical Psychology Internship Training, William Beaumont Army Medical Center, El Paso, TX.

CPT Linda H. Walker, Ph.D., Psychologist and Program Evaluation Officer, Drug and Alcohol Consultation Branch, HQ 7th Medical Command, Heidelberg, Germany.

LTC William L. Wilson, Ph.D., Psychologist and Chief, Cadet Counseling Center, U.S. Military Academy, West Point, New York.
SCHEDULE FOR 1982 AMEDD PSYCHOLOGY SYMPOSIUM

SUNDAY 14 NOV 82

1700-2000 Registration  DDEAMC Psychology Staff

MONDAY 15 NOV 82

0730-0800 Late Registration  DDEAMC Psychology Staff

0800-0815 Welcome, Announcements  LTC Rath

0815-0830 Opening Remarks  BG Cutting

0830-0900 Status of AMEDD Psychology  COL Nichols

0900-1000 Contributions of and Challenges Faced by AMEDD Psychology: 1950s - 1970s  COL(Ret) Thomas

1000-1015 Break

1015-1100 American Health Psychology: Contributions and Challenges  Dr. DeLeon

1100-1130 AMEDD Psychology: Future Functions  COL Nichols

1200-1315 Lunch

1315-1700 Psychological Assessment and Treatment**

1315-1700 Workshop in Child and Family-I**

1315-1700 Psychological Assessment and Treatment Workshop**

1315-1445 Psychological Service Delivery to Vietnam Veterans with Stress Disorders  LTC Rath

1445-1500 Break

1500-1545 Tri Modal Treatment Based Stress Management Program  MAJ Rosenheim
1545-1615 Psychological Effects of Soldier Acute High Altitude Exposure
LTC Gillooly

1615-1700 Consultation to Units with Seventy Issues
LTC McCarroll

**Workshop in Child and Family-I**

1315-1445 Family Needs and Programs
CPT Siebold

1445-1500 Break

1500-1530 Rationale for Family Therapy
CPT Stave

1530-1630 Europe and CHAMPUS Developments; Screening Procedures
MAJ Zold & MAJ Blum

1630-1700 Discussion
MAJ Zold & MAJ Blum

1730-1900 No Host - Social Hour
**TUESDAY, 16 NOV 82**

**SUPPORTING THE SOLDIER IN GARRISON**

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<tr>
<th>Time</th>
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<tr>
<td>0800-0900</td>
<td>Psychology and Army Leadership</td>
<td>COL Prince</td>
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<td>0900-0945</td>
<td>Division and Community Psychology in Europe</td>
<td>LTC Lenz</td>
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<td>CPT Luscombe</td>
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<td>0945-1000</td>
<td>Break</td>
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<td>1000-1030</td>
<td>Women in the Army Study</td>
<td>MAJ Kowal</td>
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<td>1030-1105</td>
<td>Behavioral Science Specialists (91G) Training and Utilization</td>
<td>LTC Chermol</td>
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<td>1105-1200</td>
<td>MSC Career Activities Office Overview</td>
<td>LTC Hawkins</td>
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<td>1200-1315</td>
<td>Lunch</td>
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<td>1315-1700</td>
<td><strong>Workshop in Child &amp; Family-II</strong></td>
<td>MAJ Zold</td>
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<td>1315-1700</td>
<td><strong>Advanced Neuropsychology</strong></td>
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<td><strong>Advanced Neuropsychology</strong></td>
<td>MAJ Blum</td>
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<td>1515-1700</td>
<td>Rapid Evaluation &amp; Intervention with Families</td>
<td>MAJ(P) Shoberg</td>
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<td>1500-1515</td>
<td>Break</td>
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<td>1515-1630</td>
<td>What Parents Can Do At Home and Through Community Resources</td>
<td>MAJ Zold</td>
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<td>1630-1700</td>
<td>Discussion</td>
<td>MAJ Blum</td>
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<td>1315-1700</td>
<td><strong>Advanced Neuropsychology</strong></td>
<td>MAJ Cripe</td>
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<td>Program to be announced; will include presentation by CPT Hopewell</td>
<td>LTC(P) Fishburne</td>
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<td>2000-2130</td>
<td>Conversation Hour--Assisting Professionals At Risk for Substance Abuse</td>
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<tr>
<td>0800-0915</td>
<td>Health Psychology: An Overview and Selected Applications</td>
<td>LTC Jeffery</td>
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<td>Dr. Boudewyns</td>
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<td>0915-0930</td>
<td>Break</td>
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<td>0930-1100</td>
<td>The Role of Clinical Psychologists in Neuropsychology</td>
<td>MAJ Cripe</td>
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<td>Dr. Hartledge</td>
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<td>Dr. Craft</td>
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<td>1100-1200</td>
<td>Biofeedback: An Overview and Selected Applications</td>
<td>CPT Bruno</td>
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<td>CPT Sherman</td>
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<td>1200-1315</td>
<td>Lunch</td>
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<td>1315-1700</td>
<td><strong>Biofeedback Workshop</strong></td>
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<td>CPT Sherman</td>
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<td>1315-1700</td>
<td><strong>Group Psychotherapy Workshop</strong></td>
<td>Dr. McCormack</td>
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<td>1315-1700</td>
<td><strong>Open University</strong></td>
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<td>(1500-1515 - Break)</td>
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<td>1315-1700</td>
<td><strong>Biofeedback Workshop</strong></td>
<td>CPT Bruno</td>
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<td></td>
<td>Orientation to Clinical and Research</td>
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<td>Biofeedback Equipment and Treatment Programs at DDEAMC. Discussion of</td>
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<td>training for biofeedback providers and credentialing.</td>
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<td>Transportation provided, see CPT Bruno &amp; CPT Sherman</td>
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<td>1315-1545</td>
<td><strong>Group Psychotherapy Workshop</strong></td>
<td>Dr. McCormack</td>
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<td>Group Psychotherapy in AMEDD: One Workable Model. Presentation of</td>
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<td>theoretical model and pragmatic procedures for establishing, conducting</td>
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<td>and maintaining an outpatient psychotherapy group.</td>
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<td><strong>Open University</strong></td>
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<tr>
<td>1315-1500</td>
<td>The Army Psychologist as a Manager</td>
<td>LTC(Ret)</td>
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<td>Worthington</td>
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<td>1500-1515</td>
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<td>1515-1600</td>
<td>A Survey of Division Psychologists Experiences (Speaker's attendance uncertain)</td>
<td>CPT Rollins</td>
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<tr>
<td>1315-1400</td>
<td>Application of Group Dynamics to Preventive Dentistry</td>
<td>MAJ Smith</td>
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<td>1400-1500</td>
<td>Food and Chemical Sensitivities and Emotional Disturbance</td>
<td>MAJ Thompson</td>
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<td>1500-1515</td>
<td>Break</td>
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<td>1515-1600</td>
<td>Computer Applications in Clinical Psychology (Speaker's attendance uncertain)</td>
<td>CPT Hendricks</td>
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<td>1600-1700</td>
<td>Clinical Potpourri</td>
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<td>Infant Recognition of Father's Voice (Speaker's attendance uncertain)</td>
<td>MAJ Hulsebus</td>
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<td>Korean American Marriages (Speaker's attendance uncertain)</td>
<td>CPT Zitomer</td>
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<td>Anatomy of a Neuropsychology Fellowship (Speaker's attendance uncertain)</td>
<td>MAJ Parker</td>
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<tr>
<td>2000-2130</td>
<td>Conversation Hour-Financial Planning for Career Officers-One Approach</td>
<td>LTC(Ret) Worthington</td>
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THURSDAY, 18 NOV 82

PSYCHOLOGICAL SUPPORT IN COMBAT

0800-0900 Psychological Research in Support of Combat Effectiveness
   LTC Sedetz

0900-1000 Combat Psychology
   MAJ Greenfield
   LTC Chermo

1000-1015 Break

1015-1200 Combat Psychology (Continued)
   MAJ Futterer
   MAJ Brooks
   CPT(P) O'Brien
   CPT(P) Tamayo
   Dr. Mangelsdorff

1200-1315 Lunch

1315-1500 Use of the MMPI with an Active Duty Military Population
   LTC(P) Fishburne
   CPT Klusman
   CPT Parkinson

1500-1515 Break

1515-1700**Combat Psychology Skills Training Workshop**
   Dr. Mangelsdorff
   CPT(P) Tamayo
   CPT Nacev
   (Attendance Uncertain)

1515-1700**Consultation Considerations**
   Army 2000-Implications for Consultations
   CPT Hungerland

   Crisis Intervention in Military Unit Settings - A Developmental Approach
   MAJ(P) Shoberg

1900 Dinner
FRIDAY, 19 NOV 82

0800-0845 Overview of Child & Family Needs, Policies & Required Professional Psychological Support
   MAJ Zold

0845-0915 Community Mental Health Activity in a HEDDAC
   LTC Gillooly

0915-1000 Current Status and Expectations of AMEDD Psychiatry & Social Work (Not confirmed-contingent on separate funding)
   COL Rock
   COL Jensch

1000-1100 Add Hoc Committee Reports

1100-1200 OTSG and HSC Consultant's Summaries
This report summarizes the activities which took place during the AMEDD Psychology Course which was held 15-19 November in Augusta, Georgia. The course was attended by approximately 70 active duty psychologists. Most of them were clinical psychologists (68S's), but a few were psychological assistants (68U's). In addition, a number of active duty psychology interns attended, as did 7 reserve component psychologists.

The course was designed to accomplish six main purposes:

1. To permit the outgoing psychology consultant, COL Nichols, and the incoming consultant, LTC(P) Fishburne to report on recent developments and future prospects as seen from the perspective of the Surgeon General's office.

2. To allow Army psychologists to learn of the specialized concepts and methods being developed and applied by their fellow psychologists throughout the Army. A list of the topics and times when they were presented is enclosed at the beginning of this report. In addition, in most cases, a summary of the report was provided by the speaker and is included in this volume.

3. To allow psychologists to meet and discuss key issues of concern to psychology, and to make their recommendations on actions to be taken. For this purpose, six committees were established:
   a. Recruiting and retention
   b. Education and training
   c. Professional policy and practice
   d. Psychology in Army divisions
   e. Reserve component psychology issues
   f. Fitness programs

   The issues which each committee was asked to address and the recommendations they made are included in this report.

4. To allow Army psychologists, especially the newer ones, to meet formally and informally with their colleagues and to help develop an essential sense of group identity as Army psychologists.
5. To meet and hear presentations by civilian psychologists both from the local Augusta area and from the national level such as the former psychology consultant, Col(Ret) Charles A. Thomas, Jr. and Dr. Pat DeLeon, aide to Senator Inouye(D-Hawaii).

6. To receive the latest report on MSC activities and career issues from the Chief of the MSC, BG France F. Jordan, and the officer who manages the careers of most psychologists, LTC Bob Hawkins.

It is felt the course accomplished all these purposes. It was attended by the largest, best trained, and best qualified group of Army psychologists yet assembled at one course. Some very valuable information was exchanged, much of which indicated the great progress that AMEDD psychology has made since its formal establishment in the MSC in 1944. At the same time, there was a realistic appraisal of the strengths and weaknesses of the current situation. Finally, there was an active, practical series of discussions and recommendations on what needs to be done to further strengthen the status of AMEDD psychologists and the contributions they make to the AMEDD, Army soldiers and families, and the Army mission.

A vote of thanks is owed to the psychology staff of Dwight D. Eisenhower Army Medical Center, headed by LTC Frank Rath, for the excellent work done in preparing and coordinating this conference. Preparation of this report was handled by CPT Ralph Bruno and Dr. David Mangelsdorff.
This report on the status of psychology covers the period that I have served as psychology consultant which began in December 1981. It also contains observations based on my total period of service as an Army psychologist, which covers 30 years, beginning in October 1952.

Personnel Strengths: It would be misleading to tell you how we stand today since 1 out of every 7 psychologists is now attending the officer basic course at the Academy of Health Sciences. I will, therefore, tell you where we will stand in January 1983, when these officers have reported to their duty stations.

Slide 1 shows that we will have 87 doctoral level psychologists and 27 all-but-dissertations, 68U psychologists, for a total of 114 psychologists. I am hesitant to use the term psychologists for 68U's, but we do use them in 68S positions and are required to count them in our strength figures.

Slide 1 also shows that we have 51 68T's (Health Services Research Psychologists). This is almost 1/3 of our total psychology strength. The number of 68T positions and officers has been steadily growing over the years and these officers are playing an increasingly large and effective role in the AMEDD and the entire Army.

You will also notice from Slide 1 that we will have only 1 colonel on duty in January 1983 and that will be COL Harris who will be in a non-psychology position as XO of the US Army Hospital, Bad Cannstatt. However, our new psychology consultant, LTC Fishburne has been selected for promotion to 06. When he gets that rank it will double our strength in the rank of full colonel. LTC McCormack was also selected to be a full colonel, but he declined the promotion and retired in the fall of 1982. In January we will have 12 lieutenant colonels and 31 majors in the 68S field and the rest of our officers will be captains when the new year starts. The 68Ts will have 4 O-5s and 16 O-4s, the rest being O-3s.

Slide 2 shows the change in our strength since 1981. You will see we have gained 12 psychologists in one year. This has occurred because the number of psychologists we have acquired, chiefly as HPSP graduates, is greater than the number we lost. In the last year or two losses have been considerably less than they formerly were. Whether this is because of the tightening civilian job market or greater satisfaction with the Army is still not clear.

Slide 3 shows some historical trends since 1975. During that time, Army troop strength has been essentially constant but our psychology authorizations and strengths have varied greatly. Our requirements now stand at 131, which are
far more than we have authorized or assigned. We are only authorized 90, which means that only 69% of our required positions are authorized. This is one of the lowest percentages of authorizations of any SSI in the MSC.

The low percentage of authorizations is not just a statistical issue, it's a practical one. At any given time, we are only supposed to have on duty enough psychologists to fill our authorized positions, plus a small additional number called the THS allocation which covers people in transit, people in the hospital and people who are students. At the moment, our THS figure is 104. This means we have 10 more psychologists on duty than we are authorized since our actual strength is 114.

If you look at the actual distribution of our psychologists (Slide 5) the problem is even more clear. On 1 January we will have 89 authorized spaces filled with psychologists, leaving only 1 space unfilled. We will also have 19 psychologists assigned in unauthorized status and 6 in student status (3 at AHS, 3 as fellows). This adds up to our total actual strength of 114. Most of the 19 psychologists who are "unauthorized" are assigned to locations where they are "required but not authorized."

This situation is creating great problems for us because it makes it very hard to argue for new recruitment, either into the Clinical Psychology Internship Program (CPIP) or as direct acquisitions. It is further complicated by the fact that we will have 18 HPSP applicants applying for CPIP spaces starting in Sept 83. The question is, can we gain permission to bring in new people when we are already overstrength.

How has this "problem" arisen? One key reason is that we have been steadily losing authorizations. In 1978 and 1979 we hit a high of 97 authorizations, but we are now back to 90. Why did we lose them? In many cases it was because in 1977, 1978, 1979 and 1980 we did not have enough psychologists to fill all our authorizations, and so commanders took them away from us. Now we have more psychologists but in the meantime we have lost authorizations. It is absolutely crucial that we get them back. Those of you who create the spaces in the field have successfully argued for 131 requirements but you have not won the "authorizations" argument.

There are other factors to be considered. While we are overstrength in "psychologists" we are still not overstrength in 68S's. By using 68U's to fill spaces, we are making our personnel situation seem healthier than it really is. We will really not be "healthy" until all 68S authorizations are filled by 68S's.

It is true of course that many 68U's will become 68S's, and that they render valuable service in the meantime, but nonetheless their presence distorts the statistics and blurs the definition of what constitutes a fully qualified psychologist. This is a problem we must come to grips with and I hope it will be discussed and recommendations made during the conference.
I have also maintained that we will not be "well" until we have as great a percentage of authorizations as the other SSI's do. These average about 75% for the entire 68 series of SSI's and 79% for 68 series in TDA units which is where most of our psychology spaces are.

Our overstrength situation presents another problem. We have in recent years, encouraged non-HPSP people to apply for our internships so that the internships would not be captive ones that were only attended by people with Army service obligations. However, in view of our overstrengths we will have to fight very hard to get permission to take these non-obligors in 83-84.

I should add that this overstrength problem is a novel one for us, since for most of the last 30 years we have been in an understrength situation. Indeed, we would still be understrength if it were not for two key actions, both by former consultants. The first action was that in the early 1970's COL Thomas selected for schooling a highly talented group of officers with prior service as non-psychologists. This group had an unusually high retention rate, and most of our highly-effective senior psychologists now come from this group. For this action, COL Thomas deserves great credit.

We also owe LTC Dick Hartzell a vote of thanks for helping to get authority to put 67 psychology students into the HPSP program. It is this group which is now providing the greatest share of our young psychologists. Whether they will stay with us, of course, remains to be seen.

I should also add that having overstrengths is a far nicer problem to have than our former understrength problem was. Nevertheless, we must create suitable jobs for these extra people or we will soon lose them or their successors.

You may also be interested in our distribution of rank, as compared with what is authorized. Slide 4 shows these figures: For the 68S's only, it shows that we have 2 more LTC's and 10 more Majors than we are authorized. Fortunately, the MSC is still not setting promotion quota ceilings by specialty, so this overdistribution is not yet a problem. However, the failure to get as many field-grade authorizations as we actually have does create problems in assigning people. It means that many senior-rank positions for psychologists need to be created by suitable action at local installations.

If we examine the combined distribution in rank of 68S and 68U's as shown in Slide 5, we see that most psychologists still serve as company grade officers and only 38% are field-grade officers. Our most serious lack of strength occurs at the 05 and 06 level, largely because very few officers have been on duty or stayed on duty, long enough to achieve those ranks. However, because of good retention in the prior-service group our percentage of field-grade officers has greatly increased in recent years and is the best it has been since the 1960's.

Types of assignment: Having told you how many of us there are, now let me talk about where we are located. As you know, from the personnel location rosters
sent to most of you in April of this year, most psychologists are assigned to Medical Centers and Medical Department Activities. However, there are some special points to note: First, we will have 16 psychologists assigned to divisions, including 1 in Korea, 1 in Hawaii, 4 in Europe and 10 in the CONUS. Second, we will have 17 psychologists in Europe, which is the highest number in a long while. We have also scheduled one psychologist for Japan, and one for the hospital in Korea.

Third, we have a sizable number of psychologists in non-traditional jobs. These include one psychologist who is an executive officer and several who are faculty members or student counselors at the Uniformed Services University of Health Sciences, West Point, and the Organizational Effectiveness Center and School. We have others assigned to the Drug and Alcohol Technical Agency in Washington, the Soldier Support Center at Ft Benjamin Harrison, and in important consulting and administrative roles at the Academy of Health Sciences. We also have a staff psychologist assigned to the Intelligence and Security Command (INSCOM).

The importance of these assignments is that they allow psychologists to play a key role in policy development and Army program management in ways that have not always been open to us in the past.

Training Programs: As you know we have had to operate large training programs to get people into the service. That is still true. In 1980, for example, we entered 67 people into the Health Profession Scholarship Program. Many of these people have already completed their training and are out on duty. In addition, there were 13 who completed training in the fall of 1982, and another 15 have just started their internships.

We are also operating four fully accredited internships at Walter Reed, Dwight D. Eisenhower, William Beaumont and Silas B. Hayes (Ft Ord). This year (82-83) there are 18 people in the internships, and last year (81-82) there were 20.

We now have three people in fellowship training: MAJ John Shoberg in Child psychology at Madigan, MAJ Ken Zych in Neuropsychology at Madigan and MAJ Jim Futterer in Community Mental Health at Beaumont. In the summer of 1983 we have authority to start a second Neuropsychology fellowship at Beaumont and we also expect to get permission to start a fifth fellowship which will be in Health psychology also at Beaumont.

In addition, many of you are now taking CGSC by correspondence and COL Harris is enrolled in the Army War College Corresponding Studies Course, following a precedent I set in 1971.

While these programs are strong, they are not enough. The last graduates from the HPSP will start into their internship in 1984, so we need a follow-on program for the HPSP. We also need a Long-Term Civilian Training (LTCT) program that will permit us to take Army officers and retrain them as psychologists. It is clear by now that it is easier to make psychologists out of Army officers.
than it is to make Army officers out of psychologists, which is why we need a LTCT program.

While discussing education, I should also mention that this year we have the biggest and best slate of Army sponsored courses for psychologists that we have ever had. In addition to the course we are now attending, the AMEDD psychology course with a funded input of 55 which is held every second year, we have two other courses still scheduled for FY 83.

Forensic Psychology - Fitzsimons - 16-18 Mar 83, 25 spaces
Military Applications of Clinical Neuropsychology - Madigan - 16-19 May 83, 24 spaces

That's the good news. The bad news is that so far we have not scheduled anything for FY 84. We are out of balance, now, with so many courses in one year. COL Fishburne, I believe, will try to get at least 1 course in FY 84.

Once again, credit for this full menu of courses goes to a previous consultant, COL Harris. He did much of the original spade work, and then LTC Rath, MAJ Rosenheim, MAJ Cripe and I finished up the job.

Professional Qualifications: One of the most difficult issues for us is to determine what kind of psychologists we want and need in the AMEDD. In the early 1970's COL Thomas very wisely tried to broaden our programs by bringing in psychologists trained in broader areas than clinical. We got educational, social, counseling and even some industrial type psychologists. They all did very useful work, but several problems arose. First when it came time to move them we had no other suitable non-clinical spots for them, and it was hard to put them on a career ladder. Second, we found our superiors became very confused as to who or what psychologists were and what they could do. As a consequence, although we have done so reluctantly, we have narrowed the definition of who is an acceptable kind of psychologist. We now take only clinical or counseling doctoral-trained people with a full clinical internship. We prefer APA doctoral programs and APA approved internships but will occasionally take people from strong programs that lack APA approval. As a result, a few people who did not meet these standards have been transferred out of psychology and a few others are seeking retraining. We are left with a more narrowly trained group of psychologists but those we have are very capable clinicians who also have many additional skills.

I should also add that the majority of applicants we get for direct commissions do not meet these standards and are therefore rejected. However, there are a few on active duty who still do not meet these standards, and an indeterminate number in the reserve components who also do not meet them. We plan to take steps to eliminate those who do not meet the new, tighter standards.

We have also modified the system used for awarding suffixes for levels of professional skill. Under the new system, 9D means you are state licensed,
9 C means you are in the National Register of Health Service Providers in Psychology, and 9 B means you are board certified by the American Board of Professional Psychology. The 9 A suffix continues to be awarded by an OTSG award panel. At present, 4 psychologists have both ABPP and the B level (Nichols, Harris, Fishburne, and Rath) and only one (Nichols) has the A suffix.

Morale of Psychologists: For a number of years Senator Inouye (D-Hawaii), with the encouragement of a psychologist on his staff, Dr. Pat De Leon, has been urging the DOD to improve the assignment options, professional autonomy and promotion chances of psychologists. DOD has been rather unresponsive to these initiatives, so Senator Inouye asked for, and got, a survey taken of the morale of psychologists, optometrists, pharmacists, podiatrists and physicians assistants. The survey covered three uniformed services (Army, Navy, Air Force) and was done by the Defense Audit Service.

The survey concluded that morale was indeed poor, especially among psychologists and optometrists, and confirmed that there was widespread resentment about restrictions on professional autonomy, promotion problems, and limitations on administrative responsibilities. However, it concluded that no major corrective action was needed since the services are currently able to fill all their authorized spaces. As a result, the services were not asked to take any corrective actions.

I and many others believe this conclusion is not satisfactory and that more needs to be done. Much of the response, of course, must be coordinated with representatives of the other professions covered by the survey. In the case of psychology, however, I am hoping that the Tri-Service Committee of Uniformed Psychologists (which is a committee of Div 19 (Military Psychologists) currently headed by Cdr Bill Maynard) will look into this, and that Div 19 and APA will follow up on the matter. It is my understanding that the 1983 appropriation act will also require the DOD to report on actions taken to correct the problems cited in the DAS report.

Achievements of Army Psychologists: I have already mentioned the locations where you work and I have told you that commanders value our work enough to have created 131 requirements for psychologists. Most of those requirements are for traditional people doing normal clinical work, but I think you'd be interested in some of the "out-of-the-ordinary" things we are getting into. I'll mention some people by name but I'm sure you understand this does not mean that those who are not named are not also making outstanding contributions.

1. I (COL Nichols) am currently serving as president of Division 19. I am the first clinician and only the second uniformed psychologist to serve in that post. I am glad to represent you, and all other military psychologists. I would also be glad to serve as your representative to the APA Council of Representatives if I am nominated and elected in the summer of 1983. I also serve on the governing council of the Inter University Seminar on Armed Forces and Society.
2. LTC(P) Fishburne has been very active in a project checking on whether soldiers who were given LSD show any neuropsychological defects. He and his colleagues at Reed, with input from many of you, are also establishing military norms for the MMPI.

3. LTC Steve Clements is a key behavioral science advisor to the most senior Army leaders, and now leads the Delta Force Network, an information/idea exchange group of behavioral scientists in and out of the service.

4. LTC Will Wilson and his colleague at West Point have a very active cadet counseling program that makes use of both cadet and professional counselors to cut down the attrition rate among cadets.

5. LTC Ernie Lenz formerly taught at the Organizational Effectiveness Center and School, and CPT's Hungerland and Le Ray are now assigned there.

6. LTC Brian Chermol leads the 91G (Behavioral Science Specialist) school at Ft Sam Houston, the first psychologist to do so in many years.

7. MAJ Tony Zold has been very active at Madigan in helping plan the expanded Army program for handicapped children. This includes creation of a computer-compatible coding system to identify the needs of handicapped children and the services available at each military base or civilian community. He is also planning brief courses that will help Army psychologists to work more effectively with children.

8. Several psychologists are assigned in support of the Army's drug and alcohol programs: CPT Linda Walker, CPT Valerie King, MAJ Bob Rawlin, and MAJ Bob Hulsebus.

9. Three psychologists are running fellowships: MAJ Lloyd Cripes (Madigan-Neuropsychology), MAJ Zold (Madigan-Child) and MAJ Gary Greenfield (Beaumont-Community Mental Health) and several others soon will be.

10. A number of psychologists are providing consultation to the intelligence community: LTC's Dick Hartzell, Wil Wilson, and Ed McCarrol.

11. One of our psychologists, MAJ Paul Harig, was very active in developing Academic Policy at the Academy of Health Sciences and personnel policy when assigned to the Directorate of Personnel in the Army Surgeon General's office. He is now running a student counseling program at the new military medical school in Bethesda.

12. Dr David Mangelsdorff, a reserve psychologist and a former uniformed psychologist who is now working at the Health Care Studies Division of Health Services Command, has done a great deal of staff work on mobilization utilization of reserve psychologists. He is also President-elect of Div 19.
13. LTC Rath, CPT Tamayo, Dr Mangelsdorff and many others are playing a key role in developing doctrine and organizational structures in support of combat operations, to minimize psychological losses in combat.

This list of accomplishments could be much longer but this gives some idea of the scope of non-traditional activities that our psychologists are involved in.

Military Education: Now that we have many psychologists in career status, we are paying more attention to advanced military schooling. Three or four psychologists go to the officers advanced course every 6 months. Many are now enrolled in the non-resident Command & General Staff College course. Two have taken the Armed Forces Staff College (LTC Jeffrey and LTC Ingraham) and another was selected but declined to attend (LTC Clement). And, as I said earlier COL Harris is now enrolled in the Army War-College Correspondence course, which COL Nichols also took in 1971-1973.

Command: For the first time an Army psychologist, LTC Lenz, has been selected for Battalion-level command and another 68S is on the alternate list.

Key executive positions: COL Nichols served 2 years as Chief of the Surgeon General's health Education and Training Division and 1 year as Asst Dean for Academic Support at the Military Medical School. COL Harris now serves as executive officer, US Army Hospital, Bad Cannstatt. Both jobs are "firsts" for psychologists.

Relations with the APA: We are receiving increasingly active support from the American Psychological Association. They are helping with efforts to get psychologists on the professional staffs of hospitals and individually accredited. They support broader independent reimbursement of psychologists by CHAMPUS for both outpatient and inpatient care. They have been briefed on a proposed federal law that would allow drafting of health professionals and seen likely to agree that psychologists are health professionals that should be included in such a draft. They have also supported the effort to have DOD uniformed psychologists be doctorally trained and state licensed. In addition, they provide a great deal of technical help in our review of the credentials of applicants for our training programs and for our direct-commission openings for psychologists.

Division 19: Army psychologists are now very active in this division. As noted earlier, COL Nichols is President and Dave Mangelsdorff is president elect. Four Army psychologist have won awards from Division 19 as outstanding military psychologists (Harris, Nichols, Ingraham, and Mangelsdorff). LTC(P) Fishburne will become acting secretary-treasurer. A number of Army people, including MAJ Jack Beach and LTC Tim Jeffrey, have been very active and effective on the Tri-Service Committee. A very high percentage of our number are now members of Division 19 and active in its programs and committees.

Report on the Status of the 68S: At Gen Jordan's request all 67 and 68 series consultants prepared reports on the status of their SSI's and needed improvements. The report prepared on the 68S/U field was written by me but was based
on extensive input from a committee headed by LTC's Rath and McCormack. Many others provided valuable input. The report was submitted in June 1982, and is now under active consideration. It is one of the most comprehensive reports ever prepared on this topic, and makes many recommendations that include greater professional autonomy and broader professional activities and responsibilities. My successor as consultant, LTC(P) Fishburne, will keep you advised on progress.

Psychology Field Set: A committee chaired by MAJ Laskow proposed changes in this kit to modernize it and make it fit the needs of all TO&E units where psychologists are assigned. After OTSG staffing it is now receiving final staff action at Ft Sam Houston. These changes were long overdue. My predecessor, COL Harris, also played a key role in this action.

Reservists: We can now identify about 80 psychologists in the reserves who are active either in units or the IRR. There are 7 or 8 of them at this conference and they will prepare a report on things that need to be done to strengthen our reserve program. They are a key resource that we need to train well and use wisely both now and in case of mobilization.

Summary: Time and space compel me to stop at this point. Let me summarize by stating that we now have on duty the largest number of doctorally-trained psychologists we have ever had, both in the 68S and 68T SSI's. We have more field grade officers and more broadly-experienced psychologists than we have ever had. We have reached this fine state because of the excellent work done by our predecessors with special help from previous consultants such as COL Thomas, LTC Hartzell and COL Harris. We have made great progress professionally but we need to, and can, accomplish much more with such a great supply of capable, motivated psychologists. I am proud to have been the consultant representing such a fine group, even if only briefly, and I wish you the very best of future success.
Table 1. Total Strength - Army Psychologist - 1 Jan 83.

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### Table 2. Recent Strength Changes 68S/U.

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**NOTE:** These strengths include interns.
Table 3. Historical Trends 68S/U Combined Requirements/Authorizations/Strengths.

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CONTRIBUTIONS OF AND CHALLENGES FACED BY AMEDD PSYCHOLOGY: 1950's - 1970's

Charles A. Thomas, Jr., Ph.D.
COL, USA Retired

This is not an objective history of AMEDD Psychology during the decades of the 50's, 60's and 70's. It is a view based on the experiences of one Psychology Consultant who was to some extent involved in what went on during that period. Also my statements here are limited primarily to professional psychology. My responsibilities included professional and experimental psychology but were much broader in the area of professional psychology than in research or experimental psychology. However some extremely important work was done in AMEDD Research Psychology and those contributions certainly deserve an appropriate forum.

One other introductory remark. I would suggest that the title of this presentation would be more aptly stated as "Challenges Faced by AMEDD Psychology, and Actions, Dubious Accomplishments, Screw-Ups and Contributions of the Period". All of the above probably occurred. What proportion of each happened is related to one's view as to what AMEDD Psychology should be.

Let me describe AMEDD Psychology as I perceived it in the 1950's. In 1951 Col. Fred Zehrer, the Psychology Consultant at that time, succeeded in getting published TM 8-242 ("Military Clinical Psychology"). This manual defined what a clinical psychologist did, where he did it, who he did it with and what the priorities of function were. The manual also had several chapters written by prominent psychologists on several major tests and instruments. Wechsler, Klopfer, Murray, Hathaway and Meehl, among others, contributed to the manual. TM 8-242 was the major referent of military clinical psychology and it was an excellent resource at that time. However it was subsequently rescinded about 1970 as its relevance to current professional psychology diminished.

In 1951 the Army clinical psychologists did primarily diagnostic testing, some psychotherapy and a little clinically oriented research. Most assignments were in hospitals, then Mental Hygiene Consultation Services, disciplinary barracks (or stockades) and the Medical Field Service School in more or less that order of frequency. Almost all psychologists worked within the Psychiatry and Neurology milieu, rarely venturing into other areas of medicine and almost never going outside the AMEDD boundaries. All in all, this was a very narrow range of professional services.

Some frustrations had begun to build up. Clinical psychologists were identified at the Ph.D. level, yet they were not accepted as "real" doctors. They were MSC officers to most people in the Army. They pulled AOD, did inventories and were often assigned other administrative duties. Most psychologists were
First Lieutenants and Captains, while psychiatrists were Captains, Majors or Lt. Colonels. Pay was considerably below what psychologists were obtaining in the civilian community (e.g., V.A.).

Things did not get any better from 1951 to 1963. Four Psychology Consultants came and went relatively uneventfully and in 1958 the Psychology Consultant's position became a part-time position. A major source of Army psychologists, the Graduate Student Program (GSP), sputtered, stopped and re-started but produced a low input of psychology students. During this period recruiting and retention was poor, psychology spaces were being lost and most of the Army psychologists were company grade officers with little military knowledge or experience.

In 1963 the first Psychology Consultant to come from the Graduate Student Program arrived at the Surgeon General's Office, Major (P) Jim Hedlund. Shortly thereafter the Psychology Consultant's position was re-instated as a full time position. Under LTC Hedlund some positive changes were initiated. The Graduate Student Program was made more attractive. The Psychology Consultant's position and status improved some. APA contacts were established, including support for a pay study conducted by Division 19 ad hoc committee in 1965 (with LTC Hedlund as Chairman).

However in 1966 many problems remained which threatened AMEDD Psychology's effectiveness, status and even survival. In 1964 LTC Hedlund stated, "Without dramatic change in current trends, the psychology programs within the Army medical Service will be defunct in a few short years".

My intent here is not to contrast AMEDD Psychology of today with that of another era - but in order to give some perspective you might make a comparative mental note as we go along.

When I became Psychology Consultant in 1966, I found a few positive factors, the serious problems mentioned earlier and a few others besides:

1) I found AMEDD Psychology well accepted in the Surgeon General's Office due in great part to the credibility established by my predecessor, LTC Hedlund.

2) We had a potentially good recruiting vehicle in the Graduate Student Program but it was not bringing in many qualified applicants.

3) The nucleus of the AMEDD Psychology Program was rapidly eroding. Twenty psychology spaces had been lost since 1958. Most of the Regular Army officers who had earlier entered the GSP were planning on resigning or retiring. We lost 11 career officers between 1968 and 1971. In the previous 10 years no psychology officers were integrated in the Regular Army and only three reserve officers had extended to an indefinite category. Contrast this with the present. I counted 44 professional psychology officers who are now on active duty who were also on active duty in 1974 as psychology officers or students.
4) Most of the psychology officers then on active duty were civilian trained, had only a two-year service commitment, had little knowledge of the Army and had low rank and status. Also, some were MA psychologists that LTC Hedlund had to utilize in order to help meet our commitments.

5) Most psychology officers lacked credibility within the Army structure. Low rank was certainly a factor in that lack. But also of great importance in limiting effectiveness was the limited military knowledge and experience of the Army psychologists, his limited product (diagnostic testing, psychoanalytically oriented therapy, clinical research) and his narrow span of interaction, limited mostly to the Psychiatric Department or Service.

In summary, there had developed a set of mutually reinforcing variables and forces which continually lessened psychology's impact within the AMEDD and Army organization and mitigated against retention.

My needs assessment of AMEDD Psychology during my first year in TSGO resulted in the identification of several obvious needs, some not so obvious and some clearly controversial (and probably are still so with many Army psychologists):

1) The need for intensive and broadened recruiting of AMEDD psychologists. While the Psychology Consultant did have some limited funds to visit University Psychology Departments, virtually no other information was being disseminated to potential sources of recruitment. In early 1966 there were only 43 clinical psychologists, 32 experimental psychologists and 10 GSP students on active duty.

2) The need to upgrade the rank, pay and professional status of AMEDD psychologists.

3) The need to have a broader range of professional skills in psychology officers.

4) The need for more psychology officers with greater military identification and credibility.

5) The need for AMEDD Psychology to offer a broader, more militarily relevant array of psychological services and to expand beyond the illness model.

6) The need to broaden our training capability in the clinical and other psychological areas.

7) The need for AMEDD psychologists to make greater professional contact outside of P & N and AMEDD settings.

8) The need to stress a behavioral science concept as a vehicle to broaden AMEDD Psychology's scope and to modify some the existing professional relationships. At that time several of the Army General Staff were extremely interested in behavioral science principles. They were actively exploring the areas of organizational development, behavioral assessment and motivation. This
was seen as an excellent opportunity to offer AMEDD Psychology's services in those areas. Also a behavioral science approach offered the possibility of a more collegial relationship with Social Work and particularly Psychiatry.

Over the next several years some changes and/or progress was made in the AMEDD Psychology Program. In the accession area a number of things occurred.

1) The GSP was made more liberal and flexible. Entry rank (i.e., 1st Lt.) restrictions were eliminated and it was made possible to extend student status beyond three years if deemed in the Army's best interests.

2) Several recruiting programs were activated that had not been used (or rarely used) with psychologists (i.e., Long Term Civilian Training Program, Early Commissioning Program, Excess Leave Program).

3) In-service recruiting was actively pursued (e.g., USMA cadets and officers, RA officers, enlisted personnel).

4) Our training programs were widely advertised in psychological publications (e.g., American Psychologist, Employment Bulletin, APA Bulletin on Graduate Studies) and also several military publications.

5) High priority was given to applicants with previous or existing military service and who demonstrated other indications of a military identification.

6) The Psychology MOS was broadened to allow more flexibility in recruiting.

7) Recruiting was in fact broadened to bring in psychologists with varying backgrounds (e.g., Industrial-Organizational, Educational, Counseling, Social). In this context it should be stated that no individual was brought on active duty unless there was a job for him or her.

8) The number of women and minority psychologists brought on active duty was significantly increased.

9) For psychology officers with a reserve obligation the tour of duty was raised from two to four years in order to serve in the Psychology MOS. Very few individuals declined this option. This policy was implemented in order to provide psychology officers enough military experience to become effective in the military environment. Incidentally, I note a number of those officers are still on active duty today.

10) Entry grade for Ph.D.'s raised to the Captain level.

In the education and training area several steps were taken to increase its amount and relevancy to the military environment:
1) The Orientation Course at the Medical Field Service School (MFSS) for new psychologists was shortened to two and one half weeks and given a relevant behavioral science base. Previously psychologists were required to attend a long two month course that was oriented to the administrative MSC officer. Also the new psychologists was assigned to the MHCS at Fort Sam Houston for a short OJT tour prior to permanent assignment.

2) The AMEDD Psychology Short Course was increased from a biannual to an annual event.

3) A Behavioral Science Short Course was established on a biannual basis to bring psychologists, psychiatrists and social workers together in a collegial conference.

4) Human Relations Training was introduced and strongly supported in order to give psychologists and others, skills in working with non-clinical populations and problems.

5) New internships were initiated at Fort Ord and William Beaumont General Hospital to bring internship training closer to the military environment. Concurrently, the internship at Letterman General Hospital was phased out for the same reason.

6) A Counseling Psychology Internship was initiated at Walter Reed General Hospital in 1969 and a Child Psychology Fellowship was authorized there in 1970.

A major priority of mine as Psychology Consultant was to increase, diversify and broaden the AMEDD psychologist positions in the Army structure. This included a conscious effort to expand positions in and to extend the positions beyond the Army Medical Department. A number of new positions were created. Some by persistent effort, some fortuitously and others in response to the needs of the times:

1) Several positions were established in the Dept. of Military Psychology and Leadership at the U.S. Military Academy. At least two positions were the result of communications and visits by the Consultant and stabilized by the excellent work of the first psychologist assigned there, Capt. Jack Baker.

2) Several organizational development positions were established outside the Army Medical Department (Fort Ord, Fort Benjamin Harrison).

3) A number of psychology positions were established in the Army's Alcohol and Drug Program established in 1972.

4) Psychologists began to be included in the Army divisions in about 1972. This came about as a direct request by the Psychology Consultant when the Division Medical Battalion was re-organized during the 1969/70 period.

5) A new position was established at Ft. Benning in an OSS type assessment program. It should be noted parenthetically that many new positions were
established as a result of DCSPER staff becoming educated to the availability of "behavioral scientists" in the Army Medical Department.

6) AMEDD psychologists became significantly involved in the course development and training of Alcohol and Drug specialists at The Academy of Health Sciences (formerly MFSS).

7) A number of other psychologist positions were established during this period both within and outside the Army Medical Department and Health Services Command. But the point to be made here is that it was a calculated venture to increase AMEDD psychologist positions whenever it was possible. The behavioral scientist concept made many of these positions possible. It was also assumed, and I think that this is an important point, that in the future effort and energy would be devoted to building upon the established positions and build a network of psychologists assignments for both clinical and other professional psychologists. To what extent that was done after September 1974, I am not in a position to evaluate, but clearly that would have been the path taken if the incumbent consultant remained.

During my tenure, I was pleased to see AMEDD psychologists taking the initiative to do a number of exciting and creative things in the late 1960's and early 1970's. The fruits of these efforts in some cases remain, in other cases, not. But the important thing was the willingness of AMEDD psychologists to be innovative and responsive to the Army's needs. A few examples of such efforts include:

1) At Ft. Ord psychologist Bill Datel and psychiatrist Lou Legters developed a new basic training approach based on positive reinforcement principles rather than the old punishment oriented approach.

2) Also at Ft. Ord psychologists Howard Bean and Bill Siegfried were key participants in the Organizational Development Program that was initiated there. Several other AMEDD psychologists have contributed significantly to that project.

3) Again at Ft. Ord, LTC Bob Nichols became the first clinical psychologist to be Chief of a mental Hygiene Consultation Service. This was negotiated with Hospital Commander at our initiation.

4) At Walter Reed General Hospital AMEDD psychologists were also involved in the development and implementation of Ward 108, a setting where sociopaths were taught through positive reinforcement and other behavior methods to learn a more adaptive adjustment to the Army and to life in general.

Finally, and certainly not in a spirit of self-aggrandisement, let me touch on some of my own interactions in the Surgeon General's Office. As I compared my interactions in the Army setting with that of previous Psychology Consultants, I observed a definite evolution in the roles and functions of the Consultant. My predecessor, a very talented and competent person, never got beyond the Deputy Surgeon General on any kind of official business. The same
could be said of previous Consultants (although one Consultant had some social
contact with the Surgeon General). In contrast, over a period of years I had
access to the Surgeon General, the Deputy Chief for Personnel (DCSPER), the
Assistant Secretary of Defense for Health and Environment and a number of other
key General Officers and civilian staff in DA and DOD. Also as many of you know
I was an Assistant Chief of the Medical Service Corps in my last years at TSGO.

I also worked closely with DOD (e.g., Col. Gil Jacox), CAPPS and AAP. In
course we came as close as had been done so far to gaining some form of pro-
fessional pay for military psychologists. Unfortunately legislation that was
voted upon did not complete the approval cycle.

I had the opportunity through my contacts in the Dept. of Defense (e.g., MG
George Hayes) to facilitate the gaining for civilian psychologists, direct
access to CHAMPUS payments. This turned out to be a major step in the recogni-
tion of psychologists as independent service providers for insurance purposes.

While discussing this proposed presentation LTC Rath asked me to consider
whether I would have done anything different during my over eight years as
Psychology Consultant. Well, I would have liked to have been smarter, more
tactful, more sensitive, more articulate, more politically skilled and more suc-
cessful, but I cannot think of any major change in strategy I would have made,
given the circumstances. In different circumstances I may have developed and
pursued a different strategy. Probably my biggest regret is that I was not or
could not be more bold, aggressive, even outrageous in pursuit of what I believe.

I believe the above are essential qualities to bring about positive, signifi-
cant changes and/or advances in the direction and effectiveness of AMEDD
Psychology. I sincerely hope that will be the course of AMEDD Psychology in the
1980's.
It is a distinct pleasure to be able to share my views with you regarding the future of our profession and in particular, your probable increasing stature during the next decade within the Department of Defense. Very few are aware that upon acceptance into graduate school, I attempted to obtain an Armed Forces scholarship in order to make the military my career. The recruiting officer, however, had never heard of psychology and informed me that the Army was not interested in "signing me up" until I had graduated. All I can say is that "but for" that experience, I may very well have been in the audience today.

There are two driving forces in health care today that will have a major impact upon all of psychology. The first is the ever escalating costs of health care--both in the civilian sector and in the military. For example, last year our nation's medical bill rose to $322 billion, or approximately 10.5 percent of our Gross National Product. This is the largest in our history and the increase in medical costs (12.5 percent) was about twice the general rate of inflation. Our nation continues to spend more on health care than any other nation; yet, among the industrialized nations, only the United States and South Africa do not have a national health insurance program. This simply can not continue much longer.

The second driving force is the growing emergence of a new definition of "quality care" which gives increasing attention to the importance of prevention and "wellness". In 1974, Marc Lalonde, the then-Minister of National Health and Welfare for Canada released a far reaching report into the public domain entitled A New Perspective On The Health of Canadians: A Working Document. This marked the beginning of the government of Canada's systematic efforts to stress prevention and behavioral "threats" to health. Five years later, our own government released Health People: The Surgeon General's Report On Health Promotion and Disease Prevention. And, in 1982, the prestigious Institute of Medicine released its report Health and Behavior: Frontiers of Research In The Biobehavioral Sciences. From a public policy frame of reference, we can no longer allow "as much as 50 percent of mortality from the 10 leading causes of death in the United States (to be) traced to life style" without aggressive federal intervention. I would suggest that no profession is better trained than psychology to accept the challenges inherent in this fundamental policy shift from traditional curative care to accountability, cost-effectiveness, and behavioral approaches to health care.

However, if one takes a careful look at the extent to which psychology to date has obtained legislative recognition in various federal health care statutes, one's initial optimism quickly becomes tempered with caution. For example, there are presently at least five major programs in which the federal government "purchases" health care from the private sector: the Department of Defense CHAMPUS program, the Federal Employees' Health Benefit program (FEHBP),
the Medical Expense Deduction provision of the Internal Revenue Code, and Medicare and Medicaid. Only the two smaller program (i.e., CHAMPUS and FEHBP) even mention psychology, except under a minor provision of the Secretary's Medicare demonstration authority. Further, in the entire Department of Defense code, there is only one extraordinarily minor mention of psychology. In short, we have a long way to go to establish legislative recognition. And I would remind you that it is our nation's elected officials, and not any health care profession, that establishes our nation's health care priorities.

Nevertheless, there is no reason why as a discipline we can not obtain full professional and legislative parity under each of our federal health care programs. Our clinical and scientific expertise is second to none. There is no credible reason why our scope of practice should not be as broad as that of any other discipline. The key to this determination is not clinical, but instead is political. For us to truly live up to our potential in shaping the course of our nation's health care system, we must become significantly more involved in the political process. We must make our professional concerns the concerns of our nation's elected and appointed officials. For, they are not merely ours, they are the nation's. If our services are meaningful, and I believe they are, then any unreasonable restrictions are not in our national interest. But again, it is the politician, and not the clinician, who must resolve this matter.

In August, 1982 the Defense Audit Service released a report highlighting morale problems of various non-physician health care providers within the Department of Defense. This report was following up on a 1978 memorandum in which the Deputy Assistant Secretary (Health Affairs) recommended that the military departments consider several proposals to improve the use of military psychologists.

The Defense Audit Service report concluded that conditions existed that "seriously affected morale". There is a documented problem. It is now up to you to decide what steps should be taken. What are your priorities? Are you willing to press for the responsibility of commanding hospitals, or requiring that all psychologists be licensed? The next step is up to you.

To be successful in the political process you must take five steps. 1) Each of you, and your friends, must develop personal contact with your own elected officials. They must know you as a person, not merely as a statistic. 2) You must involve your natural allies (optometrists, podiatrists, professional nurses, etc.). All of the policy issues of importance to psychology are also of importance to them. 3) You must interact with the media; get them to appreciate your true potential contribution. For in a very real sense, it is the media more than anyone else that shapes our national health care policy. 4) Write for an audience other than psychology. Teach others (judges, teachers, clergy, business leaders, etc.) what psychology has to offer. And finally, demonstrate that your services do in fact make a difference. For example, why isn't biofeedback considered the "treatment of choice" for a range of symptoms, instead of being considered "experimental". Together I am confident that we can modify our nation's health delivery system. If we do not, psychology will continue to be considered "paraprofessional".
REFERENCES


Following are the partial agenda for the Ad Hoc Committees. The committee reports are found later in this volume at pages 383-400.
Partial Agenda
AMEDD Psychology Conference
November 1982
Policy/Professional Practice

1. Is the present policy to insist 68Ss be clinicians or counseling psychologists with clinical internships wise? What are the pros and cons?

2. What are the 5 (or any number) most valuable services/program Army 68Ss can provide as judged by:
   a. The AMEDD
   b. The Army
   c. Army families (treat each issue separately)

3. What can be done to get more 68S authorizations?

4. What are the 5 most significant restrictions on AMEDD psychology? Suggest a plan for correction of each.

5. What are the 5 greatest advantages of AMEDD psychologists, what can be done to enhance or capitalize on these?

6. Should licensure be mandatory? Is that feasible?

7. Are the present 9A, 9B, 9C, 9D criteria adequate?

8. What should the policy be on psychologists concerning:
   a. Hospital admissions
   b. Credentialing
   c. Security clearance roles
   d. Evaluation of administrative separations
   e. Evaluation of medical board/disability cases

9. What should be the policy with regard to putting 68Ss in the non-traditional roles? Should we seek such roles?

10. Where and how should 68Us be assigned? Should we have spaces specifically designated for 68Us? If so, with what controls?

11. How can we supervise psychologists in isolated locations, especially for licensure/ABPP/National Register purposes?
Partial Agenda
AMEDD Psychology Conference
November 1982
Education/Training Committee

1. What topics should be covered by Army-sponsored short courses?
2. Is there any advantage/disadvantage in getting APA accreditation for Army-sponsored continuing health education?
3. Is the present number/type of fellowships adequate?
4. What training do we need for 91Gs working for psychologists?
   a. In CONUS settings
   b. Overseas
   c. In Divisions
5. What types of Long-Term Civilian Training (LTCT) do psychologists need? How can these needs be justified/documented?
6. What types of military schooling do psychologists need?
7. Is there a need for renewal of the Psychology Graduate Student Program and/or the Health Professions Scholarship Programs? What should be its characteristics with regard to:
   a. Number of years subsidized
   b. Timing of internships (last year, next to last with return to school)
   c. Background of students (prior military experience or not)
   d. Other factors
8. Are we correct in limiting the 68S to clinical psychologists or counseling psychologists with clinical internships?
9. What improvements are needed in in-service training at local installations?
10. Are we getting and using consultants properly?
    a. Locally
    b. At OTSG and MACOM levels.
11. Should we review fellowship programs to determine if their quality is adequate? If so, how should this be done?

12. Should we maintain a consultant data bank on educational achievements and special skills of our psychologists to include licensure, national register, ABPP and special skills (biofeedback, hypnosis, behavior mod, child, health, etc.)?

13. What can we do to reduce the number of ABDs (68Us) and the time they spend in this status?
Partial Agenda

AMEDD Psychology Conference

November 1982

Reserve Component Committee

1. Do reserve psychologists meet the same training/qualification standards as active duty?

2. How can we fairly but accurately review credentials of reservists?

3. Is the reserve obtaining adequate active duty experience and professional training? What changes are needed?

4. What is the role of the reserve psychologist prior to mobilization? How should they be used after mobilization?

5. Is the MOBDES program adequate?

6. What needs to be done to make service in the reserves more attractive?

7. Who should be responsible for the reserve psychology program? How should he/she/they operate?
Partial Agenda
AMEDD Psychology Conference
November 1982
Recruitment/Retention Committee

1. What recruitment incentives/procedures are needed?
2. What retention incentives are needed?
3. Whom should we not retain? How should this decision be made?
4. What information should be maintained by consultant on each active psychologist? Where/how can these data be obtained?
5. What information needs to be available to the GS to keep him competitive for promotion (i.e., what career guidance does he need)?
6. Is the broader/troop-related career desirable/feasible/acceptable to Army psychologists?
7. Are we recruiting the right people with the right training from the right places? If not, what are the deficiencies and how can they be corrected?
Partial Agenda
AMEDD Psychology Conference
November 1982
Division Psychologists Committee

1. What should be the role of a division psychologist?

2. How does this role differ from that of the psychiatrist and social worker?

3. What should be the chief activities of a division psychologist in the following situations:
   a. In Garrison - CONUS
   b. In Garrison - Overseas
   c. During maneuvers
   d. In combat

4. What should be the preparation and rank/experience level of a division psychologist?

5. What impact would/should Division 86 have on the organization/function of the Division Psychologist?

6. What changes, if any, are needed in division MH Programs to prepare for new types/locations of combat?

7. What should be the relationship between the Division Psychologist and same posts CMHA, MEDDAC?

8. What is the ideal tour length for a Division Psychologist?
This past Veterans Day served as a focal point for acknowledging the contributions of Americans who served in Vietnam and the past year has seen a great deal of public and professional discussion of the adjustment difficulties of Vietnam Veterans. The issues facing veterans have been graphically portrayed in a number of compelling movies and television documentaries. Some would say these stories are elaborations, if not purely fictional, while others say they represent but the tip of the iceberg. There is no consensus on the incidence rate of veteran adjustment disorders, and even less consensus about the etiology of the adjustment problems observed and the factors maintaining the maladjustment. What is clear, and for this there is some consensus, is that there are significant numbers of men and women who served in Vietnam whose current lives are less fulfilling and less productive than would have been predicted for them. There is then also a majority belief that some sort of supportive intervention be available for veterans in need.

This panel was formed not to address issues of incidence, etiology or motivations. Rather, we're here to discuss delivery of mental health services to Vietnam Veterans in a variety of settings. Before doing that I will mention the variety of factors that have been presented in the literature and public debate as causing, or maintaining, adjustment problems in Vietnam Veterans and briefly present the symptoms of the post-traumatic stress disorder, chronic or delayed, as noted in Dr. Goodwin's chapter on Vietnam Veterans.

The etiologic and maintenance factors commonly mentioned are:

- Combat stress, experience in combat zone.
- Pre-service psychopathology or predisposition to psychopathology.
- Post service experiences.
It is important that the relative contributions of these factors be determined for planning for future combat situations and procedures for debriefing the returning veterans and to provide them opportunities for decathecting and integrating the experiences of the returning veterans, especially those leaving the service. However, our focus today is on provision of services needed, regardless of the etiology and duty status of the veteran.

The post-traumatic stress disorder, chronic or delayed, has been most articulately described by Dr. Goodwin and typically involves some, if not all, the following symptoms:

- Depression
- Isolation
- Rage
- Avoidance of Feelings: Alienation
- Survival Guilt
- Anxiety Reactions
- Sleep Disturbance and Nightmares
- Intrusive Thoughts

I should point out that this disorder is not the same as the battlefield stress reaction, and management and intervention goals differ. Second, the symptom pattern is probably much less frequent in those who continued on active duty although this does not mean it isn't there, perhaps especially in those nearing retirement.

With this brief background, let's turn to discussion of service provision. CPT Jim Goodwin is providing services to both active duty and civilian veterans; Jim, as many of you know, is a Vietnam veteran who authored the lead chapter for the Disabled American Veterans book Post Traumatic Stress Disorders of the Vietnam Veteran, the chapter entitled The Etiology of Combat-Related Post-Traumatic Stress Disorders, which has also been republished in abridged form for distribution throughout the Veterans' Administration. COL(Ret) Chuck Thomas provides services to civilian veterans as a civilian contract agency; Dr. Thomas is a veteran of World War II, having served in both the Canadian and U.S. Army Air Forces, and was active as an Army psychologist post-Korean conflict and during the Vietnam war. Dr. Lee Hyer provides services within the context of the Veterans Administration; Dr. Hyer was an active duty Army psychologist in
the late 1960's and early 1970's and has been with the Veterans Administration in a variety of settings since. They will each discuss some of the crucial aspects of providing the services in their settings and possibly some of the normative characteristics of the veterans they serve.
Establishing a Vietnam Veterans Rap Group

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Acknowledging the Problem

Once you have recognized that Post Traumatic Stress Disorders do indeed exist (DSM III, 1980), you have made that first hurdle involved in the treatment and resolution of a syndrome that is playing havoc with hundreds of thousands of Vietnam era veterans (Wilson, 1979) and literally millions of their dependents. The active duty army psychologist who endeavors to deal with this situation enters an arena populated with some rather precarious hurdles.

These obstacles are in a large part based on our primary mission of "supporting the fighting strength." Our role is in supporting the combatant in order that he/she might dispatch our country's enemies in the most facilitative, economical and psychopathologically free manner. It is apparently an almost insurmountable hurdle, for us as military mental health professionals, to consider the fact that the war experience we supported our combatants through may have additionally predisposed these veterans to problematic post combat emotional sequelae. If you are able to surmount this particular hurdle, you are free to begin to take in stride the less precarious obstacles leading to the identification of the problem and the treatment modality best suited to its resolution.

Identification of the Veteran With the Symptomatology

It would be a natural assumption that during an intake process, with an active duty soldier or family member thereof, that a segment of the social history would contain a reference as to whether or not the active duty service member had been involved in our last war effort. This assumption however, is blatantly erroneous. Not only has contemporary American society tried to repress memories of that conflicted era, but very often those mental health professionals who are deligated to help our active duty service members deal with the stresses of military life fall into the same pattern. We have apparently forgotten that the paramount life stressor that a soldier can face is a war experience. We have all manner of data to support the everyday trauma of growing up in America and how that may well predispose one to all varieties of psychopathology. However, it appears that for many it is beyond their comprehension how an American teenager (Williams, 1979) growing up with one, two or three tours in war torn Vietnam might leave the scene with some unresolved conflict.
The bottom line is that a war experience is quite stressful and post combat stress symptoms, some lasting twenty years or more (Archibald and Tuddenham, 1965), are well documented (Figley, 1978). If these symptoms can indeed persist or manifest themselves many years after the fact, then the need to identify the service member as a war veteran becomes all that more clear. In order that the etiology, of any post war related symptomatology, comes to light, there must be some inquiry into war time experiences.

In the active duty Army there are some common characteristics shared by the veterans that will help identify them. As previously mentioned, this was our first war fought largely by adolescents, the average age being 17 years old (Wilson, 1979). At this time, a large percentage of these veterans are in their early to middle thirties. This age group is especially prone to post combat reactions as theorized by Wilson (1980). This might well be the case, as the vast majority of the active duty service members that I have worked with (with this symptomatology) are in this age range.

When an active duty service member is in uniform it is usually easy to identify him/her as a war veteran with the wearing of a shoulder patch on the right sleeve. In addition, if the service member is wearing his/her class "A" uniform blouse the appropriate ribbons will be displayed. However, I have met some (more than a few) veterans who will not wear their identifying paraphernalia (this might be diagnostic). If they have some extended time in service and are in their thirties an inquiry is in order. Additionally there are those veterans with a comparatively few years in service, but who recently have come back onto active duty. They would also merit an investigation into any war time experience.

Once the subject of the war is breached, its important to be on the lookout for any affectual changes. Quite often affect will become constricted and over controlled when questions relate to the war or to post combat adjustment. On the other hand, many service members will relate their most recent tragedies with little affect change, but when issues relate to war time experience all manner of anxiety identifying affect will become manifest.

Many therapists, some Vietnam veterans themselves, find it uncomfortable probing into a service member's war related history. The rationale for this merits a research project itself. Given this particular hurdle, it is often easier to surmount by having the service member read a copy of The Etiology of Combat Related Post Traumatic Stress Disorders (Goodwin, 1980). It is very often the case that the service member will come back to the second session primed with personal insight needing very little probing.

It is relatively rare that an active duty veteran will appear in a military mental health setting voluntarily acknowledging that he/she has post combat stress related symptomatology. The more common scenario is that of a service member having familial difficulties or struggling with peers and command on the job. Quite often a young child will present as the symptom bearer of a dysfunctional family system with the troubled veteran hiding in the background. These
particular veterans classically attempt to hide from any kind of recognition. They are acutely aware of the media portrayal of the "troubled" Vietnam vet, and are fearful of having labels attached to their 201 files.

In order that these veterans are identified and referred, it is important for the chaplains, physicians and commanders who make contact with them to become aware of the symptoms of this disorder. As is quite often the case, these individuals have been dealing with the veterans on a day to day basis unaware that identified problemantic behavior has been recognized as a specific disorder and amendable to treatment.

**Organization of the Rap Group**

The structure of rap groups differ. There are advantages to both open ended and closed ended groups. I prefer the open ended group when working with active duty service members in a military environment. The reasons vary. To begin, the military life style is often unpredictable in its demands on an individual and where he/she could be at any particular moment. Invariably a number of your group members will be in the field, TDY, on leave, PCSing or just on duty. This plays havoc when individuals are forced to miss sessions and there are a limited number of sessions. In addition it takes some time to form a relationship with people moving in and out so often.

Much of the work being done in the rap group centers on the social skills involved in establishing new relationships, maintaining them, and termination of old ones. The open ended military setting is ideal in this aspect. Additionally, when a new member enters the group he/she invariably rehashes some of their Vietnam memories. When these memories prove conflictual for the service member, the older group members become very supportive after having worked through their own similar issues. There is no better therapist for a Vietnam veteran, than one of his/her peers confronting the conflict with him/her.

The last statement rests on a point of much conjecture. A lot of discussion has gone into the issue of who can work with the Vietnam veteran population. There are many, including the veterans themselves, who believe that if you have post combat stress related symptomatology your conflicts are only understood with empathy by another combat veteran. Any mature mental health professional who is aware and open with his/her own feelings with good communication skills on a person to person level can help establish the kind of supportive setting that these veterans work best in.

The usual location for group treatment is normally within the confines of the mental health setting. However, this given often presents problems to many veterans with post combat stress reactions. This has been somewhat overcome with the V.A.'s system with their use of the Vet Center concept. The Vet Center specializes in dealing with war related stress symptomatology in an out-reach setting of store front clinics far from the normal V.A. medical center.
In the military system, these groups have been run in both close proximity to the established settings and in distant locations. Both have achieved some success. The current group I am involved with meets in a civilian setting away from the confines of a military post. The active duty service members involved enjoy the privacy this affords, as well as the often hard fought for camaradie that has developed with the civilian veterans of our group. Often, simple logistics will dictate the geographic location of the group. However, be aware that this will present many of these veterans with conflict. By using your imagination, an unconventional setting will help assure a better attendance record.

As I have stated at the beginning of this discussion, this particular area of work is populated with many hurdles. However, Vietnam veterans with Post Traumatic Stress Disorders are being treated and are resolving their conflicts. Working with these veterans is hard work, and often times unrewarding because of the many feelings that our country, our Army and our fellow mental health professionals harbor regarding that conflictual episode. However, I as a mental health professional find there is no greater satisfaction than in identifying the behavioral symptomatology, providing the proper treatment, and in this case watching these honored service members and their families grow.
REFERENCES


As contrasted to my presentation this morning, which was based on eight year's experience as Psychology Consultant and 23 years in the AMEDD Psychology Program, this presentation is a description of a program that I have been involved with for only the last four months.

At Lakeview Center in Pensacola, Florida I am the director of a Vietnam-era veteran counseling program. Under Public Law 96-22 we were awarded a contract by the Veterans Administration in June 1982 to provide "re-adjustment counseling" to these veterans. Myself and four other counselors provide the counseling. Two of our counselors served in S.E. Asia (one was wounded in Vietnam), two others including myself served in CONUS during this period, and one counselor is a non-veteran Ph.D. psychologist. To date we have seen about 50 Vietnam-era veterans, of whom approximately 70% served in Vietnam. Per our contract we conduct individual, group, marital, substance abuse and vocational counseling. Major behavioral problems encountered in our clients to date include employment instability, marital/family problems, lack of direction, abuse of alcohol, depression, poor control of anger, intensive war-related ideation and guilt.

My observations and comments in this presentation on psychological services to Vietnam-era veterans are based on my extended involvement with the military setting including military service from World War II (combat pilot) to almost the end of the Vietnam war; treating soldiers as an AMEDD psychologist during the Korean and Vietnam conflicts; debriefing AMEDD psychologists returning from Vietnam; counseling veterans in a civilian mental health setting; and my experiences to date in this program.

A majority of our clients to date have not been previously involved in a mental health system (military, V.A. or civilian). They are mostly veterans who have been struggling with their problems for some time and chose to avail themselves of this new program in the community when it became available. They learned of the program through media coverage (e.g., TV, radio, newspaper), local agencies (e.g., DAV, VA, employment service, local military base), and word of mouth. The program obviously has filled a need in the Community since veteran response to its opening was immediate and positive.

Our approach to the veteran has been low-key, non-diagnostic, and with a primary focus on the veteran. We down play counselor titles, the trappings of a mental health setting, psychological jargon and paperwork for the veteran. Typically a veteran's presenting problem is accepted as a valid concern and the
starting point of the counseling interaction. Relevant background (e.g., educational, marital, vocational, military) is obtained over the first few sessions. Presenting problems may or may not be re-defined, expanded, or shifted after additional information is obtained. The primary focus of re-adjustment counseling is to help the veteran deal with his present problems and environment in a more adaptive way. We pursue all potential problem areas but no assumptions are made regarding etiology. Critical personal and environmental variables evolve out of the counseling interaction. War and post-war experiences are dealt with in the context of their role in disrupting or interfering with present functioning. We work with the veteran to help him re-structure his view of his experiences in a way which will hopefully help him reduce feelings of isolation, alienation and hostility; free up long suppressed positive feelings; and help him learn or re-learn more adaptive coping skills.

A number of our veterans do express or reflect enduring problems with combat-related experiences (e.g., depression, guilt, nightmares, intrusive thoughts). However, in only a handful of our veterans have these problems been observed to be of seriously disruptive nature. Our experience so far has been that with most of the veterans the strongest feelings still affecting them are related to the post-Vietnam or homecoming experiences. Among the most common themes deal with the lack of acceptance, even hostility upon return from Vietnam and/or military service; the indifference of the civilian community (including family) to the veteran's problems and frustrations; the lack of governmental support or concern; the inability to find an acceptable personal reason or purpose for serving in Vietnam; the dramatically different treatment of the POW's and Iranian hostages upon their return; and a sense of having been used, then rejected by one's country.

Our sense is that as a group the veterans we are seeing are probably less severely disrupted than many of the individuals being seen in VA hospitals and clinics. Veterans also seem to find a setting such as ours (and possibly the VA Vet Centers) less threatening and more acceptable than a more medically or psychiatrically oriented setting. It may also be that the non-medical/psychiatric setting in the individual's community can provide greater motivation and positive reinforcement for more adaptive functioning in one's present environment.

One final observation. This presentation on November 15, 1982 follows by only a few days the dedication of the Vietnam veterans memorial in Washington, D.C. as well as the parade and other veteran honoring events taking place there. These events may well be symbolic of a healing process that is now taking place in our country. The public now seems to be making the distinction between the Vietnam war and the warrior and developing a more positive image of the Vietnam veteran. Hopefully this is so and that this attitude along with the counseling programs now available to the veteran may be a major impetus to fully integrate the Vietnam war veteran back into our national community.
A GROUP MODEL FOR THE VIETNAM COMBAT VETERAN
IN AN INPATIENT SETTING

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Introduction:

During the past decade hundreds of articles and dozens of books concerning Vietnam veterans' readjustment to civilian life have been published, including a variety of works that have drawn on surveys and clinical studies. From Polner's No Victory Parades in 1971, through Wilson's classic reference, The Forgotten Warrior in 1978 leading to the designation of the Posttraumatic Stress Disorder (PTSD), to more recent reviews and surveys (e.g. Egendorf, Kadushin, Laufer, et al. Legacies of Vietnam, 1981), the clinical picture of the Vietnam veteran has taken form. There are at least 40 publications outlining, describing, and agonizing over the variables of the PTSD for Vietnam veterans. Shatan's (1973) coterie of six common themes are as representative as any: guilt feelings and self-punishment; feelings of being scapegoated; rage and other violent impulses against indiscriminate targets; combat brutality and its attended "psychic numbing"; alienation from one's own feelings and from other people; and doubt about a continued ability to love and trust others. Wilson (1978), along with others, has even identified "types" of Vietnam veterans as a result of these variables as well as a selected mixture of adjustment patterns and personality factors.

In the past five or so years there has developed a spirited debate on the scientific and treatment issues related to the Vietnam veteran. These include:

1. Adjustment and symptom levels of Vietnam combat versus Vietnam-era veterans.
2. Adjustment and symptom levels of Vietnam combat veterans versus combat veterans from other wars.
3. The relationship of premorbid personality to later adjustment among Vietnam combat veterans.
4. The posttraumatic stress disorder--its use and clinical purity.
5. Treatment issues for Vietnam veterans.
Foremost among these has been the underlying emotionally-loaded concern of whether the Vietnam veteran deserves "special" consideration or recognition. Problems unique to the war in Vietnam and the subsequent adjustment years in society are often discussed. There has in the past 10-years been no shortage of "blame" speculation when Vietnam is mentioned.

It is not surprising then that there is still much confusion and bitterness concerning that 1964-1973 period, and the years following. At such times cautious observers seek synthesis and a conceptual clarity. Egendorf (1982) perhaps best places in perspective some of these critical issues: to lay to rest finally questions of whether the aftermath of the Vietnam war differed from the aftermath of other wars; to recognize the wide variation and range of responses of the Vietnam veteran; to pay tribute and duly note the many Vietnam veterans who are not just adjusting, but thriving; and, most especially, to appreciate that a subclinical malaise affects more than two million men, a virtual majority of those who served.

This paper is directed to that growing minority of Vietnam combat veterans using the Veterans Administration inpatient and outpatient services. As of August 1982, the VA Outreach Centers alone has served over 125,000 Vietnam-era veterans. Scores more have been treated as inpatients and/or outpatients in VA Medical Centers. It has been estimated that some 20% of Vietnam veterans have substantial war-related psychological difficulties. It has also been estimated that as many as 5% are suffering highly disorganized lives (Blank, 1982). In the Veterans Administration Medical Center in Augusta one in every two psychiatric admissions is a Vietnam-era veteran. As you might expect, the range of diagnosis is varied. The most frequent symptoms noted are those of depression, confusion, somatic concerns, flashbacks, nightmares, violence, suspicion, addiction to alcohol or drugs, often suicidal and/or homicidal behavior. At the present time it is safe to say that virtually every VA Medical Center has some special provision or program for Vietnam veterans. While the bureaucratic petrification of the VA has been exposed (Wilson, 1978), only a handful of Vietnam treatment programs has been discussed.

This paper discusses the treatment of the Vietnam combat veteran in an inpatient setting, the Veterans Administration. Specifically, its purpose is to discuss previous research in the treatment of these veterans, especially in inpatient treatment, to outline a model of group treatment, and to highlight selected aspects of this process with a special emphasis on resistance and paradoxical intervention.

Treatment Positions:

Reports from the VA Medical Centers (Blank, 1982) suggest a clear trend toward an increased emphasis on special milieus for Vietnam veterans with a special focus on groups and interventions involving both the veteran and his partner. To date, however, no major research on clinical outcomes has been published. Retrospective data from several sources suggest some conclusions and treatment direction. Probably the PTSD among Vietnam veterans is best conceived
as the result of a profound assault in which severe psychic stress is added to a set of conditions that impair or delay the ability of the individual to proceed with the ongoing tasks of adult development. A latency period or psychological moratorium then festers with psychic turmoil and developmental problems during the ensuing years.

The two most important treatment elements, alluded to again and again in clinical reports are the therapeutic relationship and Vietnam group identity, most notably self-help and peer-support. For any who have dealt with this population these two factors are indeed strong. No other group hungers more for someone to listen and to validate experience; what Jerome Frank (1974) calls the cornerstone of all psychotherapy. No other group seems to need a group identity or a “holding environment” more than these veterans. All groups with identifiable problems (e.g. alcoholics) have this identity feature in common, but with this population it seems to represent survival itself. Williams (1980) has identified seven representative features of group treatment with the Vietnam veteran: reduction of stigmatization, uncovering pride, removing the fear of mental illness, learning a better way, expression of emotions, provision of a sense of community, and the establishment of a forum. It is not hard to see how the therapeutic elements of an understanding relationship and group identity become prepotent.

A review of the VA inpatient treatment programs reveals a common helping paradigm. For some reason these rehabilitation and treatment programs like to “divide into three” their treatment efforts. Lifton (1978) labels one such program confrontation, reordering and renewal. The Palo Alto Program (Berman, Price and Gusman, 1982) utilizes three main tasks also: the relief of acute psychological distress; the restoration of the Vietnam veteran to a maximal level of functioning within the shortest period of time (approximately 6 months); and the reintegration of the veterans into the community and its support systems. Particular emphasis is placed on a return to employment and a reconnection with family or friendship network. The content of such programs involves many nonspecific treatment variables not unknown to therapists (listening, empathy, revealment and unconditional acceptance) and Vietnam combat veteran-specific features already alluded to (issues of guilt, psychic numbing, flashbacks and the like).

For the most part then, the treatment focus for Vietnam veterans has been through a supportive milieu as well as group therapy. In such a setting these veterans can both take sanctuary and develop the autplastic conviction of growth. There are other helpful treatment modalities too with this population, especially behavioral flooding (Keane & Kaloupek, 1982), couples therapy (Williams, 1980), and relaxation/behavioral/stress reduction techniques (Marafioti, 1980). Somewhere along the line, however, the four critical components of psychosocial crises outlined by Wilson in 1978 need to be addressed: 1) self identity values; 2) interpersonal involvement; 3) authority relationships; and 4) the nature of political process. The reader is referred to the works of Figley (1978) and Williams (1980) as treatment resources.
Inpatient Group Treatment: A Model

The group treatment model utilized at the Augusta, VAMC also is not unlike others. There are three phases existing across time. The treatment philosophy espoused relies strongly on the adaptive capacity of the Vietnam combat veteran. As Sullivan (1954) notes:

"The brute fact is that man is so extra-ordinarily adaptive that given any chance of reasonably adequate analysis of the situation, he is quite likely to stumble into a series of experiments which will gradually approximate more successful living."

As noted above, the strength of the treatment process involves the group identity and issues related to Vietnam and its aftermath, as well as the treatment relationship itself. As Freud noted, the therapist can listen to the same things again and again until they begin to "speak."

Phase I is labeled the identification/abreaction phase. Vietnam identification and emotional catharsis are the two most salient elements during this early phase. It lasts anywhere from two weeks to three months. During this time, experiences related to the war itself are relived. Pride is reified, community felt, and the old and the new become one. At this time, little "classical" therapy can be performed as there is an existential need for human encounter, almost for the first time since Vietnam. This group sanctuary raises hopes and expectancies and creates a needed ingroup. It is amazing to experience instant relief as combat veterans see that others have this problem, that they are not going crazy, and that finally somebody is helping.

The central therapeutic strategies employed during this phase are once again unconditional acceptance—the holding environment—and the labeling of experience, particularly feelings. During this opening phase also the feeling mode is the major source of data. Consequently, the labeling of feelings and the clarification of cognitions are essential. Any treatment direction must unfold through these therapeutic strategies.

Between the first and the sixth month many things happen. This is Phase II and can best be viewed as the time when the "work of therapy" unfolds. It is a time when group cohesion and relationship concerns take a balcony seat to the "work" of therapy; better self-understanding, self-acceptance, and self-control. It is the period of "optimal disillusionment" to borrow Basch's term (1982). This consists of helping the client face the often painful fact that causes for failure and unhappiness in life are to be found in his character and in his behavior patterns.

The Vietnam combat veteran has a high degree of affect arousal and group commitment during the entire treatment process. These are conditions optimal for lasting change. It has been my personal belief that the bottom line to successful therapy of whatever variety is the client's willingness to listen, to step back and to allow himself to be confronted in painful ways. This is the true working alliance. During Phase II the therapist will feel a constant "tug"
between human needs of support and therapeutic ideals of growth. In the language of the Vietnam veteran this has been labeled "fatal flow" issues versus ones more related to therapeutic change (Figley, 1978). After a group identity has formed and the bonds of the relationship solidified it is recommended that a vigil tuned into the personalization of issues, self-defeating life style patterns, and self-demands for change become activated by the therapist. Side concerns related to the Veterans Administration, society and its global problems, and as well as Vietnam are highly seductive and often need to be reframed or reordered. Keeping the therapeutic focus on self - "how was this experience for you?" - on the present - "What is going on now?" - and on change - "What will you need to carry that out?" - are important.

It is at these times that resistance becomes a problem. As a therapeutic construct it has been widely discussed; as it applies to the Vietnam combat veteran it has been somewhat neglected, probably because of the clinical emphasis on the accepting environment. Resistance is a natural process in therapy and its central core involves opposition to change in whatever form. It reminds therapists everywhere that change is never easy and certainly never linear. It is an important issue with this population because of those psychological features most evident with the Vietnam combat veteran; a repetition of patterns, intense feelings and especially ontological confusion. As briefly mentioned, one of the issues in the scientific literature regarding the Vietnam veteran involves the extent to which the premorbid personality is an influential factor in post-war adjustment. In the inpatient group setting resistance components become manifest less through the character of personality of the Vietnam combat veteran. Rather fears regarding the change process, the anxiety of the therapeutic process itself, are more important.

During the past decade or so, Horowitz and Solomon (1978) in San Francisco have helped conceptualize resistance for this population. Using the literature of stress they noted that manifestations of the stress response syndrome often do not appear until after termination of real environmental stress events and after a latency period of apparent relief. Then strategies to deal with the PTSD express themselves in two major ways. One tendency involves the intrusion of "warded off" ideas or the compulsive repetition of trauma-related behavior or emotion. The second tendency is a contrary one. It involves the constellation of denial, repression, and emotional avoidance. For the Vietnam combat veteran these contrary strategies can eventually lead to the many symptoms of the PTSD, from nightmares to acting-out.

At the VA Medical Center at Augusta, a screening battery of tests is given to all Vietnam-era veterans. Two of these tests, the Impact of Events Scale and the Figley Stress Scale, are especially important. The Impact of Events Scale measures the two poor coping strategies identified by Horowitz and Solomon. Intrusion thoughts are characterized by such strategies as unbidden thoughts and images, troubled dreams, strong waves of feelings and repetitive behavior. Avoidance responses include ideational constriction, denial of meanings and consequences of an event, blunted sensation, behavioral inhibition, counterphobic
activity and an awareness of emotional numbness. The Stress Scale is a 31-item scale with four responses ranging from no problems to major problems (1-4). This scale measures present stress related to many day-to-day functionings within the family, within society, and human relationships, as well as those that relate back to Vietnam.

Table 1 gives the results of these two scales for the first 40 combat veterans and the first 40 non-combat veterans. As you can see there are significant differences. Combat veterans have more negative, cognitive/behavioral/emotional coping strategies, as well as more stress than their non-combat counterparts. Therapeutically, these are viewed as blockages or resistance. It is believed that through the relaxation of these strategies that the "work of therapy" can progress.

The resistance paradigm on the next page is an effort to explain this process. It borrows from the work of Saltmarsh (1976), Kell & Mueller (1966), as well as Maslow (1954). It posits two levels of resistance (growth and resistance). Each of these levels, it is believed, are implicit messages, which, if they can be verbalized, will lead to resolution of problems and entry into "higher" therapeutic levels. The therapist's task is to resolve the patients' attempt at resistance and activate the growth level. On this paradigm also are represented the prominent conditions displayed by the patient, his method of operation, as well as the teleological end-point or goal sought. This last issue of goal is especially important when there is a goodly amount of intensity. One's "fictive" goal becomes easily apparent and can be used as a therapeutic handle for change.

At the growth level, there is a strong commitment to therapy. Many of the humanistic approaches of group experience, conditions for freer study of change potential, can be set in operation. This level is a hierarchical, proceeding from three to one and a more refined self-exploration. At this higher level there is a real working alliance. Lower level resistance is transcended. The activities of self-searching, mutuality and even existential concerns are energized. The client is vulnerable, but also helpful in his process of therapy. At this level there is a "drive" for change and a willingness to experience pain.

At the resistance level, on the other hand, the client is a power-broker trying to set-up safe conditions for himself. Intrusion and avoidance are the two self-protected strategies. These two processes are not sequential but stylistic. In fact, it is not unusual to see Vietnam combat veterans displaying both of these. A clinical clue that these strategies are being used is the client being unable to adequately define what he wants. He might even seem nervously content with his personality adaptation to the "subclinical malaise" since Vietnam. Outside of a small band-width of safety, an adversarial potential is seen. The therapist often feels like the "helpless helper" and may find the need to search in his/her therapeutic armamentarium for "techniques" to bring on movement. It is no surprise that this veteran can be quite creative in the resistance method used. The Resistance Paradigm represents only the most popular ones.
One technique that has been used successfully with the Vietnam combat inpatient veteran is paradoxical intervention. This veteran, as Rohrbaugh et al. (1977) have noted has a high reactance potential: that is, there is a high probability that this veteran will resist the therapist's influence and seek his psychological freedom. Paradoxical interventions are specifically designed for just such conditions. Paradox is designed to "get on the side of the resistance" and to minimize initial needs to change. It is loosely defined as an intervention or command, which if followed or accepted will accomplish the very opposite of what it is seemingly intended to accomplish (Weeks & L'Abate, 1982). This procedure is done under a benevolent umbrella and keeps the full respect of the therapeutic relationship. It does little good to "get cute" with the Vietnam combat veteran.

Three types of paradox interventions are especially useful with this population: relabeling, restraining, and insight-producing paradoxes. As with all paradoxical interventions an initial effort is made to utilize the language of the client; "How does this person want to be seen?". This question usually provides a meaningful framework around which the language of each person emerges. Once this is established paradoxical injunction can be employed.

Relabeling involves a change of the label attached to a personal problem without necessarily changing the frame of reference. It is a creative technique which seeks to change the client's phenomenological perspective. Like most paradoxical injunctions, it seeks to give the client greater self-control. Weeks (1977) has offered a number of examples where "reality" can be changed from bad to good. Oppositional tendencies can be relabeled as searching for one's own way; impulsive tendencies, as one being spontaneous and being able to let go; being depressed, as being self-searching. The implementation of this strategy is especially helpful during the early period of Phase II, at the resistance level.

In a similar way, restraining and insight-producing paradoxes can be used. The message in restraining is a simple one: in order to change, remain the same or give up. There are many different ways to change. Restraining methods can be used at different points in the therapeutic process to help facilitate or maintain changes that have already been facilitated. Zeig (1980) has given many examples of this type of paradoxical technique. In the group it has often been helpful to certify that, as a Vietnam combat veteran, he no doubt has substantial problems and at the present time he should not seek change, as change would almost certainly lead to excessive psychological risks or poorer adjustment in the future. Similarly, insight-producing paradoxes are in order. This form of paradoxical intervention provides what Weeks and L'Abate (1982) label as a pragmatic insight. The therapist is merely providing structure for an experience, not the interpretation of that experience. The insight is simply a perceptual reorganization grounded in the client's own language system. One example of this is Watzlawick et al.'s (1974) when-then paradox. The combat client might be told, "When you feel angry and annoyed, then leave the situation and go for a walk, thinking only how controlled you are and how helpless you are." One successful paradoxical intervention like a picture is worth a thousand words. Group members vicariously apply new learnings to themselves, as one small success lead to more successes.
Resocialization is Phase III. In the waning three or four months of group
the veteran has the double task of solidifying new therapeutic experiences and
of objectively carrying out a practical plan involving social support systems,
employment, education, housing and income. The veteran is returning to the com-
community. Consolidating therapeutic learnings and concrete resocialization tasks
are the barometers of change. Setbacks are reframed as part of the turbulence
of change: to choose to change does not invalidate the life already lived; it
only accepts the reality that has been lived and that a new and different living
awaits.

Conclusion:

As you might expect, little of this process/model goes smoothly. A model
is really a heuristic device to be used until a better one comes along. In
therapy it is known that no two patients are really alike, that even the same
stress impacts differently on participants, and that every therapeutic
experience is ultimately one that requires its own individual definition. There
are no doubt many viable models to group treatment using this population.
There are also many other issues of importance not discussed; therapist personal
problems, group membership, acting-out, contacts, and rules, to name but a few.
The intent here was to formulate a theoretical but practically based, somewhat
parsimonious model to re-sensitize therapists treating Vietnam veterans to
issues of group therapy.

During inpatient group treatment something was discovered about the Vietnam
combat veteran that has been face valid all along. It is most unusual to meet a
Vietnam combat veteran who is not "ready", and who does not communicate his
messages over painful channels. Even when negative, avoidant, sullen, or
embarrassed, the Vietnam combat veteran is "ready." He wants to unload.
Psychotherapy in a strict sense is really not for this person. It in the long
run is an intellectual exercise no matter how much one detests this implication.
It is divorced from life; it is not life. Even worse, it is even confining; it
sets up limits and codified paths to "correct behavior."

But psychotherapy is also an encounter. The very best of the experience of
the human condition. It is not intended for the impoverished, the backward
focusing, because it ultimately asks "is it possible to deal with some things
that really matter to us?". This is why virtually every therapeutic position on
the treatment of these Vietnam veterans entails a vibrant emphasis on the human
relationship in therapy. Whatever that portion of the total therapeutic
variance that is real or manipulative, societal-induced or individual-induced,
premorbid or postmorbid, latent or expressed, experienced or fantasized; wha-
tever it is, the positive addiction of the therapeutic experience and all this
entails will be important.

If the mental health professions fail with this population, it will be
because we are victims of our own clinical and diagnostic tools. As therapists,
it might be helpful to "travel light"; to put distance between our theory and
our treatment. Lifton (1978) has written eloquently on the therapeutic dilemma
of advocacy versus treatment. Perhaps as therapists we need a touch of both
with treatment being most important during the middle phase of hospitalization (Phase II). It must be remembered that in the Posttraumatic Stress Disorder, these are clients who experienced real events. Jerome Frank (1974) has labeled such a condition, demoralization, where turmoil develops because the demands of society are felt and escape is not possible. Such is the plight of the Vietnam combat veteran.

REFERENCE NOTE

REFERENCES


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The role of Psychology and health care has blossomed to the point where specialization is not uncommon. The identification of psychological etiologies for somatic disease as well as the alleviation and resolution of somatic complaints have become a routine endeavor for the practicing clinician. In an attempt to maximize the delivery of psychological services to psychosomatic patients, the Psychology Service at Fitzsimons Army Medical Center developed a 10 week Stress Management Program (SMP) aimed specifically at relief of somatic symptomatology. This paper describes the program and offers a clinically oriented review. The SMP is composed of three modalities; namely, Rational Behavior Therapy, Relaxation Therapy, and Biofeedback Therapy. The integration of these varied approaches is discussed. From its inception, the SMP has been designed with at least some empirical measurement of effectiveness. Initial and very preliminary results on a pre-post MMPI, a post treatment survey, and an EMG measure are presented.

INTRODUCTION

There are few terms that are more frequently used by more people in more diversified situations and mean more things than "stress". In fact, it is difficult to imagine a word that on one hand has as much communicative value as "stress" yet communicates such a wide range of emotions, psychophysiological responses, environmental contingencies, and life situations. Any clinical or research endeavors concerning stress or stress related problems demand early definitional parameters. The present paper describes the background, procedures, and early outcome of a psychological intervention designed to assist patients suffering psychosomatic dysfunction. Stress is viewed as a richly communicative term that conveys the complex of antecedents and consequences of psychosomatic illnesses.

It is almost a paradox in Psychology that definitions raise more concern for definitions and one risks being launched upon a never-ending reductionist journey which is not the intent of this paper. Such a tendency will be consciously resisted; at least following elaboration of "psychosomatic
dysfunction" (psychosomatic illness, psychophysiological reaction, and associated terms are viewed as synonymous). A psychosomatic dysfunction reflects a perceived pain, illness, or physical difficulty with at least some significant portion of the etiology thought to be psychological. The organic - functional dimension is not considered relevant to this definitional view. Similarly, exaggeration of organic impairment is considered only as a variant of psychosomatic problems. While consistent with the DSM-III's (1980) Psychological Factors Affecting Physical Condition, the present view is considerably broader as a result of the practical concerns in reaching a broad spectrum of "difficult to treat" patients with psychological and somatic symptoms mixed in varied fashion. Hopefully, definitional issues are now reasonably resolved.

In attempting to maximize psychological services to patients suffering psychosomatic illnesses, the Psychology Service at Fitzsimmons Army Medical Center has sought to develop a treatment that would be reasonably efficient in terms of both patient and staff time, acceptable to a heterogeneous population (portions of which could be resisitive to "psychological" interventions and especially to the assumption of a psychiatric patient role), and relying on intervention techniques based on firm theoretical and empirical foundations. What has emerged is a "Stress Management Program" (SMP) composed of three modalities; Rational Behavior Therapy (Maultsby and Carpenter, 1980, 1976; Ellis, 1963), Relaxation Therapy (Jacobson, 1938) and Biofeedback Therapy (see for example Olton and Noonberg, 1980). The program lasts ten consecutive weeks and relies on a group and homework approach for Rational Behavior Therapy (RBT) and Relaxation Therapy (RT) and individual appointments for Biofeedback Therapy. Figure 1 provides an overview of the SMP. The program will be described in greater detail after the modalities are reviewed along with their theoretical and empirical background.

RATIONAL BEHAVIOR THERAPY (RBT)

RBT shares so much in common with Ellis's Rational Emotive Therapy (RET) that Maultsby (1976) has come to view the two approaches as virtually synonymous. Certainly the same theoretical basis for understanding and modifying emotional responses is applicable to virtually all cognitive based therapies. Treatment focuses on the patient's beliefs surrounding his reality, action, or event. The beliefs or thoughts (not the event) are viewed as direct antecedents for the emotional response. Typically an "A-d-C-D" format is used to both illustrate and analyze the process leading toward emotional responding and the therapeutic modification of dysfunctional emotions. "A" represents an extremely objective description of the situation eventuating in a problematic emotion with "D", the beliefs about "A" which generate "C", the emotional consequence. "D" represents the rational alternative, a set of beliefs about a reality or situation which produce a healthier emotional response and in turn more effective behavior in reaching the patient's goal. "D" sometimes symbolizes the debative, rationally argumentative and analytical interactions that describe the basic therapeutic process.

RBT is often thought to have its origin with Ellis's development of RET (see Ellis, 1963). In fact, as Ellis (1977a) points out, the history is con-
siderably more elaborate. This is readily understandable when one realizes that RBT is straightforwardly and admittedly a philosophical position and an applied use of the same. Thus it is entirely appropriate to consider RBT as a continuation of rational and stoic philosophy. A very interesting, modern, and rationally based social philosophy is examined in an essay dealing with the work of Habermas by Quentin Skinner (1982).

The clinical applications are of course more recent. In his theory of personal constructs, Kelly (1955) favors a highly cognitive and rational approach to both personality and psychotherapy. Contrary to the prevailing view then, and perhaps even now, Kelly argues that the most basic of psychological motivating factors is not pleasure but rather understanding. Humans are viewed as motivated to develop behaviors and beliefs which lead to more accurate predictions for events in their world. Emotion as the consequence of belief has been an integral component to cognitive approaches and a good deal of research has been gathered to support this view (see Ellis, 1977b, p. 37, for a listing of key research and Lazarus and Averill, 1972 for particularly detailed data). Few theorists and practitioners have gone so far as to conclude that all emotions are the products of cognition. Even Ellis (1977a) acknowledges significant biological determinants of emotions and behavior. Ethological studies and conclusions concerning at least some predisposition for emotional patterns and behavior have generally been accepted and assumed if not well integrated into rational theory. Nonetheless, there is at least one theorist who argues for an exclusively predominant role of cognition in all emotions, even in intrahuman species (Lazarus, 1982). Without endorsing such an extreme position, an impressive array of theorists and researchers including Heider (see Benesh and Weiner, 1982), make it reasonable to view RBT as meeting the theoretical quality considered an essential criterion for a therapeutic modality in the SMP. The empirical support for outcome effectiveness of this psychotherapy is probably greater than most others and has been extensively reviewed by Ellis (1977). Criticisms of the research validation for RBT (again, this is used synonymously with RET) such as that of Kessel and Streim (1976) have been readily answered (for example see Sutton-Simon, DiGiuseppe, and Miller, 1978). Even those who utilize RBT under different titles (e.g. Cognitive Behavior Therapy, Beck, 1976) have gathered their own research highly supportive of outcome effectiveness. In brief, of all the psychotherapeutic procedures considered, RBT is viewed as potentially the most effective and efficient for assisting the psychosomatic patient.

THE RBT MODALITY IN THE SMP

The RBT intervention is limited exclusively to group sessions and homework. In fairly directive fashion, patients are oriented to the theory and taught the method of rational analysis. Figure 2, illustrates how this analysis is organized; clearly it is a virtual template of the theory itself. Patients are given instructions on Maultsby's five criteria of rational thinking and assisted in using these criteria to assess the rationality of their own belief statements in "B". Figure 3, lists the criteria. Beginning the first week, patients begin
doing homework. Each patient is asked to take one situation occurring during the week in which they responded irrationally and upset themselves more than they either desire or judge to be healthy. They are asked to do a rational analysis and are given a form to assist them (the same form depicted in Figure 2). As might be expected the earlier weeks emphasize "A", the objective description of their situations and each week the analysis is broadened. By the third or fourth week, full analyses ("A-B-C-D") are expected. Each homework is reviewed by one of the therapists and returned with appropriately constructive comments. Each group session focuses on at least one patient's analysis. All members participate in rational debate, sharing of experiences, empathy, and recommendations in a manner not unlike group therapy. The patient task is to gain increased understanding of how they contribute to their emotional and somatic problems and how a rationally modified set of cognitions can generate healthier feelings and behavior. The patient is encouraged to begin implementation of alternatives immediately and is assisted in this task with instruction on behavioral rehearsal, thought stopping, rational emotive imagery (Maultsby, 1971) and other specific behavioral recommendations. The RBT component of each group session is approximately 45 minutes. There are a total of six group sessions in the ten week sequence of each SMP. (The final group session is evaluative in nature).

RELAXATION THERAPY AND BIOFEEDBACK THEORY

It would be legitimate to ask why the need for other treatment modalities in the SMP especially in light of the effectiveness boasted for RBT. Actually few rational therapists argue that only RBT is sufficient in all cases; it is simply necessary. RBT is unique in the ease with which other procedures can take on a supportive and consistent role (Ellis, 1977 and Maultsby, 1977). Considering the nature of the psychosomatic problem, it is believed that direct somatic attention is critical. RT and Biofeedback Therapy both permit relearning of psychophysiological responses and patterns from well learned maladaptive habits to healthier ones. Both procedures do this relatively directly (i.e., with a minimum of intervening interpretations) and are entirely consistent with RBT. Reinking and Kohl (1975) briefly review the evidence demonstrating the effectiveness of relaxation therapy in reducing the psychological concomitants of anxiety. In their own investigation they found that muscle training with electromyogram feedback (EMG) produced the most rapid learning and depth of relaxation. Budzynski and Stoyva (1969) found skin temperature feedback to also be an effective psychological method for relaxation and relieving anxiety. Very useful clinical reviews of biofeedback procedure and applications can be found in Olton and Noonberg (1980) and Gaarder and Montgomery (1977). Relaxation Therapy can best be reviewed through the work of Jacobson (1938).

RT AND BIOFEEDBACK THERAPY IN THE SMP

RT is implemented in all of the group sessions for approximately 45 minutes. Using Jacobsonian type instructions, the therapist facilitates all members of the group in a relaxation exercise. Each patient is given a series of tapes
covering different relaxation exercises for home use. During the group sessions these tapes are discussed, exercise problems reviewed, and sharing of experiences encouraged. Attempts are made to resolve specific difficulties as well. A new tape is provided the patients each week until they have all four. They are encouraged to exercise once or twice per day. A log illustrated in Figure 4 is completed each week, reviewed by the therapists, and returned with constructive comments. Patients are advised to continue their practice during the weeks where the group does not meet as a whole and to maintain weekly logs as usual. Again, every patient's log is reviewed and returned.

Biofeedback Therapy is viewed as both a continuation of RT and a conjunctive procedure. The patients are first introduced to biofeedback theory and application during the fourth week of the SMP. A very basic description of the feedback loop and its psychological implications are given. Use is made of a very simple diagram illustrated in Figure 5. The critical, instructive point is the patient's own contribution to their somatic expression of emotions and their potential for modifying it. During this session patients are shown and oriented to the biofeedback equipment they will be working with. These consist of EMG (Model B-1) and digital temperature (Model DT-1) units designed by Bio-Feedback Systems.1 Beginning with the fifth session and continuing through the end of the program, patients are provided individual weekly biofeedback sessions. Most patients are first given EMG training utilizing the frontalis muscles while temperature is continuously recorded. Audio feedback is the principal mode. Depending on a patient's progress and needs, the biofeedback is switched to skin temperature sometime toward the eighth or ninth week of the program. A biofeedback training log for each session is maintained by the therapist and is illustrated in Figure 6. Naturally, the therapist is available to not only provide instruction and encouragement but also to facilitate resolution of confusion and difficulties. Details of the procedural aspects of biofeedback therapy can be found in Gaarder and Montgomery (1977) which has been utilized as the basic text for biofeedback applications in the SMP.

PRE-POST EVALUATIONS OF PATIENTS

All potential candidates for the SMP are seen on referral from any physician in any medical service or department. Naturally a patient is only considered if he or she suffers a psychosomatic problem. The evaluation consists of an interview emphasizing the history of their somatic complaints as well as a brief psychiatric/psychological overview. In addition an MMPI is administered. Mental status observations are made during the history taking.

At this time, the criteria for accepting a patient into the program are rather liberal since predictive data are only now being developed. As mentioned earlier, the patient must have a psychosomatic problem; "generalized tension" or "anxiety" does not constitute a psychosomatic problem. The patient must not be psychotic or suffering from one of the major affective syndromes. The "ideal" MMPI pattern is either one elevated in any combination of scales 1 through 3 or a clinically normal profile. However, in the absence of clinical evidence suggestive of psychotic or major affective psychopathology, no patient is excluded on the basis of the MMPI alone. Acceptance into the program is not

contingent on concurrent treatments, medical or psychological. In cases where patients are not accepted, an alternative recommendation is made (e.g., psychotherapy).

The post-treatment measures consist of another MMPI and a symptom oriented, program evaluative and self-assessment questionnaire (Figure 7). These are accomplished during the tenth and final session of the SMP. A six month followup questionnaire is sent to each patient accompanied by a letter asking for their participation (Figure 8). The followup questionnaire is illustrated in Figure 9 and is simply a modification of the first set of items to account for the time difference.

EMPIRICAL REVIEW

Subjects. The subjects were patients referred from various medical departments to the Psychology Service, Fitzsimons Army Medical Center. The patients all presented with chronic somatic complaints, which had not responded well to medical treatment. The patients were evaluated as described above, accepted into the ten week Stress Management Program and seen between October 1981 and June 1982. In all, 19 of the 23 patients who began the SMP during that period completed the program.

Most of the patients were female dependents of active duty or retired military personnel. However, there was a great diversity in age and education (see Table I), as well as in presenting complaints. As can be seen in Table II, those patients who dropped out of the SMP did so quickly in three or fewer sessions. The dropouts did not differ dramatically in age or education from those who completed the full ten weeks.

Procedures. As noted above, the patients were evaluated with an MMPI both before and after treatment in the Stress Management Program. Also mentioned above was the Post-Treatment Questionnaire (Figure 7) which gave each patient an opportunity to evaluate the program.

The Post-Treatment Questionnaire (PTQ) also allowed each patient to describe his/her perception of any changes in several areas related to the somatic complaints initially presented. These areas included (1) his ability to relax himself, (2) the frequency of symptom occurrence, (3) the usual severity of the symptoms, and (4) his ability to control the symptoms both before and after participation in the SMP.

Finally, during the biofeedback training phase of the SMP, careful records of frontalis muscle EMG readings were kept for later statistical analysis, as well as for informational feedback to the patients.

2. The data from the followup questionnaire has not been collected or analyzed at this time but will be incorporated in future reports.

20
Results. The statistical analysis of the available data required both parametric and nonparametric procedures. The pre- and post-treatment MMPI T-scores and the mean EMG readings from each patient's first and last biofeedback training session were analyzed with a one-tailed t-test for paired comparisons. A one-tailed test was used since the test score and EMG reading changes of interest were all unidirectional. The scores on the PTQ were considered to be ordinal in nature. Therefore, analysis of that data was done nonparametrically using the Sign Test for matched pairs.

Each of the three SMP patient groups was originally to have been statistically analyzed separately. However, most of the dropouts occurred during Group II. Therefore, it became necessary to combine Groups II and III to create a sufficiently large number of subjects to allow for meaningful, statistical analysis.

A summary of the analysis of the PTQ results for Groups I and II/III can be seen in Tables III and IV respectively. It can be noted that in both groups the patients reported statistically significant (p < .01) increases in their abilities to "relax" themselves and to "control" their symptoms. Additionally, they reported significant (p < .01) reductions in both the frequency and perceived severity of their symptoms.

While the patients reported self-perceptions of dramatic changes in themselves and their presenting symptoms, the remaining results indicated little or no statistically significant change in the other measures after treatment. Table V shows the mean pre- and post-treatment MMPI T-scores for all the patients on all of the validity and clinical subscales. Only the Pt scale showed a significant (p < .05) change; in this case a mean reduction.

Finally, Table VI outlines the average EMG readings from the frontalis muscle (used as a rough barometer of general relaxation) of the patients during the first and last biofeedback training sessions. While six of nine patients in Group I and nine of ten patients in Group II/III showed a mean reduction in frontalis EMG readings during the biofeedback training, these changes failed to reach statistical significance at even the .05 level.

CONCLUSION

For some time a philosophical trend has been developing toward a biological or organic view of behavior to include psychopathology. In a sense, the mind-body question has been answered for some by "concluding" that mind and brain have been "proven" to be identical. An exemplary argument for this view is presented by Restak (1979). Yet more recently, a number of writers have taken issue with this trend and have meaningfully argued (actually re-argued) for the validity of a Psychology of behavior. Of particular note is Peele's (1981) attack on reductionism. Cousins (1982) provides an interesting piece that even while suggesting a biochemical intervening mechanism, reports on the usefulness of humor in cancer treatment. Smith (1982) has taken an anti-reductionist posi-
tion in the growing antipsychological (i.e., anti-mind) bias in clinical neuropsychology. In no uncertain terms the SMP is fully in the psychological tradition both in theory and practice. There is probably no psychotherapy more philosophical, more psychological, and less biological than RBT. RT and Biofeedback Therapy are entirely consistent with the psychological level of understanding and intervention. It seems to make inherent sense that even when treating "medical problems" psychologists can be most effective when maintaining conceptualizations and practice at a psychological level.

The preliminary results suggest that this approach has some empirical validation. At least in terms of the present patient sample, the self report measures strongly reflect the clinical impression that therapeutic change and movement has taken place. Despite the problems of using the patient as primary judge of improvement, it is well known that in clinical settings thisconstitutes the most widely used if not the only outcome measurement. While the MMPI results are not terribly impressive, the scale that did show significant change was the one probably best measuring irrational thinking (i.e., Pt). Interestingly, this was one of the scales to show change in a study of short term RBT although the change was in a negative direction (Rosenheim and Dunn, 1977). It appears that RBT does in fact influence troublesome cognitions which thereby implies a risk of paradoxically exaggerating irrational thinking. Certainly in the present study this did not occur perhaps due to the comprehensive and psychologically based planning included in the SMP. Finally, the biofeedback measurements support an appropriate therapeutic trend but similar to the MMPI data, the results are far from dramatic.

It is expected that as the data base grows, it will be possible to refine and elaborate the empirical validation begun here. Presently, it is clear from clinical and questionnaire sources that patients are perceiving themselves as significantly helped by this program and there is some indication that other measurements confirm this impression. It may be important to expand the set of dependent variables to include for example, number of visits to medical clinics and life style changes.

Although an active treatment program, the SMP is also considered somewhat experimental and modifications aimed at increasing its potency will continue to be made based on empirical results. Each of the three treatment modalities are continuously being developed, refined, and hopefully improved. In the truest psychological sense, the program presented here is both a treatment and an experiment.
REFERENCES


Maultsby, M.C. Introduction and summary for rational behavior therapy (the art and the science). Published by The Rational Behavior Therapy Center, University of Kentucky, College of Medicine, Lexington, Kentucky 40503, 1976.

## TABLE I

**PATIENT DEMOGRAPHICS**

<table>
<thead>
<tr>
<th>PATIENT</th>
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<th>AGE</th>
<th>MARITAL STATUS</th>
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**SUMMARY**

- M-6
- M-17
- M-13
- AD - 2
- F-13
- M=45.4
- S-2
- Mode = 12
- Civ-14
- D-0
- Range = 12-18
- Ret-3

74
# TABLE II

## DROPOUT PATIENT DEMOGRAPHICS

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<th>PATIENT</th>
<th>SEX</th>
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<th>MILITARY STATUS</th>
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<td>M</td>
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<td>38</td>
<td>M</td>
<td>17</td>
<td>R</td>
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**SUMMARY**

- M-2 M-46.5
- M-3 M-14.3
- Civ - 2 M = 2.25
- S-1 Ret - 2
- D-0 AD - 0
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<td>2.47 *</td>
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<td>Frequency of Symptoms</td>
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<td>Severity of Symptoms</td>
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<tr>
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* p < .01
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<td>Frequency of Symptoms</td>
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* p < .01
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* p < .05
### TABLE VI

**MEAN FRONTALIS MUSCLE EMG READINGS**

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<th>GROUP</th>
<th>AVERAGE # BIOFEEDBACK TRAINING SESSIONS COMPLETED</th>
<th>FIRST TRAINING SESSION</th>
<th>LAST TRAINING SESSION</th>
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<tr>
<td>I</td>
<td>4.75</td>
<td>4.37 mv</td>
<td>3.48 mv</td>
<td>1.166</td>
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<tr>
<td>II/III</td>
<td>5.6</td>
<td>4.93 mv</td>
<td>2.88 mv</td>
<td>1.575</td>
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As measured in microvolts (mv) on a model B1 EMG unit from Biofeedback Systems, Inc., Boulder, Colorado.
Stress Management Program
Information Sheet

PURPOSE: Meet the recurring need for an educational program on stress, psychosomatic illnesses, biofeedback, etc. Provide a very limited group treatment modality for a range of complaints not easily managed within existing services.

GOALS: Educate participants on etiology of anxiety-related conditions and approaches to management.

REFERRAL: Suitability is determined by an evaluation in the Psychology Service on referral from any hospital clinic or service. The assessment will consist of a clinical interview and MMPI.

PROPOSED FORMAT: 10 weeks - Group Meetings (90 Min); Individual Sessions (45 min).

I. Goals of Program

   Introduction of Participants

   Cognitive and Physical Components of Stress

   RBT - Thinking and Emotions

   Relaxation Therapy
   (Rationale, muscle group survey, tense-relax exercises)

II. Group Reports

   RBT - Analyzing Rational vs Irrational Thinking I

   Relaxation Therapy
   (Homework review, muscle group review, limb heaviness exercises and auto-suggestion)

III. Group Reports

   RBT - Analyzing Rational vs Irrational Thinking II

   Relaxation Therapy
   (Homework review, limb-warmth exercises and auto-suggestion)

IV. Group Reports

   RBT - Practice

   Relaxation Therapy
   (Relaxation exercises)

Figure 1. Overview of SMP
V. Group Reports

RBT - Practice

Biofeedback Therapy (Individual).

VI. Biofeedback Therapy (Individual - no group meetings) (EMG or temp. training, as appropriate to case)

VII. Biofeedback Therapy (Individual) (EMG/temp. training/w/feedback)

VIII. Biofeedback Therapy (Individual) (EMG/temp. training w/feedback)

IX. Group Reports and Processing (closure)

Biofeedback Therapy (Individual) (EMG/temp. training w/ and w/o feedback)

X. Biofeedback Therapy (Individual) (EMG/temp. training w/o feedback) Evaluation (group)

---

Figure 1. Overview of SMP (contd)
A. REALITY (action - what the camera sees)

B. THOUGHTS (beliefs - what you think about "A")
1.
2.
3.
4.
5.
6.
7.

C. EMOTIONS (feelings -- the consequence of "B")

D. RATIONAL ALTERNATIVES
1.
2.
3.
4.
5.
6.
7.

Figure 2. Format for Rational Analysis
ABC's of RBT

A -- Action (what the camera sees)
B -- Initial thoughts
C -- Feelings; emotions
D -- Alternative thoughts

RATIONAL VS IRRATIONAL THINKING

1. Based on reality.
3. Behavior meets your goals.
5. Leads to survival.

Figure 3. Criteria for Rational Thinking
<table>
<thead>
<tr>
<th>DAY &amp; TIME</th>
<th>LOCATION</th>
<th>TENSION</th>
<th>COMMENTS</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Before</td>
<td>After</td>
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1 = very relaxed
10 = very tense

Figure 4. Patient's Relaxation Training Log
Figure 5. THE BIOFEEDBACK SYSTEM.
## Biofeedback Training Log

<table>
<thead>
<tr>
<th>Gain</th>
<th>EMG</th>
<th>Color</th>
<th>Temp</th>
<th>Remarks</th>
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<tbody>
<tr>
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<td></td>
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<td>3.</td>
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### General Relaxation

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<tr>
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<th>Color</th>
<th>Temp</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>1.</td>
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<td>G-Y-R</td>
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### Training Preparation Instructions

- **Gain**: G-Y-R
- **EMG**: G-Y-R
- **Color**: G-Y-R
- **Temp**: G-Y-R
- **Remarks**: G-Y-R

### Training Trials with Feedback

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<th>Color</th>
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### General Relaxation Without Feedback

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**Figure 6. Biofeedback Training Log**

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<td></td>
<td></td>
</tr>
</tbody>
</table>

*Bio Feedback Tng Log (cont) 87
Stress Management Program

Post-Treatment Questionnaire

Patient's Name ___________________________ Date ___________________________

The following questions are designed to help the Psychology Service staff evaluate the effectiveness of the Stress Management Program. Please answer them as frankly as possible. Thanks for your help.

1. Did you feel the Relaxation Training was helpful to you?
   Not at All 1 2 3 4 5 6 7 Very Helpful

2. Did you feel the Rational Behavior Therapy was helpful to you?
   Not at All 1 2 3 4 5 6 7 Very Helpful

3. Did you feel that the Biofeedback Training was helpful to you?
   Not at All 1 2 3 4 5 6 7 Very Helpful

4. How effectively could you relax yourself before the Stress Management Program?
   Not at All 1 2 3 4 5 6 7 Very Helpful

5. How effectively can you relax yourself after taking the Stress Management Program?
   Not at All 1 2 3 4 5 6 7 Very Helpful

6. How often did your physical symptoms (headache, etc.) occur before the Stress Management Program?
   More than 1 per day _____ 1 per day _____ 2-3 per week _____ 1 per week _____
   2-3 per month _____ 1 per month _____ Less than 1 per month _____

Figure 7. Post-treatment Evaluation Questionnaire
7. How often do your physical symptoms occur after the Stress Management Program?

More than 1 per day       1 per day       2-3 per week       1 per week
2-3 per month       1 per month       less than 1 per month

8. How severe or intense were your symptoms before the Stress Management Program?

Very Mild 1 2 3 4 5 6 7 Very Severe

9. How severe are your symptoms after the Stress Management Program?

Very Mild 1 2 3 4 5 6 7 Very Severe

10. How well were you able to control your symptoms before the Stress Management Program?

Not at All 1 2 3 4 5 6 7 Very Well

11. How well are you able to control your symptoms after the Stress Management Program?

Not at All 1 2 3 4 5 6 7 Very Well

12. Please let us know anything you think can be helpful for the future of this program. Would you want anything changed? Would you want anything added or eliminated? Whatever you can tell us would be appreciated.

Figure 7. Post-treatment Evaluation Questionnaire (cont)
Dear

In a continuing attempt to develop and improve the Stress Management Program, the Psychology Service has initiated a six month followup on all patients who have completed treatment with us. Would you kindly take just a few minutes and complete the enclosed questionnaire? You may notice that the questions are similar to the ones you answered upon finishing the program, but now, please respond as you think and feel now.

I would be most appreciative if you would send your completed questionnaire back as soon as possible in the self-addressed envelope provided.

Thank you for helping us to improve the quality of care to the people we serve.

Sincerely,

HAROLD D. ROSENHEIM, Ph.D.
MAJ, MS
C, Psychology Service

Figure 8. Followup Letter
Stress Management Program Six Month Followup Questionnaire

Patient's Name __________________________ Date __________________________

The following questions are designed to help the Psychology Service staff evaluate the effectiveness of the Stress Management Program. Please answer them as frankly as possible. Thanks for your help.

1. Did you feel the Relaxation Training was helpful to you?
   Not at All 1 2 3 4 5 6 7 Very Helpful

2. Did you feel the Rational Behavior Therapy was helpful to you?
   Not at All 1 2 3 4 5 6 7 Very Helpful

3. Did you feel that the Biofeedback Training was helpful to you?
   Not at All 1 2 3 4 5 6 7 Very Helpful

4. How effectively could you relax yourself before the Stress Management Program?
   Not at All 1 2 3 4 5 6 7 Very Effectively

5. How effectively can you relax yourself now?
   Not at All 1 2 3 4 5 6 7 Very Effectively

6. How often did your physical symptoms (headache, etc.) occur before the Stress Management Program?
   More than
   1 per day ______ 1 per day ______ 2-3 per week ______ 1 per week ______
   2-3 per month ______ 1 per month ______ Less than 1 per month ______

Figure 9. Followup Questionnaire
7. How often do your physical symptoms occur now?

More than
1 per day ____ 1 per day ____ 2-3 per week ____ 1 per week ____
2-3 per month ____ 1 per month ____ less than 1 per month ____

8. How severe or intense were your symptoms before the Stress Management Program?
Very Mild 1 2 3 4 5 6 7 Very Severe

9. How severe are your symptoms now?
Very Mild 1 2 3 4 5 6 7 Very Severe

10. How well were you able to control your symptoms before the Stress Management Program?
Not at All 1 2 3 4 5 6 7 Very Well

11. How well are you able to control your symptoms now?
Not at All 1 2 3 4 5 6 7 Very Well

12. Please let us know anything you think can be helpful for the future of this program. Would you want anything changed? Would you want anything added or eliminated? Whatever you can tell us would be appreciated.
ABSTRACT

Professional consultation contacts with training programs, committees and services of MEDCEMs often result in Clinical Psychologists being invited to contribute expertise in research design formulation and review. These occasions may also involve ethical consideration input, as well as a potential for relevant clinical study . . . an opportunity with mixed blessings. This report of study progress discusses the tributes, tribulations and thrills of a clinician's one such collaborative research effort. Formal and informal consultations eventuated into a mandatory requirement for in vivo psychological factors exploration of soldiers rapidly exposed to a terrain altitude environment of 13,784 feet above sea level. Rationale for selection of instrumentation is noted which allowed assessment of performance and personality variations both on cognitive, visuopractic and strength tasks and on objective and projective personality procedures, not unduly burdensome for field study. An attempt is being made to relate psychological function variability to physiological alterations during an hypoxic condition.

The opinions or assertions contained herein are the private views of the author are not to be construed as official or as reflecting the views of the Department of The Army or the Department of Defense.

This human research study, in protocol form, was reviewed and approved by the Tripler Army MEDCCN Human Use Committee and the Clinical Investigation Program Division of Health Services Command in accordance with AR 40-38 and USAMRDC Regulation 70-7 on Use of Volunteers in Research.
TRIBUTES

In the normal course of concurrently providing psychological consultation services amid a Medical Center, Clinical Psychologists have ample opportunity to contribute to professional expertise at various levels (See Table 1). Traditional consultation requests for evaluation of patients, referred from:

### TABLE 1
Concurrent Levels of Psychological Consultation

<table>
<thead>
<tr>
<th>I. Health Care Delivery</th>
<th>II. Medical Activity &quot;Research&quot; Review</th>
<th>III. Medical Activity Program Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Psychology Services</td>
<td>Clinical Investigation Committee</td>
<td></td>
</tr>
<tr>
<td>Individual Evaluations</td>
<td>CI Proposal Review</td>
<td></td>
</tr>
<tr>
<td>Clinical Research</td>
<td>Human Use Committee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CI Protocol Review</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medicine, Psychiatric, Family Practice</td>
<td></td>
</tr>
<tr>
<td>Internal Medicine, Neurology/Neurosurgery</td>
<td>Scientific Adequacy/ Support Priorities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Significant Concern in Health Care</td>
<td></td>
</tr>
<tr>
<td>Collaboration, Instruction</td>
<td>Medical Safety/ Suitability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moral, Ethical, Legal</td>
<td></td>
</tr>
<tr>
<td>Research Psychologist Role</td>
<td>Medicine, Psychiatric, Family Practice</td>
<td></td>
</tr>
</tbody>
</table>

Departments of Medicine and Surgery, are seen as the pivotal effort wherein technical assistance in direct health care service delivery becomes translated into perceived competency by our medical colleagues. Success with clinical evaluations quickly expands the chances for teaching and collaborating in clinical specialties areas the investigations. As "research" proposals involving psychological factors need institutional review, Clinical Psychologists are invited to assist local Clinical Investigation and Human Use Committees in their determinations. The Psychology Officer's expertise, as the only Behavior Science Officer doctorally trained in research design formulation, statistical procedures and ethical considerations in human subjects experimentation, becomes...
readily apparent. The system within which we work offers many occasions for interprofessional gratitude and indorsement as well as personal and professional gratification for relevant clinical study and programs development.

TRIBULATIONS

Formal and informal (hallway) consultations eventuated, in this case, into a mandatory requirement for in vivo psychological factors exploration of soldiers rapidly exposed to a high altitude environment. The writer was originally and casually informed of the existence of this study being in-the-works nearly two years prior to its actual undertaking. Psychological factor issues were not a part of the initial protocol. The study was designed to explore physiological factors (i.e., antidiuretic hormone) variation. Final approval from Health Services Command was contingent upon the inclusion of psychological factors. This stipulation came approximately one week prior to the study planned commencement. Needless to say, this author scurried around to accomplish a literature review. Then, the project was canceled indefinitely due to disapproval from State authorities to use the proposed high altitude site. Finally in about four months, arrangements were firmed up leaving this experimenter with about 10 days for final preparation. Parameters of the study plan had changed in the meantime (See Table 2), causing a troublesome but challenging roadway.

<table>
<thead>
<tr>
<th>TABLE 2 Study Plan Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study Prep Time</strong></td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
</tr>
<tr>
<td><strong>Assessment Time Allotted</strong></td>
</tr>
<tr>
<td><strong>Assessment Frequency</strong></td>
</tr>
<tr>
<td><strong>Group Procedure Setting</strong></td>
</tr>
<tr>
<td><strong>Assessment Tools</strong></td>
</tr>
<tr>
<td><strong>Medical Support</strong></td>
</tr>
<tr>
<td><strong>Behavioral Sci Sp Support</strong></td>
</tr>
<tr>
<td><strong>Site Transportation Mode</strong></td>
</tr>
<tr>
<td><strong>Electrical Power</strong></td>
</tr>
<tr>
<td><strong>Pharmacology (Drug Effect)</strong></td>
</tr>
</tbody>
</table>

THRILLS

As a researching clinician at heart, the whole affair stirred vibrant activity, energized cognitive processes to ruminate up and down, to and fro, about the design of the study, its constraints, and its possible situational controls of the environmental, organismic and assessment features (See Table 3).
Contemplating these aspects of study design was exciting by itself. The sensation continued to prosper as discovery was made, through literature review, that rarely had any traditional clinical instrumentation ever been used, or used correctly, in this field of exploration. This clinician was having a heyday. Final determinations of what instruments to use depended on reports of previously discovered functional deficit areas, knowledge of neuropsychological effects of hypoxia, and testing time allotment.

In addition to these preparatory entrancements, the writer thoroughly enjoyed the in situ activities of the study in its progress. The personal experiences as a study team member was invigorating and the professional encounters and outcomes continue. Now on to a brief description of the study.

BACKGROUND AND PURPOSE

The effects of reduction in supply of oxygen, hypoxic conditions, have been related to impairments of function in humans (Adams, et al., 1980; Ewing, et al., 1980; Tune, 1964) and have been explored systematically during expeditionary study (Olive and Waterhouse, 1979) of Acute Mountain Sickness. Medical aspects of humans exposed to acute, terrain high altitude environments have been
reported further in mountaineering guidance booklets (Hackett, 1978). Clinical manifestations of over 1900 incapacitated Indian soldiers exposed to the Himalayan region have suggested a sequential pathogenesis of Acute Mountain Sickness that includes hypoxia, pulmonary congestion, increased cerebral blood flow, increased cerebrospinal fluid pressure and cerebral edema (Singh, et al., 1969).

Attempts to study variations and impairments of central nervous system function, and particularly in higher mental ability and personality function, in incidences of acute high altitude exposure have been relatively few using both atmospheric simulation chambers and actual ascent protocols. Effects of high elevation upon physical proficiency, cognitive functioning and personality factors have resulted in equivocal conclusions (Banderet, 1977; Carver, 1968; Nelson, 1982) and begs further exploration.

Major efforts have been undertaken both at the U. S. Army Medical Research and Nutrition Laboratory, Fitzsimmons Army Medical Center, and at the U. S. Army Research Institute of Environmental Medicine, Natick Laboratory, to develop an assessment tool to measure subjective symptom occurrence and variation at high altitudes (Evans, 1966; Kobrick & Sampson, 1979; Sampson & Kobrick, 1980). Results of this labor have encouraged further study wherein the derived General High Altitude and Environmental Symptom Questionnaires have been used both to define experimental treatment groups in research exploring cognitive and psychomotor tasks performance (Stamper, et al., 1970) and, as a dependent variable measure, to study Acute Mountain Sickness symptom reduction following prophylactic treatments (Evans, et al., 1976).

The present study was designed to measure the degree of functional performance and personality variation resulting from soldiers being rapidly exposed to a 13,784 ft terrain elevation, field condition as compared to that at a sea level field environment. Variations in psychological functioning were assessed on a variety of cognitive, visuomotor and strength tasks, and on objective and projective personality evaluation procedures, not unduly burdensome and having accepted clinical relevance and validity.

METHOD

Subjects: Fourteen males, ranging in age from 19 to 29 years, from the 25th Infantry Division, Schofield Barracks, and Tripler Army Medical Center, Hawaii, participated as study subjects volunteers following preliminary medical records screening, physical examination, and informed briefing and consent. Subjects were excluded if they were injured, ill, not medically fit, or taking any medications at the time of subject selection. None of the subjects had visited or resided, in last 18 months prior to the study, at an environmental altitude greater than 7,000 ft.

Materials: Table 4 lists the psychological functions assessed and the instrumentation used.

Procedures: The present study was a part of a larger investigation accomplished at sea level (SL) testing site located at Tripler Army Medical Center, (Oahu
Island) Hawaii, and high altitude (HA) testing at the summit of Mauna Kea Mountain (13,784 ft) on the "Big Island" of Hawaii. Subjects resided in equivalent tent facilities at sea level and high altitude and wore artic gear at the summit. Smoking was not permitted. Subjects were randomly assigned to two treatment groups of 7 each. Group 1 ingested acetazolamide (Diamox), 500 mg, and Group 2 ingested exact appearing placebo preparation at the same time daily (1700 hrs), commencing for 3 days at sea level and terminating after 3 days at high altitude. Study protocol lasted 9½ days: Sea Level (3½ days); High Altitude (4 days); Sea Level (2 days). Ascent and descent took place at mid day on day #4 of study and at mid day on day #8 of study, respectively. Interisland transportation was accomplished by helicopter (CH 47, Chinook) flying for approximately 2 hours at terrain altitude of less than 7,000 ft. Participants ascent to high altitude summit was accomplished en masse by land vehicle (truck), from altitudes of less than 100 ft to 13,784 ft above sea level, within a 60 minutes time period. Psychological evaluation procedures were administered at same 3 hour time period (9a.m.-noon) during day 3 (SL1), day 5 (HA1), day 7 (HA2), and day 9 (SL2). Assessment techniques were randomly ordered across test trials. No significant difference in general intellectual functioning level estimates (Shipley conversion) were found between drug treatment groups (t = 0.46, df = 12, ns).
TABLE 4
Functional Assessment

<table>
<thead>
<tr>
<th>FUNCTIONS</th>
<th>TEST EMPLOYED</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I. Cognitive</strong></td>
<td></td>
</tr>
<tr>
<td>A. Abstract Reasoning</td>
<td></td>
</tr>
<tr>
<td>Verbal Material</td>
<td>Shipley Institute Living Scale - Abstraction</td>
</tr>
<tr>
<td>Nonverbal Material</td>
<td>Penrose Pattern Perception Test</td>
</tr>
<tr>
<td>B. Memory</td>
<td></td>
</tr>
<tr>
<td>Auditory Immediate</td>
<td>Wechsler Adult Intelligence Scale - Digit Span</td>
</tr>
<tr>
<td>Visual Retention</td>
<td>Wechsler Memory Scale - Visual Reproduction</td>
</tr>
<tr>
<td>C. Calculations</td>
<td>Addition Series</td>
</tr>
<tr>
<td>D. Perceptual/Conceptual Shifting</td>
<td>Grayson Perceptualization Test</td>
</tr>
<tr>
<td><strong>II. Visual-Motor</strong></td>
<td></td>
</tr>
<tr>
<td>B. Constructional Production</td>
<td>Wechsler Adult Intelligence Scale - Digit Symbol</td>
</tr>
<tr>
<td>C. Reaction Time (Simple)</td>
<td>Bender Gestalt Test</td>
</tr>
<tr>
<td>D. Physical Strength (Upper Extremity)</td>
<td>Ruler drop/pinch technique</td>
</tr>
<tr>
<td><strong>III Personality</strong></td>
<td></td>
</tr>
<tr>
<td>A. Projective</td>
<td>Hand Test</td>
</tr>
<tr>
<td>B. Objective</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Traits Mood</td>
<td>Interpersonal Check List Profile of Mood States</td>
</tr>
<tr>
<td>General Profile</td>
<td>Minnesota Multiphasic Personality Inventory</td>
</tr>
<tr>
<td>Physical Symptoms</td>
<td>Environmental Symptom Questionnaire</td>
</tr>
</tbody>
</table>
RESULTS

One study from the placebo group, was deleted from the study at time of debarkation from Sea Level site due to hand laceration and injury sustained while loading study equipment onto a truck. Three additional subjects were deleted at the high altitude environment; two because of the existence Acute Mountain Sickness signs and symptoms (Placebo Group members: approximately 48 and 60 hours at HA, respectively) and one who freely withdrew voluntarily (Drug Group member: approximately 72 hours at HA). Psychological testing data were obtained twice at HA conditions for all subjects, excluding a second HA assessment on the earliest deleted individual.

To date, all obtained data has been scored using published criteria for each instrument or procedure. Analysis of psychological function variation will be attempted upon receipt of additional data to be provided by the Department of Clinical Investigation examiners at Tripler Army Medical Center. In brief, physicians specialized in Internal or Aviation Medicine are to be tasked to rank order subjects by extent of demonstrated physiological status alterations that occurred during altitude change conditions. These judges will have clinical reports, laboratory (urine, blood), vital signs, fluid and meal, and body weight data available. No attempts have yet been made to summarize or analyze the data by drug group or environmental setting conditions.

NOT THE END

Uniformed Clinical Psychologists have many rewarding opportunities available to them for investigations that have direct relevance to soldier deployment and functioning in stressful environments. The finding of the present project will eventually advance the knowledge base on one such situation.
REFERENCES


A RATIONALE FOR FAMILY THERAPY
WITH MILITARY POPULATIONS
Jonathan A. Stave, Ph.D.
CPT, MSC
Clinical Psychology Service
BAMC, Fort Sam Houston, TX

The purpose of this paper is to provide a series of logically consistent orientating statements, followed by indications and contraindications of family treatment to guide the military treatment to guide the military practitioner through the maze of controversy and conflict the various schools and systems of family psychotherapy engender. The orientating statements serve to restate a general psychotherapeutic rubric to the specific instance of family treatment. Then, indications and contraindications for family treatment are offered to the military psychotherapist to assist in deciding whether family treatment is the treatment of choice. A summary is provided to help resolve the psychodynamic concerns such a synthesis entails. Parenthetically, a solution, not the solution is attempted. Divergent elaborations are expected and necessary to this active area of clinical concern regardless of theoretical or a-theoretical bias.

INTRODUCTION

During the last 20 years, particularly the last decade, family therapy has emerged simultaneously as a growing and vocal profession and a promising technique to the bewildering set of presenting problems a soldier or his dependents presents to the military practitioner. The implications, controversy and enthusiasms of the family approach are not new however and match that of the early rise of psychodynamic approaches to the amelioration and understanding of behavioral reactions of mankind. Surrounding the optimism and often novel conceptualizations of the strategic and structural schools to family therapy has been the parallel emergence of debate about epistemology or the very foundation of how we perceive, acquire and understand events about ourselves and our interpersonal relationships in the Sullivanian sense. This state of the science and art results in a healthy but often painful and laborious analysis and synthesis of our psychological assumptions and practices. The questions and debate about our conceptual and perceptual modes of understanding others can also result unfortunately in cognitive rigidity and emotionally laden excesses that impede our designing of incisive treatment strategies.

Thus, while it may be appealing to applaud the fragmentation of the clinician attempting to master some aspects of the family therapy technique, it would be unwise to neglect the paralysis, cognitive dissonance and frank emotional
upheaval the implications of family therapy controversy portend for the individual clinician. Thus, at this time at least some guidelines and orientating statements appear indicated with respect to the utilization or non-utilization of the family therapy approach to the military practitioner — often especially removed geographically and ideologically, from the mainstream of academic and clinical debate. Such a set of orientating statements will be offered here vis-à-vis indications and contraindications if family therapy from a rigorous but by no means exhaustive experience in military clinical psychology. Other issues central or peripheral to the plethora of issues engendered by a family therapy approach will be offered for purposes of orientation and usefulness rather than promoting further controversy. The usefulness of this paper will reside in a hopefully more pragmatic and clearer approach to an extremely esoteric, intellectually rich, and emotionally laden area in child and adult psychology with a potential for a more humane understanding of the human condition.

ORIENTATING STATEMENTS

1. All psychotherapy is non-linear by essence. The strategic, Ericksonian and similar criticisms of psychodynamic, especially psychoanalytic psychotherapy are not compelling because there is always an element of non-structure to the "50-minute hour" whether one chooses to attend it or not. To criticize "non-strategic" psychotherapy on the basis of simple linearity is to misunderstand the essence of psychotherapeutic endeavor and practice of the clinician (Egan, 1981). To the practicing clinician this thought means that psychotherapy will invariably continue to be both simultaneously a confusing, anxiety-laden and yet rewarding and exhilarating experience for those who practice or undergo it. Calling a psychotherapeutic approach circular or non-linear will hardly reduce the complexity and subtlety of the human interpersonal experience as Sullivan often reminded us (Sullivan, 1953). Yet the strategic reminders of the role of the therapist as a sort of participant-observer is well taken but was really initially the idea of Sullivan, not Haley as has been claimed by his more enthusiastic followers. The American notions of psychodynamic theory and practices are heavily colored by the English translation of Freud and the Neo-Freudians and do not portray the humanism, circularity and metaphorical richness to psychoanalytic thinking as has been pointed repeatedly by Bruno Betheleim and Erick Erickson. Therefore, it is easy to pretend we are discovering ideas that are novel and fresh, which are a glossing over of historical reality. This strategy sells books and fills workshops but seldom contributes to a deeper appreciation of the practice and art of psychotherapy.

2. All well conducted psychotherapy with few exceptions is understood and practiced with a tremendous accent upon language, metaphor and right hemispheric communication. To capitulate, the es, ich, uber-ich, Freud's german words for the diversion of the personality, do not connote the same metaphorical meanings as id, ego and super ego do to us today. Master teachers of psychotherapy particularly Wolberg, Bruch and even R. D. Langs emphasize repeatedly the notion of the therapist speaking in a language intelligible and meaningful to the patient but beyond the cognitive and affective barrier or rigidity of the patient's current personality organization. Thus family therapy approaches are neither discovering or emphasizing anything particularly new in the general field of psychotherapy when they discuss right hemispheric communication.
As psychotherapists, it is constructive but disheartening to discover the emperor has no clothes on. However, criticisms might serve to curtail our use of "psycho-babble" with patients whatever the school of therapy is.

3. A systemic or structural view of family therapy does not mean that individual dynamics will play no salient role in a family's problems, no matter how artfully they are called something else. Conceptual purity or rigid orthodoxy, while personally comfortable, is probably not warranted by the available research on psychotherapy outcomes which are generally disappointing to those with a clinical orientation, Glass's work notwithstanding (Glass and Smith, 1980). Thus a purely systemic therapist would make the same mistake as a purely intra-psychic therapist would be excluding troublesome data not neatly reducible to one's theoretical or a-theoretical framework. Thus, conceivably, the clinical psychotherapist will always have the task of attempting to disengage interpersonal or family systemic factors with respect to a particular clinical case. Chomsky's classic response to Skinner should remain an object lesson to all interested in orthodoxy. Succinctly, orthodoxy is a luxury we cannot afford if we want to help patients.

4. All psychotherapy should be preceded by some sort of assessment. Glick and Kessler (1976) and Wolberg (1972) give several examples of assessment guidelines appropriate pursuant to family treatment. This does mean treatment cannot be conducted for diagnostic purposes but that is strictly speaking another issue. To attempt to treat a family without a comprehensive and detailed assessment is to invite destruction in the form of depression, acting out and alienation in the worst case. At best, no assessment would reinforce the simple but dubious notion that psychotherapy is easy, simple and fun - to the detriment of a long and prestigious tradition of rigorous clinical warnings. In short, one does not paradox or strategize a family without a very clear understanding of the family dynamics in addition to the genuine and authentic investment of the therapist in such a situation.

5. In terms of clinical ineffectiveness one can err on the side of either impulsively changing behavior or compulsively attempting to understand completely a given family's problems. This conflict is probably central to the core area of pragmatic and aesthetic preference and reflects no doubt our ambivalence regarding understanding or changing behavior. Theoretical excess, no matter how charming the proponent, is no excuse for the lack of almost complete restraint or timidity in treatment strategies as clinical judgment hopefully emerges somewhat independently of one's theoretical bias. Add to this, the difficulty of translation even in the same language the author's intent with respect to a written or oral point and the salience of one's independent clinical judgment become obvious. Obvious also is the place of personal supervision, psychotherapy peer review and additional reading in the formulation of aforementioned judgment. To exclude permanently data in the behavioral sciences, by theoretical bias is to invite incompetence, censure, and personal burn-out.

6. Over confidence or pessimism in a therapist points out the need (and rather dramatically) for additional training, supervision or personal psychotherapy. It remains even to this day wise in view of research on psychotherapy
outcomes to retain some humility about one's therapeutic successes and failures. Not to do so reflects a narrow concept or distortion of the human condition, engaged in a particularly human endeavor, namely learning something that will lead ultimately to a more harmonious union within the self and other interpersonal relationships—family and non-family. To neglect the learning or educational aspects of psychotherapy is to introduce once again the magical, charlatan aspects to the therapeutic alliance (Langs, 1981). Such elements most frequently detract rather than enhance problem management and resolution. Clinicians need to frequently remind themselves of the Hawthorne and placebo effects. Similarly, the clinician must focus ultimately on thoughts and feelings for a therapeutic experience to proceed no matter how adroitly that process is encumbered by jargon and theoretical trappings—even epistemological concerns.

7. It could be argued that personal psychotherapy is unnecessary and perhaps detrimental to the treatment process. Such a view coincides with the pragmatic orientation. However, it will remain difficult for the therapist to evaluate meaningfully a particular treatment strategy in terms of both short and long-term effect without such an experience. Simplistically perhaps, personal therapy, if nothing else, helps to keep the clinician's expectations minimal, which mitigates against a toxic interpersonal style.

With these orientating statements in mind, the open-minded but rigorous clinician will note several related but curious phenomenon originating from an individual/group psychotherapy orientation. Primarily, patients in individual treatment often appear to display or verbalize insight from perhaps a primitive experimental and intellectual viewpoint but do not change behaviorally. Often there is simultaneously the verbalization of many unfocused, unresolved issues regarding the family system but these statements remain rather unamendable to operational control or understanding by the individual therapist's frame of reference. This is especially true when a child refuses to give up a symptom until the parent's marital problems are better managed. In this event, the family therapy approach is nicely complimentary to the overall treatment effort. Even from an individual, psychodynamic viewpoint, the child's symptoms might be difficult to understand as concretely or literally as may be the case, except as a reaction to the family system. Often the knowledge that a child is acting-out the parental conflict regarding aggressive and sexual impulses yields a handle to the bewildering set of behavioral patterns a child presents to the psychotherapist. Cases of parental collusion with a child's symptoms are often impossible to resolve without a family treatment approach. Thus, certain indications for family therapy treatment are now fairly well established and follow.

INDICATIONS

A consensus of writers in the field recommend family therapy particularly to resolve the following reactions:

(1) Childhood depression—check incidentally for adult negative signs.

(2) Emotional sequelae of attention deficit disorder with or without hyperactivity.
(3) Anxiety reactions and phobias in children - intractible to beha-
vioral modification techniques or where the family organization is too chaotic
to follow the structure of a behavior modification program.

(4) Conduct disorder, particularly the non-aggressive socialized type.
Therapy proceeds with more difficulty with the aggressive, non-socialized types.


(6) Some neurotic disorders - rule out the prominence of intrapsychic
conflict.

(7) Mixed neurotic/behavioral disorders particularly passive/aggressive
underachievement and maneuvers.

(8) Disturbed gender/identify reactions, sexual promiscuity, incest,
other aberrations, pre-homosexual child.

(9) Schizophrenic reactions not primarily autistic, symbiotic, but
childhood psychosis or pervasive developmental disorder.

(10) Normal developmental transitions college, retirement, birth of
siblings.

(11) Neurotically-based juvenile delinquency.

(12) Drug/ETOH problems after Detox, Antebus/AA to manage sequelae of
drinking career.

Family therapy should not be used as the only treatment for an active drug/
ETOH abuser, except perhaps an adolescent. It is helpful also to start treat-
ment six months to one year following sobriety as the dementia or disorientation
following chronic drug/ETOH abuse precludes meaningful therapeutic involvement.
AA/NA Antebuse can and should be used as a vehicle to establish trust in the
therapist, prior to treatment efforts.

CONTRAINDICATIONS

With such a wide array of problems that can be managed or resolved through
family therapy, the enthusiasm of a family approach is relatively easy to
understand. Contraindications, therefore, need to be posed relatively, indi-
cating at this point in the state of the art in the following conditions. Of
course, this caveat does not apply to experimental approaches that generally do
not fit into the framework or mission of military clinical psychology.

(1) Family therapy is contraindicated when the family is in the actual
process of breaking up or are not a family any more. Family members must care
about and be emotionally interested in each other to make the sacrifices neces-
sary so therapy can proceed. Families breaking up are often committed to
decatharsis which poses a significant resistance that is actually appropriate to
the individuals concerned. These patients seen in families are often unreliable
about a history and miss appointments, posing too large a resistance to be meaningfully managed in a typical military setting.

(2) Family therapy is also contraindicated when initially the family as a whole rejects the notion of family treatment. There is a subtle distribution between resistance and treatment in general and resistance to family therapy that must be made. In general, if this initial resistance is respected and followed by more comprehensive evaluation of the IP and other family members, the initial resistance will be replaced by a willingness to resolve family-based or systemic barriers to effective family living. The therapist can always by virtue of his greater social influence and greater dependency of family members "push" family therapy but this usually results in unusually brief or unusually long treatment. The family system can always sabotage treatment quicker than most therapists can recognize the many forms of resistance. A flight into health or transference cure will incidentally occur on a family basis particularly if the therapist is well regarded but technically weak. Without follow-up and a reasonable course of treatment it is impossible to disentangle these factors.

(3) Family therapy is also contraindicated when deception or overt lying occurs as a sort of family style or when there is considerable secondary gain (usually financial) to being dysfunctional. This can occur in economically disadvantaged or economically advantaged families where frankly the family believes (or begins to believe) their own prevarications. The family therapist in such a situation gets nowhere unless he joins the "lying" system which then ultimately leads to "lie" therapy as opposed to "truth" therapy. The art of therapy can be said to reside not in formulating what a family wants to hear but challenging them to confront aspects of their existence they would prefer evading.

(4) Family therapy is also probably contraindicated where family members are geographically unavailable. This contraindication has broad implications for those in military practice because of the widespread prominence of the "geographical bachelor." The issues of alienation and concomitant depression, loneliness, anger and other emotional strategies need to be, therefore, confronted in an individual or group psychotherapy format. It is instructive to point out the family therapy approach owes a great conceptual debt to the group psychotherapy approach. This strategy can also avoid lawsuits and some justifiably hurt feelings by the absent family member. Would we like to be the odd man out?

(5) Families in which symptoms to be changed have an underlying organic cause. These families need support, didactic information and ventilation usually more than the re-structuring aspect of family therapy.

(6) Families in which very serious psychopathology would prevent others from working on their problems in a meaningful way, i.e., psychosis - active and florid, sociopathic reactions. Again, the contraindication is written with the military practitioner in mind whose practice implies certain limitations.
Families in which the presenting problem bears no current emotional and/or behavioral consequences for the family. A family, for instance, where a drug abusing son no longer resides at home.

Families in which the risks of therapy are worse than the benefits to one or more of the individuals. An example might be a hypomanic spouse with psychomatically induced headaches maintained by the spouse, but where the structure of the current relationship is preferable to a divorce that would be disastrous by opening up arenas both spouses would prefer not to explore. Judgment here is critical.

As a practical matter, when a case conference engenders significant controversy about the feasibility and clinical appropriateness of conjoint family therapy, this author has found it not practical to utilize a family therapy option. Usually, the IP and other pivotal family members are generating such confusion and "noise" within the system, the family therapy should be deferred until diagnostic impressions are better formulated. This is especially true with a recovering ETOH with a significant emotional overlay that will likely clear up with continued sobriety. Family therapy at that time may unwittingly engender sufficient anxiety to cause a relapse.

Family therapy is contraindicated when one member of the therapy team composes an extremely elaborate and esoteric therapy plan that is not readily understandable to other members of that team. In the military setting therapy strategies of necessity must be rather brief, direct and readily understood to those who follow any practitioner or any meaningful continuity is lost. Probably a family therapist cannot be as easily replaced as an individual therapist but this point is subject to empirical validation.

Family therapy is also contraindicated when there is the existence of an important valid secret that could not be brought out in the open, i.e., infidelity, bigamy, homosexuality, etc. For a therapist to expose total awareness, total honesty and total self disclosure, is to be incredibly naive if not covertly hostile and exhibitionistic. Helde Bruch (1982) reminds us that our position as practitioner and therapist is contingent upon that middle ground between being prudes and aggressive liberalists. This contraindication also can remind us not to force our value system upon a patient, a point we often forget as we enter the family system, despite our theoretical or a-theoretical background.

The existence of unyielding and inflexible religious, political or economic barriers against outright intervention or therapy by a consultation or therapist. Sadly, these families often need therapy the most but the barriers create too great a resistance.

Any strong counter-transference or outside ties to a family. The necessity for a therapist to have sufficient introspection is obvious here as well.

In summary then, a set of orientating statements has been offered as a prelude to indications or contraindications of family therapy for the military.
practitioner. The purpose of both orientation statements and indications and contraindications is to guide the military psychotherapist through the maze of conflicting, often controversial systems and schools of thought regarding family psychotherapy. The primary role of independent clinical judgment has been perhaps resurrected as a handle to resolve both the optimism and pessimism the family therapy approach and challenge brings to adult and child clinical psychology. This discussion can result in modest but practical treatment objectives and at least fair treatment by those involved with the military mental health care delivery system. Often volatile and hostile controversy reported in workshops, newspapers and journals results in turning away individuals who would make excellent family therapists and activating those whose contribution is questionable from a more psychoanalytical perspective.

I attempt to resolve these issues for myself by constant reminders that despite all the techniques I learn and have to learn what the patient sees and hears from me is an amalgam of my life experience, values, emotional state techniques, not now reducible to a strict stimulus response (paradigm). The person of the therapist is akin to the wine-press, the grapes akin to technique - the therapeutic result is either vinegar or wine. So too, strict adherence to either pragmatic or aesthetic concerns leads to ultimately what some might call fuzzy eclecticism. That shall probably remain until our technology catches up to our values as a human people.
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My purpose is to discuss the development of stress management as conducted at the U.S. Military Academy. This area of stress management may now be evolving into wellness programs in the military. This may be a natural evolution and show movement in a highly appropriate direction. This movement towards a whole person, preventative model is a logical and essential next step from many of the stress management programs in which military psychologists have been involved. Wellness is a result of creating an awareness of organization and individual issues which have impact upon the individual's medical and psychological health and upon the organization's efficiency, effectiveness and readiness.

Stress management is an area which has been recognized as important to military organizations for many years. "Stress Curves" have been developed for basic training recruits, a special forces team anticipating attack in Viet Nam (slide 1), engineers being deployed to remote sites to clean up radiological debris and on cadets during Cadet Basic Training at West Point.

At this point I will focus primarily upon the issue of stress management, especially as these programs have been conducted at West Point. The purpose of this digression is to indicate the path which "stress management" has taken at the Military Academy and to use that as a sounding board. The sounding board leads to two concepts on thoughts: (1) there is no single approach or foundation of knowledge consistently used by Army psychologists to assist commanders to manage stress in their organization, (2) wellness is the coming area and experience for the development of stress management programs, both positive and negative, can be used to develop wellness programs.

The environment at West Point, for a new cadet, is quite hectic, demanding or ---- stressful. The initial experience that the candidate-civilian experiences at Beast Barracks or New Cadet Barracks is in many ways similar to Army basic training, although it does have many aspects unique to cadet life. There is a traditional view that approximately one-third of these candidates will not make it to completion through the four years at West Point. One often heard view is that a number of these newly arrived cadets do not have what it takes and should be eliminated early so as not to cost unneeded dollars and "contaminate" the rest of the Corps. If this concept of eliminating the chaff is accurate, one anticipates that "easy" years would show lowered attrition curves for fourth class (freshman and women) and "hard" years would show high fourth class attrition curves. The second class (junior) and first class (senior) curves for attrition should flatten out since there is an expected standard "chaff" loss in each class.
What is actually reflected in the attrition curves is that there is a strong relationship between CBT resignation rates for a class and resignation rates for the class by the time they are in their first class year. In other words, the cadet's experience of that organization early on dictates what is going to happen to the class as a whole, in resignation rate. We are indicating that one of the most important experiences a cadet has is the Beast Barracks experience. This experience is crucial to the development of that particular class. Beast Barracks is also described as a time when cadets learn how to deal with stress and adversity by experiencing it. In other words, the enhancement and development of coping skills through trial and error. My impression is when you start talking about things like “stress” is that we do a great job of denying those new cadets resources they need to be successful in their first year. In fact, we only give them four responses, allowing them to say “yes sir,” “no sir,” “no excuse sir,” “sir I do not understand.” That is all they are allowed to say during their first six weeks.

Resignation rate in Beast Barracks has traditionally been 10%. In Plebe year (freshmen) another 10% and the following three years 15 to 20%. This results in a four year attrition rate of between 35 and 40%. That is a lot of folks when you think about how much it costs the Military Academy to put those people into the program. By the way, reflected in the resignation curves is a big bubble at the top. This resulted from the “EE 304 honor scandal” when we had over 100 first class cadets depart. There is another bubble that shows up in Class of '74. My hypothesis is that the first experience of the class should follow the class through graduation. You have to wonder how it happens that a bubble shows up in the Class of '74 by first class year. I was giving a briefing to the Superintendent and was informed that “By the way, Wilson, you don’t know what happened in '74. Resignation rates got so high in Beast Barracks, that we cut it off and did not allow people to leave in the middle of “Beast Barracks”. So you see the big jump after fourth class year. In fact, that was a “hight stress” or difficult year. Psychologists have been around looking at this concept we call “stress” for some time. You heard the name, Datell earlier today. Datell did a lot of work with what happens in Basic Training (Table 2). You see the top two curves and the lower left curve in Table 2 represents what happens in the areas of anxiety, hostility and depression using a MACCL. This is also the tool used for the soldiers in Enewetak. We find a fairly classic “stress” curve. I am not sure who went out, but a couple of psychologists went out to a Special Forces camp in Viet Nam in Second Corps. This Special Forces team was expecting an attack and the psychologists ran the MACCL out there to measure dysphoria. I do not know if the curve down at the bottom reflects the attitude of those soldiers who were having to deal with a couple of psychologists wandering around wanting to administer paper and pencil exercises. However, you can see interestingly enough, there is a difference with what those Special Forces were experiencing as compared to basic training. The Special Forces soldiers are a bit more seasoned than basic training recruits and you can see that the experienced troops seem to be feeling hostility more than anything else.

Hostility is also an important curve when you look at what’s going on at West Point. The classic curve also shows at West Point (Slide 3). STOP. You can see that the anxiety curve peaks and then the hostility curve peaks.
The underlying characteristic is depression. We do not put those new cadets in a situation where they do not have a whole lot of control over what is happening day to day. We thought it was important to display this information for the Commander at West Point. We also wondered what was going on with our cadre or upperclass cadets, who are actually the ones who train new cadets in Beast Barracks and what was happening to the officers who over saw the cadre. We found the same curves for both groups of people. The important part there is not to focus on the anxiety which you can predict is going to show up, but on the second week when hostility begins to peak. At that time we have angry new cadets looking at angry cadre members who are dealing with angry officers and you can imagine that gets to be a very exciting time at West Point. These curves would indicate that there are some intervention programs we could conduct and the curves provided some direction. So then we asked cadets to identify their sources of upset? What causes distress? Four days after they have arrived, the issues are: the shortage of time, meals, standards of performance, upperclass cadets, other than squad leaders or platoon leaders. (Table 4) We call these upperclass cadets "squirrels", they come out of the closet, zap you and then take off. They have no responsibility for you, they just harass you ostensibly using regimentation. So those are the major issues, shortage of time and standards of performance. There are two details of upperclass cadets. Initially the new cadet has to deal with one Squad Leader and train that Squad Leader how to deal with a subordinate in three weeks. Then the new cadet gets a new Squad Leader. This change over probably accounts for the blip in the curve around Rt 18. When we take another look at the "stress" curves, what are the real sources of stress? The interesting thing about the "stress" curves are the shifts and changes. The thought was plebes were having a difficult time dealing with their squad leaders, but that source of stress drops off fairly steadily. There are other issues which hold up such as performance standards. One view at West Point is we are too easy all the time; we have to toughen the place up. Performance standards continue to be a heavy issue for cadets through Beast Barracks, shortage of time, upperclass cadets, non squad leaders. We have now broken the experience down and have some idea of the sources of stress. We have taken a few funny twists and turns. I was concerned one summer because we were now plotting resignation by squad. It appeared to depend on what squad you were in to reflect a difference in resignation rate. I developed a very interesting curve which indicated first squad cadets are more vulnerable to resignation than anybody else. How come, what's going on? Then I plotted it on through for the second detail. It still held up. (Table 5) Our formation at West Point in the summertime looks something like this (Table 6), but in the majority of the time two squads go behind the front two. You can make a prediction that something is going on with the first squad then something is also going on in the second, and also front squad. We thought it had something to do with the fact that when you are standing in a formation and your squad is up in front, you are going to get more attention than cadets in other, "hidden" squads. The resignation rate did not show on other years or bear out. So, I had a dead end trail when I thought we had some really hot information.
This is what our resignation pattern looks like across the whole four years (Table 7). Six weeks of Cadet Basic Training followed by what we call Reorganization Week. At this time all the upperclass cadets come back to West Point and they start focusing and cueing on the Plebes. Now all the cadet classes are back, whereas in the summertime when there is only one upperclass cadet per ten new cadets. Now there are three upperclass cadets for each plebe. Reorganization Week coincides with an increase in resignation.

Going back to Beast Barracks you can notice a Bomb or increase in the resignation rate curve for Beast Barracks (Table 3) in the third week. That is what we call change in detail. We knew there was a stress issue going on at that time and that we should be paying attention to this time period. The particulars of what is going on is not very important now, except that it very closely follows what is going on that MACCL curve (Table 3). The first peak in MACCL was anxiety. I see most of the cadets who resign at this time as the sightseers or bandwagon kids. You can identify sightseers at West Point because they always have scholarships to other schools hanging out their back pocket and as they walk around you see their scholarships bouncing up and down. Of course, this is a figurative statement reflected by their attitudes. As for the bandwagon kids, typically some home town has put them on a bandwagon physically and has had a band and a big parade. The town has said, "You are going to West Point and we expect a lot of you." The potential cadet becomes excited and enthused, but nobody ever stops and asks if they really want to go to West Point. By the way, those early resignees always have very grand things to say about West Point, except they really do not want to stay there. The second and most important 70% of our resignations in the summertime comes from what is called regimentation. Notice on the stress curve that in the second and third week the hostility curve is peaking. These resigning cadets are usually angry as hell at the upperclass cadets for dealing with them in the way they have been dealt. Psychologically we have a very interesting group in about the fourth week. We still observe conversion reactions at West Point. We find new cadets who go deaf; new cadets who go blind; new cadets who go numb in the legs. I do not know if you still see that in Basic Training. Working with these stresses new cadets, we find the more you put on them, the more they tighten their eyes down, or can not hear a thing. Typically nothing is organically wrong with them at all, but their eyes are closed tight and they can not see; they are convinced they can not see. So, we have to work with that, but you also have to deal with the squad leader who is now pinging off the walls because he or she can not be tied up with a blind/deaf cadet. So you wind up with two clients to work with. Looking at this resignation curve, people got anxious. Is there something we can do about this curve? A meeting at the superintendent's level, resulted in a return to the old system. The old system was you could not resign from West Point all the way through the summertime. We did not want to be that severe, so it was decided that a hard-out policy would be instituted, but when to allow the cadets to resign? The counseling center was not involved in this decision. I think it was a command decision that compromised between a group of people who said, you should keep new cadets in for the first two weeks and another group who said four weeks. So the Superintendent made a decision to have a hard out policy for the first three weeks. Unfortunately that point is probably the worse place to have a hard-out policy. That is where the change.
of detail occurs and that is where we know stress jumps back up if you look at the stress curve. So we had a problem. This curve (Table 8) is now a reflection of what happens when we instituted the hard-out policy at the three weeks.

Last summer we were included in the decision making and indicated if a hard-out policy is necessary, go at the second or fourth week. I was anxious about the stress of not being allowed to resign from West Point resulting in increased suicide gestures. Suicide gestures at West Point consists typically of drinking rifle oil or drinking brasso or scratching wrists. We have had a few fairly serious suicide gestures where a mistake could have been made with tragic consequences.

Last year instituted a four week hard-out policy that requires new cadets to stay at West Point for the first four weeks and then resign if desired. I think there were a lot of other things involved with the change in the curve and I’ll tell you some of the other ingredients. We had the lowest resignation rate we have had in Beast Barracks in a long time and command seemed to be delighted. This schematic (Table 9) is intended to represent Beast Barracks. You see represented, Cadet Barracks I and II. Cadet Preparation and Training is conducted for two weeks prior to the start of CBT I. Before the preparatory training a group of officers and cadets go to the U.S. Army Preparatory School at Ft. Monmouth to discuss Beast Barracks. What we were trying to assist command to do was to identify some of the things which could be done that could work against this thing we call stress. Now, you have to be somewhat careful in an Army environment when you talk about stress. You have to realize that we are training people to go into a highly stressful environment. When your approach begins to sound like taking stress out of the training, you have created dissonance. Command is convinced we want people in a stressful situation because that is the kind of environment in which we are eventually going to have to fight and lead. The realistic and effective approach is to be able to discuss how you are going to teach people to deal with the stresses more effectively, not how you are going to reduce stress; work on how the soldier is going to handle stress more effectively. If there is anything I have learned since I have been at West Point, it’s that you have to focus on coping with, not eliminating stress.

A summary of our stress intervention program at West Point during Cadet Basic Training or Beast Barracks follows: we attempt to inform the candidates as early as possible as to what they might expect at West Point. We attempt to reach any special groups which seem appropriate. The groups have included Preparatory School cadets, athletes, women and minority groups. We have established a “hard-out” policy which now lasts four weeks. We have a standard Human Relations Training program and we have ongoing interactions with officers through counseling center staff and cadets through a peer counseling program.

In our standard Human Relations Training Program for Beast Barracks a "stress" lecture is presented. This lecture is basically, intended to help cadets identify what stress looks and feels like and what are some of the things each cadet might be able to do to cope with it. Change in detail, when we switch over from first cadre to second cadre is a high stress time, so we get
cadets together by company. The facilitator deals with about 200 cadets in a group in the gymnasium. We break them down, eventually, to squad level and get them to begin to identify some of the things they can do for the arrival of their new squad leader. We start off with a relaxation exercise by putting them all down on the floor of the gym. This often causes a lot of stress for the tactical officers at West Point if they happen to stumble into the room and see me with 200 cadets lying down on the floor.

Following Beast Barracks we enter a period called Reorganization Week when all the upperclass cadets return to West Point for the beginning of the academic year. Our stress evaluations indicate that this transition is a highly stressful time for the plebes. "Positive Leadership" was an attempt to get upperclass cadets on the right footing. The concept of positive leadership is one that has been talked about since 1975 at West Point. The notion of positive leadership seems to indicate that a cadet has to use effective techniques to get positive results out of the plebes. Unfortunately the obtaining of positive results is only seen in the short term goals. The attitude of positive leadership is clearly embraced and of great concern to cadets but they do not seem to know clearly how to put the attitude into behavior. We realized that there was a problem and we used the standard problem-solving model to identify issues. We were finding in our counseling sessions with cadets that abuses of new cadets were occurring. A traditional aspect of a West Point upperclass cadet is to make sure that your plebe gets a sense of urgency. A variety of techniques are used, some of which we believed to be abusive. Overall we were able to identify that abuses were occurring, but often due to misguided intentions and lack of knowing what to do. We found the CBT cadre eager but confused about techniques of leadership. In summary, we identified that there was an issue and wanted to determine where to go with it. We clarified the issues, did some research, measured the stress levels, tried to find out what the issues were and then began to evaluate the number of options available.

By 1980, we were in a position to propose to the Commandant a number of different options. These included everything from McClellan's approach to motivation to Norm Kagan's Interpersonal Process Recall and assessment centers. The ROTC is using an assessment center technique, although we are not presently using at West Point. Another program we evaluated was Sorcher's Behavioral Modification Program which basically espouses that you have to observe four tenants when you deal with other people. A supervisor must be able to enhance or maintain the subordinates self esteem, focus on the problem, not the person, not back the person into a corner, demonstrate commitment by continuing to work with the person, just not abandon them. John Allen has a program in Seattle called New Age Thinking which is a motivational program. We are not using it with cadets but we are using it with our athletic teams. The Center for Creative Leadership, also offers developmental programs. We developed Sorcher's program of leadership skills for use at West Point. The way in which our program generally works is I train the tactical officers, who in turn then, train the cadets. The logistics of how this is accomplished is horrendous. There are 4,500 cadets to train with the start of this program.

Remember the primary functions of the Cadet Counseling Center is one-on-one counseling. Some of the other programs we manage or are involved in at this
These are the kinds of problem areas that we find occurring in the Counseling Center (Table 1). They are fairly well prioritized by frequency count, as you see on the left hand column. The bottom line thing in the CCC is that we are doing a lot of brainstorming. We are involved in a lot of programs and areas that I never realized as a psychologist, I am going to get involved in. I am also involved with INSCOM in a Stress Management Program. In the INSCOM Stress Program we train people within that organization to go out to the field and be the Stress Management representative. I know a lot of people and I get phone calls from people I worked with before who ask, what do you know about this area? It happens that Barbara and I did research with transitions. We were looking at life satisfaction in the military and out of the military at around age 30, because we were pretty dissatisfied.

Take it one step further with Will Wilson's philosophy. I have learned a lesson that when I sit up in my little ivory fortress, up above the plain and below God, I get little contact with clients. Where I get interaction with people is when I go out and play basketball at lunch or in other activities out of my office. Even as an officer involved with the Scuba Club, there are cadets who swim up underwater and want to initiate a counseling session. My point is you have to get out where they are. I am convinced that there are plenty of people who want the interaction with you. I think we are a little too busy thinking about how smart we are and not really willing to get out there and get our hands dirty.

The other thing that happens when you get out there and get your hands dirty is that you usually end up with more work than you can handle. How do you manage all the programs and activities? An example of a variety of programs and approaches is stress management. I am confused about this whole area of what stress management is in the military. I have been involved with a lot of you in a lot of different settings where you tell me you are doing stress management. I am not even sure what stress management is anymore. As for ourselves, we are in the process of developing a resource guide. That resource guide would, hopefully, identify what are some of the issues that come to be in a military organization or the individuals in that organization that fall under this area that we call stress management. What are some things that we could do? Are there some resources or projects that we could do within that organization which would help the command understand what is going on and then give that command some options? At this time we are a little bit farther behind than I would like to be. An OE project is in the works now at the Chief of Staff of the Army level. It is called "fitness" program and indicates if you have individual wellness plus organizational wellness, then you are going to have fitness. OE is now couching it in terms of "wellness" and have presented a program, called fitness but it appears to be an embellished general stress management program. I started to take a look at some of the material; I thought some of it was pretty good. Part of what we have to do is to get serious and not give professional
Slide #3

STRESS LEVEL (MAAC-L) CBT

--- Graph showing changes in stress levels over weeks, with lines representing depression, hostility, and anxiety.
<table>
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<th>Rank</th>
<th>Stressor</th>
<th>Rank</th>
<th>Stressor</th>
<th>Rank</th>
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<td>R &amp; 10</td>
<td>3</td>
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</tr>
<tr>
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<td>Shortage of Time</td>
<td>3</td>
<td>Shortage of Time</td>
<td>4</td>
<td>Standards of Performance</td>
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<tr>
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<td>Meals</td>
<td>4</td>
<td>Standards of Performance</td>
<td>5</td>
<td>Upperclass Cadets (Non SL/PL)</td>
</tr>
<tr>
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<td>Standards of Performance</td>
<td>5</td>
<td>Meals</td>
<td>6</td>
<td>Regimentation</td>
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<tr>
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<td>Upperclass Cadets other than S.L./P.L.</td>
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<td>7</td>
<td>Platoon Leader</td>
<td>8</td>
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Slide #4

Ranking of Top Five Stressors at Key Time Periods
RESIGNATION BY WEEK

REGIMENTATION

SHOCK/STRESS
Slide #8

RESIGNATION BY WEEK

NUMBER OF CADET RESIGNATIONS

0 1 2 3 4 5 6
REORG AUG 24 SEP 7

125
IDENTIFIED PROBLEMS

CONSIDERING RESIGNATION
ANXIETY/STRESS
TIME MANAGEMENT
INFORMATION
INTERPERSONAL SKILLS
ACADEMICS
DEPRESSED
FOR GROUP EXPERIENCE
ALCOHOL
SELF CONCEPT
DIFFICULTY WITH 40 SYSTEM
MILITARY DEVELOPMENT
PERFORMANCE PROBLEMS
CONDUCT
WOMEN IN THE ARMY
AMNESIA
FEAR OF FAILURE/NOISE
PERSONAL GROWTH
INAPPROPRIATE BEHAVIOR
SUICIDE GESTURE
GIRL/BOY FRIEND
ROOMMATES
ANGER MANAGEMENT
SPEECH/MEMORY
WEIGHT
APPEARANCE
SMOKING
FEAR OF HEIGHTS
COMPUTER ANXIETY
FAMILY PROBLEMS
STUDY SKILLS
CONFUSED
PAIN CONTROL
SLEEP DISORDER
HEADACHES
SEXUAL HARASSMENT
PSYCHOTIC EPISODE
LONELINESS, ISOLATION
PREGNANCY
HOMESICKNESS
HUMAN RESOURCE CENTER CONCEPT

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The human resource center concept was presented to MG Baker by COL Ed Jefferin a briefing on 25 June 82 addresses the problem of maldistribution of behavioral science resources in Army programs in Europe. Key to the concept is the use of Army Community Services (ACS) and Drug and Alcohol (D&A) personnel to assist in staffing Human Resource Centers.

The human resource center was conceived as a "one stop" location for individual screening, problem identification, and referral to the service organization having the professional competence to address the individual's problem (e.g., legal services, chaplain, CDAAC). The goal of the human resource center concept are to:

(a) Improve the communication and coordination of the human resource center programs HRP within each community, and

(b) Develop maximal utilization of existing resources.

As with any goal fulfillment, there are certain necessary criterion objectives which must be met in order to bring the task to fruition. When coordinating human service programs, the following objectives serve to enhance the attainment of the goals outlined above:

A. Improve integration of the human service delivery system.
B. Identify duplication of human resource service functions.
C. Develop team approaches when possible to common HRP areas.
D. Expand professional guidance and consultation within the HRP.
E. Improve (HRP) visibility and the provision of information to the community about human resource service.
F. Enhance training of human resource personnel via increased coordination of in-service training programs and cross training.

Within the European military community, several potential benefits may be realized via the coordination of human resources programs. Some of these benefits are:

A. Removal of "CDAAC Stigma;"
B. Reduction in IG workload due to other agencies handling more mundane interpersonal concerns;
C. Better utilization of chaplains and their expertise;
D. Better 91G distribution among all communities.

The realization of these potential benefits is not without some concerns about possible problems. Those areas which may be of concern are:

A. Adequate resources (i.e., supplies, budget and personnel) to serve the populace;
B. Perception of commanders and their support (or lack of) for the program;
C. CDAAC and ACS workload increase because these agencies tend to be the primary organizations within Human Resource Centers;
D. Professional competency and training of personnel to handle a wide spectrum of people problems;
E. "Dilution" of the mission of each respective agency because of a tendency to provide services outside of their domain.

DEVELOPMENT OF AN HRC STEERING COMMITTEE

A Human Resource Center (HRC) concept steering committee was established in April 1982 by VII Corps to study the Human Services Programs provided throughout the corps. The committee created and mandated an HRC study team to survey all VII Corps communities and subcommunities to assess command support of the HRC concept, the current Human Resource delivery design, and steps taken and planned for implementation of the HRC concept. The team consisted of Mr. Gary Bartle, VII Corps Army Community Services representative, Mr. Dan Witwer, VII Corps Alcohol and Drug Control officer, Dr. (CPT) Linda M. Walker, and SFC Orrin H. Vanderwarker, 7th MEDCOM Drug and Alcohol Consultation Branch. Both MEDCOM team members participated solely as observers on an alternating basis. Fourteen communities and subcommunities were surveyed between the months of July 1982 and September 1982.

Because the mission of the team was deemed fact finding, the following essential informations were sought:

A. A wiring diagram (organizational chart).
B. The mission given to the HRC.
C. The staffing of the HRC.
D. Communication/Coordination mechanisms used by the HRC.
E. The types of services offered by the HRC.

MODELS OF HUMAN RESOURCE COORDINATION

The concept of a Human Resource Center (HRC) can be conceived of in a number of ways, but all with the same focus of providing the most comprehensive and effective human services for the populations involved using local resources. Three models of an HRC are as follows:

(1) COLOCATION - Human Resource Programs are colocated in a single building. Most frequently colocated are Army Community Services (ACS) and Alcohol and Drug Abuse Prevention and Control Program (ADAPCP), ACS and division
social work, and ADAPCP and division psychiatry. The American Red Cross, United Services Organization (USO), Equal Opportunity (EO), and Equal Employment Opportunity (EEO) are an adjunct to this colocation in some communities.

(2) PARTIAL COLOCATION - A few human services programs (e.g. ADAPCP and ACS) ARE colocated while other resources remain housed in their respective facilities.

(3) HUMAN RESOURCE COORDINATING COMMITTEE - A committee is formed to coordinate Human Services Programs via: (1) The Development of Procedural Guidelines; (2) Client Case Management Reviews; (3) Team Command Consultation Effort; and (4) Periodic Human Resource Program Assessments. Committee activities are to be under the direction of a Human Resource Director, Director of Personnel and Community Activities (DPCA) or Deputy Community Commander (DCC). The membership of the committee consists of:

Red Cross  
Equal Employment Opportunity (EEO)  
Chaplain  
Army Health Nurse  
Alcohol and Drug Abuse Prevention  
Drug Control Program  
Army Community Service  
Race Relations/Equal Opportunity (RR/EO)  
Provost Marshal  
Mental Hygiene/Social Work Services

In addition to the above models, communities may also create a council as an adjunct source of support. For example:

HUMAN RESOURCE COUNCIL: The Council develops policy for Human Resource Programs. Its functions are (1) Command oversight of Human Resource Programs; (2) Identification of problems and needs in Human Resource Program delivery; (3) Provision of information about Human Resource Services to the community; and (4) Assist command in the development of policy. The council is to be chaired by the deputy community commander and is to meet at least quarterly. The membership of the council is as follows:

Army Community Service  
Mental Hygiene  
Red Cross  
Provost Marshal  
Army Health Nurse  
Chaplain  
Staff Judge Advocate  
Inspector General  
Education Center  
Alcohol and Drug Abuse Prevention  
and Control Program  
DPCA  
Medical Treatment Facility  
Morale support activities  
Community schools  
EEO  
RR/EO  
Housing director  
Retirement Services Officer  
Information Officer

FINDINGS OF THE ASSESSMENT TEAM

The findings presented here represent the observations of the 7th MEDCOM representatives and are not indicative of VII Corps or 7th MEDCOM's position on the status of the Human Resource Center concept.
A. The MEDDAC Clinical Consultation plays a vital supervisory role with communities, especially those with limited personnel resources. As such, a close working relationship with well defined and accessible means of communication are necessary between the Drug and Alcohol (D&A) staff and the consultant.

B. There appears to be a trend toward combining the positions of clinical director and Alcol and Drug Control Officer (ADCO) within communities. The duties of this "Dual Hat" oftentimes may interfere with the effective rendering of clinical services.

C. The staffing of a few Drug and Alcohol programs consists entirely of civilians. Such a makeup may adversely affect the military personnel served in that "none of their own" are present as role models or helping agents.

At the same time there may be a difference in orientation via the Army that civilians may embrace versus that of military personnel, and their difference may manifest itself in civilian counselors as a lack of adequate understanding of the military system. One possible outgrowth of this may be an inability of civilian counselors to provide their counselees with as much informative assistance as possible.

D. The education and/or experience of some of the civilian counselors may only tangentially relate to the work they are performing. When this is coupled with limited supervision, the needs of the service members may not always be adequately met; therefore, a closer study of credentials of the counselors and the various medical/legal implications involved may be warranted.

E. The training of most 91Gs, behavior science specialists, prior to working in D & A, consists of basic interviewing skills. Consequently, they are ill prepared to provide many of the counseling services in which they engage. This is especially true of new 91Gs who are quite young and lacking in life experience.

F. The director of an HRC is often the professional person from the ADAPCP, ACS or some other community agency. The HRC directorship is not an authorized position. The dual role precludes the person performing in an optimal manner in their primary position.

G. There are several communities in which mental health resource personnel are understaffed or lacking and therefore D & A staffers may perform counseling tasks for which they have limited or no training. This situation results in a reduction of D & A clients seen for services.

H. The need for mental health personnel at each kaserne is of primary importance in that it has a significant influence on the combat readiness of service members.

I. In several communities visited, the personnel assets are mixed (e.g. a division psychologist, community 91Gs, other corps staff members) and as a result, there may be a potential for conflict in the rating chains.
It is hoped that these findings will shed some light on the present status of HRC personnel. If human resource centers are to be an integral part of the military human resources programs in Europe, it is hoped that these findings will be instrumental in helping to create a more viable system of services.
The role of the Division Psychologist in Europe has been receiving an increased level of attention over the past number of years. The attention to this area has grown considerably with the recent surge in work being carried out examining the phenomena of combat stress reactions, or what has been more commonly referred to as psychiatric combat casualties. This is clearly an important area of work for all psychologists serving with the Armed Forces, though especially for those who are assigned to combat divisions. Fundamental as this may be to the role of the Division Psychologist, there are many other aspects to the job which are also significant. Those individuals who have had an opportunity to serve as a Division Psychologist, particularly in Europe, know that it would be very difficult to accurately describe all the different activities which make up the job description. As Zold so aptly stated, "In some ways, being a Division Psychologist is not that different from being a psychologist in another setting: What are needed in the Division are the same core skills of diagnosis, treatment, consultation, administration and research that, hopefully, define a psychologist anywhere." What, then, provides the uniqueness of serving as a Division Psychologist? One of the more accurate and succinct descriptions of division psychology was mentioned in the same paper by Zold where he referred to it as "frontier psychology".

When the author first learned of his assignment to West Germany as a Division Psychologist, he felt a need to discover all there was to know about what this type of psychologist did. Again, as many of you already know, there is little guidance with respect to what one should or can expect while functioning in the role of a Division Psychologist. There are a number of reasons for this relative dearth of information in this area. One of the most significant issues is that, as suggested earlier, there is no one definitive job description. Examining the Division Psychologist in Europe would result in what would at first appear to be a role confusion. One works primarily as the head of a human resources center, another primarily within the Division, while still another operates essentially a satellite mental health clinic. Thus, one cannot discern the role of the Division Psychologist merely by examining the job descriptions of those individuals already in the field.
The second source one might turn to is the training one receives at the Academy of Health Sciences. As many of you are well aware of, there is much information to cover in a short amount of time while at the Academy of Health Sciences. Teaching psychologists about the role of the Division Psychologist is not given a priority. In fact, in a recent paper by Slifer (1982), it was pointed out that very little time is given to one of the more important aspects of Division work—combat stress reactions. LTC Slifer did note, however, that the curriculum is undergoing some change in this area. During the author's tenure with the Division, he developed his role according to the needs and resources of the particular Division of which he was a part of. Judging from the uniqueness and diversity of the Division Psychologist positions found throughout the United States Army, one might be somewhat skeptical concerning our ability to provide in-depth guidelines for future Division Psychologists—at least in a traditional sense. The purpose of this paper is to provide some insight into Division Psychology in Europe through the recent experiences of someone working in that role.

DIVISION PSYCHOLOGY IN AN ARMORED DIVISION - EUROPE

According to current TO & E authorizations, the assets of a Division Mental Hygiene Consultation Section consist of one psychologist, one psychiatrist, one social worker and eight behavioral science specialists. There are a number of different configurations under which the Mental Hygiene Consultation Section is able to operate. At Ft. Hood, for example, these assets are consolidated in a more centralized format for providing mental health care (Smith and Stulman, 1974). Due to the geographical separation of the Brigades in combat Divisions in Europe, the Division assets are often scattered to provide the greatest coverage for the largest area. This often results in limited resources for most, but at least some resources for everyone. There are often a number of areas or units which are attached to a Division that, due to their distance from the major troop concentrations, are not supported as well as they need to be.

Oftentimes individuals from remote sites would travel three or four hours to a Mental Hygiene Consultation Service. This clearly becomes a problem in terms of close support, consultation, man-hours lost and, of course, follow-up appointments. There were many individuals from these areas who would choose not to make such a trip due to the innumerable difficulties they experienced. There were some individuals who came to the clinic from such distant positions that one was not even sure whether or not they were from the same Division, though none were turned away. One attempt at dealing with problems was to provide occasional consultation visits during the year. This would consist of both an Army Community Service social worker and a senior behavioral science specialist. Due to the large numbers of people, these visits would primarily consist of talks and presentations, with some command consultation.

The areas noted above were beyond the major troop concentrations within the Division and thus, it is somewhat understandable that they were poorly supported at best. Unfortunately, this was not the only area where resources for the Mental Hygiene Consultation Service were lean. For some time, one behavioral science specialist was the only full-time mental health asset for the largest
Brigade in the Division. This position was supported directly by the Division Psychologist who, along with two other behavioral science specialists, was also the Chief of a Mental Hygiene Consultation Service in direct support of another Brigade approximately thirty kilometers away. In addition to providing psychological support directly to these two Brigades, the Division Psychologist consulted with the other mental hygiene units in the division in support of the other Brigade, headquarters element, support and other attached units. The psychiatrist and two behavioral science specialists (one of whom was the Division NCOIC) constituted another Mental Hygiene Consultation Service in support of the headquarters element while the social worker and two behavioral science specialists comprised the third Mental Hygiene Consultation Service which was located among the support units. The eighth behavioral science specialist was also placed among one of the Brigades without a mental health officer, though this position was supported by the Division Social Worker.

The Division Mental Hygiene Consultation Service met as a group every other week for a day at the headquarters Mental Hygiene Consultation Service office. This allowed for the dissemination of information, the discussion of trends within the Division, and the ongoing training of the staff, in addition to aiding in the growth and/or maintenance of cohesion within the Mental Hygiene Consultation Service. There was a problem, however, in the two isolated behavioral science specialist positions in that the individuals serving those positions both felt that they were too isolated, did not receive enough supervision, and were often at the whim of the organization with which they worked (a Troop Medical Clinic in one case and a Dispensary in the other). These and other issues resulted in a reorganization such that all behavioral science specialists were provided with more supervision and the largest Brigade was given a Mental Hygiene Consultation Service consisting of a mental health officer and two behavioral science specialists.

At the time of this major reorganization of the mental health assets for the Division, a number of alternatives were considered. For some time the issue of centralized versus decentralized mental health assets was examined. A more centralized system would provide a better environment for the Mental Hygiene Consultation Service personnel in that there would be less professional isolation, more opportunities for training, closer supervision and hopefully, increased cohesion. There were a number of significant problems with this idea, however. Due to the geographical layout of the Division, it was often difficult for troops and family members to travel to the headquarters area (proposed site for consolidation) due to, for example, lack of transportation, time off from work or, in some cases, individuals being anxious about traveling in a foreign country outside their home area. Telephone service was also fair to poor and thus, communication would have been an additional problem. The most important issue, however, addressed the very basis of the role that the Mental Hygiene Consultation Service played in the Division. Centralizing the Division resources would have changed the focus of the Mental Hygiene Consultation Service to a more traditional clinical model which, in turn, would have limited its overall effectiveness to the Division. The centralized format would also provide some increased control of mental health assets. The three mental health officers were assigned to the Headquarters and Support Company of the Medical Battalion, with two behavioral science specialists assigned to each of the four companies.
Though these individuals represented the mental health assets for the Division, there were often attempts to task them with other duties which interfered with their mental health mission. This difficulty was alleviated somewhat by the Division Surgeon who highly supported the Mental Hygiene Consultation Service and its role in the Division. Though, as noted above, a de-centralized concept had a number of inherent weaknesses, its overall advantages in allowing for a more expanded and flexible role made it clearly the better choice for the needs of the Division. Command consultation and community work are an important aspect of the job and are more feasible in a de-centralized format.

The actual job responsibilities of the Division Psychologist are many and varied. They depend, to a certain extent, on the skill, experiences and interests of the individual. One can easily be overwhelmed with the demands from all sectors. Some Division Psychologists have opted to continue working in a traditional clinical role, working with patients in their offices, while others have chosen to become involved more on a community level. The mission, as stated in the Division, was broadly defined as to provide psychiatric, psychological, social work, and consultation services as appropriate, to maintain the mental health of active duty personnel and their families. Due to the many different demands and needs, the work by the Division Psychologist was distributed among a number of areas. There was a great deal of command consultation (with commanders and supervisors), staff consultation (with physicians, physicians' assistants, lawyers, etc.), therapy and assessment for active duty service members and their families, consultation and work with the community, continuing education for staff members and self, administrative work and other miscellaneous tasks.

The Division Psychologist spent a great deal of time getting out of the office talking with commanders about their units and essentially building a consultative relationship. Many commanders were unfamiliar with psychologists in consultative roles and thus, some teaching was carried out. Requests for participation in the Officer Professional Development Programs of the different Battalions provided an excellent opportunity to work with larger segments of the command. The mental health officers of the Division met with the Division Commander on a quarterly basis to discuss the mental health of the Division. This included not only the units themselves, but the service members and their families. Ongoing practical research was also an important job for the Division Psychologist. Other responsibilities included forensic evaluations, psychological consultation to the drug and alcohol program, Co-Chairman and psychological consultant to the Child Protection Case Management Team (child abuse and neglect), psychological assessment for the Division Mental Hygiene Consultation Service units and various talks to community agencies (e.g., Red Cross, OCWC, etc.) Additionally, as with any psychologist, there is a responsibility to engage in ongoing training and supervision. This was accomplished in conjunction with another Division Psychologist and Chief Psychologist at a regional medical center. This helped to alleviate some of the professional isolation of working within a Division. There was always, however, the feeling of being out of the mainstream of psychology.

Combat stress reactions, as noted earlier, are an important concern for psychology as a whole, and especially for the Division Psychologist.
A considerable amount of time was spent working in this area. Ingraham and Manning (1980) had already pointed out the importance of perceiving and treating combat stress reaction casualties as a renewable resource for the divisions. An informal assessment of the level of knowledge within the Division regarding the recognition and treatment of combat stress reactions indicated that there was very little known about this area, with a significant portion of the information available being erroneous. Before developing a training program it was important to assess the level of knowledge and training with the Division. This was accomplished by Schneider and Luscomb (1982) in a recent research project. A series of pilot studies were performed to develop a questionnaire examining attitudes toward, and knowledge of, a combat stress casualty. The questionnaire was randomly presented across ranks and units within a given Brigade. The results indicated that the "Absolute knowledge of how to recognize and treat CSR was found to be very limited, and the typical attitude toward returned CSR casualties was one of mistrust" (Schneider & Luscomb, 1982, p. 10). Professionals have known for some time the importance of recognizing and treating combat stress reactions. Studies (Rioch, 1954; Mulline and Glass, 1973) suggest that an eighty percent return to duty rate within three days can be expected. This can present a problem, however, if the units themselves are unwilling or hesitant to reintegrate the individual after treatment. Figure 1 is a graph displaying the reported trust by officers, medics and enlisted of the returned stress casualty for each length of treatment (Schneider & Luscomb, 1982). It is a major responsibility of the Division Psychologist to prepare for the smooth reintegration of the stress casualty through the dissemination of information, training and consultation. This was begun in the Division through the use of special classes for medics and officers with an eventual goal of reaching all the troops. This approach also allows for treatment within the unit which is known to be an important factor in the recovery of the stress casualty.

One final area to address is the role of Division Psychologist in the field. It is easy to get so caught up in the demands in garrison that one does not "have the time" to pack up and go on a field exercise. Mental Hygiene Consultation Service personnel need to understand their mission in the field and thus, exposure to field duty is imperative. This also allows the units within the Division to better understand the dual mission of the Mental Hygiene Consultation Service. The Division had an excellent opportunity to set up and assess the functioning of the Division Mental Hygiene Consultation Service during a REFORGER field exercise and to provide for the treatment of real and simulated patients. The list of problems and issues raised as a result of this exercise are too lengthy to go into at this time and not a major focus of this presentation.

In summary what has been presented here today are the experiences of one Division Psychologist in an Armored Division in Europe. The role of the Division Psychologist is an important one and must meet the needs and resources of the Division. It can be both an exciting and extremely rewarding job. However, it can also be overwhelming in its demands. One can feel very isolated and out of the mainstream of psychology - on the "frontier". The Division Mental Hygiene Consultation Section will have to continue to change to meet the needs of the Division, both in garrison and in the field environment.
Figure 1. Reported trust by officers, medics and enlisted of the returned stress casualty for each length of treatment.

From Schneider and Luscomb (1982)
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VALIDATION AND UTILITY OF A WORK CAPACITY TEST BATTERY FOR THE SELECTION AND CLASSIFICATION OF MILITARY PERSONNEL

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Since WWII the military has tested entering recruits for job aptitudes but little systematic research has been done on the physical strength and stamina necessary to perform specific jobs. Recently, the Army has completed a systematic task analysis of its 352 enlisted occupational specialties. This occupational task analysis was accomplished: (1) to systematically, objectively, and empirically identify the critical task requirements of occupational specialties, (2) to validate these tasks through field observation, (3) to develop and validate a physical capacity test battery to identify the individual's strength and stamina capacities and predict performance on job related tasks or criterion performance tasks (CPT), (4) to document the expected increment in these capacities as a function of the initial entry training program, and (5) to develop physical standards for the accession and assignment of soldiers and match them to occupational requirements.

Matching the physical requirements of the job with the physical capacities of the recruit will not only insure individual readiness, but will reduce costs associated with attrition, injury, and that associated with recruiting and training replacements. Likewise, it will assist the military in identifying recruits with pre-existing physical disabilities that could increase their susceptibility to injury. In the presentation, I will (1) review the factor analysis of critical task requirements, (2) review the development and validation of the Army's physical work capacity test on specified criterion performance tasks (CPT) for each MOS physical demand cluster, (3) quantify the expected improvement in work capacity parameters, and (4) discuss the utility of such a physical test battery for use as a selection and assignment tool in the military.

With the anticipated passage of the Equal Rights Amendment, the abolishment of the draft and the institution of the AVF with its expected shortfall in qualified male recruits, the DOD made an intensive effort to recruit large numbers of women and increase their distribution over a wider range of occupational specialties. The result of this rapid influx of women into the Army, specifically, created several organizational problems that have had significant impact on the operational readiness of the entire force.

The GAO in its 1976 report sent to DOD recommended that the military develop physical and operational standards for Military Occupational Specialties (MOS) for the selection and assignment of recruits. These standards would be used to assign soldiers to jobs that they could be expected to physically perform at a satisfactory level to insure the unit's operational readiness.
At the same time, field commanders voiced concern about the rapid growth of the female content of their units. These concerns focused on (1) the inability of the unit to perform its mission with large numbers of females, (2) the comparatively high attrition of women and its impact on unit cohesiveness and mission accomplishment, and (3) that many of these women and some men lacked the physical strength to perform the full range of tasks required by their MOSs.

In February, 1981 the CSA, concerned with the warning signals from his commanders regarding the degradation of readiness, the high attrition rates among women in some MOSs, the high injury rates of women during training, and claims of sexual harassment and maltreatment of women soldiers, caused him to call a moratorium on further recruitment of women into the Army and establish a review group to assess where women should serve, what jobs they should perform, and how many the Army could support. The Review Group was tasked to reassess the role of women in the force and formulate a "policy capturing role that would allow for the development of a rational basis for the recruitment and assignment of women into the force. A major component of this reassessment was the development and validation of a work capacity test battery to be used for the selection and classification of all soldiers entering the Army. This instrument would be used to supplement the existing personnel management instruments and to develop an optimal algorithm for the selection and assignment of all soldiers entering service based upon the medical, mental, and physical work requirements of the occupational specialization. The first requirement was to classify jobs according to the physical requirements using a detailed task analysis. Once this was completed, the development of a classification strategy was necessary to ensure a manageable number of categories for the physical demands distribution. It was important that a classification system recognized the: (1) operational requirements of the wartime Army, not just the peacetime mission, (2) focus of the task domain intrinsic to the MOS and not includes all tasks a soldier must perform, and (3) document the specific tasks, operations (lift, carry, push, pull, etc.) frequency, duration, and distance requirements of the job to assure an objective and systematic task analysis. The Army, using this task analysis, has documented that over 90 percent of their jobs have a lifting and carrying requirement that establishes the limiting physical demands for these jobs.

The Department of Labor Job Classification System provided the methodological basis for the physical demands analysis for the Army's MOS. It was selected because: (1) it has been widely used and is a valid task analysis procedure, (2) it has been used by the military to classify jobs before, (3) it is readily available and required no research expenditure or time delay, and (4) it could be modified to meet the Army's needs that differed from the industrial application that it was originally designed for. The DOL Classification System consists of two major components--work performed and worker characteristics. The work performed measured the job's complexity in relation to data, people and things. The worker characteristics address the physical requirements of the job, occupational risks, and the standards for selection.

The proponent schools for the Army's Training and Development Command's (TRADOC), conducted the required task analysis and documented the physical demands for the 350 active duty MOS. The data were used by the WITA Group to classify these jobs into one of the 5 categories based on the lifting and
carrying tasks responsible for the major physical requirements of the physical demand category. These categories are very heavy, heavy, moderately heavy, medium, and light. See Figure 1.

This task analysis was accomplished to:

- Systematically and objectively identify the critical physical task requirements of each MOS.
- Develop and validate a physical capacity test battery to identify the soldiers physical capacities and match them to the job requirements. Matching these physical demands of the job with the physical capacities of the recruit will not only insures individual readiness, but will reduce costs associated with attrition, injury, malutilization, migration, and those costs resulting from the recruiting and training of replacement personnel.

With this data available on the physical requirements of Army jobs, one strategy to program personnel for success is to use this classification system and find the people who can fill the requirements of that job whether they are mental, medical, or physical.

The Army is not in the process of validating a physical capacity test battery (MEPSCAT) at Fort Jackson. Upon completion of this year long validation study, we plan to implement this testing procedure into the Military Enlisted Processing Stations (MEPS) as part of the enlisted accession and classification system for the selection and assignment of all Army recruits entering service in FY 84. In short, we will match each soldier's physical capacity with the demands of his/her job.

During this analysis of Army MOSs, it became apparent that in a number of MOSs there were major disparities in the job requirements as they were currently structured. We have identified these MOSs and are in the process of splitting them to insure coherent physical demands and insure the optimum matching of soldier capacity to the MOS demand and increase female utilization in these MOS.

Military Enlistment Physical Strength Capacity Test (METSCAT). The Military Enlistment Physical Strength Capacity test, a gender free physical capacity test, will be administered in the Military Enlistment Processing Stations (MEPS) to (1) screen new enlistees and obtain a prediction of the enlistee's physical capacity (strength and stamina) upon completion of training, and (2) to develop a highly valid predictor of performance on a set of simulated work tasks that characterize the job domain.

Physical capacity is a function of strength, stamina, and skill. Soldiers normally increase their physical strength and stamina during basic training and acquire skills in advanced individual training that can reduce physical strength requirements needed to perform given tasks. Figure 2 displays the expected improvement in physical capacity as a soldier progresses through training.
An enlistee will be tested once—at the Military Enlistment Processing Station site—and allowed to select a MOS for which he/she has the predicted physical capacity to perform. Figure 3 illustrates this process of selection and classification as it could be implemented into the MEPS.

The test being validated consists of:

1. Skinfold measurement (a stamina correlate). This test determines body fat content and is firmly based in the medical and physiological literature as a powerful predictor of stamina.

2. Handstrength. A dynamometer will be used to measure the enlistees handstrength. This test is an overall body strength correlate.

3. Isometric Lift at 38 cm. This test will be used to measure an enlistee's lifting capacity.

4. Cardiovascular Fitness. An ergometer or a stepping test will be used to measure endurance capacity or stamina.

5. Incremental Lift. This test will be used to assess the soldiers' dynamic strength with increasing lifting requirements.

Military Enlistment Physical Strength Capacity Test Requirements. The test must be reliable, valid, rapidly administered, safe, and predictive of an individual's strength and stamina potential. These test equipment must be inexpensive and durable. The test must also be job-related. To establish their relationship to the job and satisfy the requirements mentioned above, a validation study is underway. Until the test and physical standards are validated, no enlistee can be or will be selected or rejected using the Military Enlistment Physical Strength Capacity Test.

Military Enlistment Physical Strength Capacity Test Advantages. Although Physical Demands Analysis and implementation of EPSCAT testing are not specifically designed and implemented for these purposes, the Army does expect to reduce attrition, injury, malutilization, and migration through the use of this test as soldiers are matched with jobs for which they have physical capacity to perform. Yet, more information must be obtained as to why both male and female soldiers attrite before success in reducing attrition can be assured. We do expect success in reducing malutilization and migration. The Army must and is studying the attrition problem. The data does, however, show that:

1. Female attrition in the aggregate is higher than that of males. However, a part of their attrition results from marriage, pregnancy, and parenthood. The three year groups of enlistees (COHORTS) for which complete attrition data exists represent those who enlisted in 1976 through 1978. See Figure 4.

(a) Attrition results from the heavy and very heavy MOS clusters are even higher for females, while that of males in the heavy and very heavy
clusters remains about the same (FIGURE 5). About 50 percent of the women in the heavy and very heavy categories leave the service prior to completion of their first term of service.

(b) Soldiers leave the Army for numerous reasons.

(2) Malutilization or under-utilization (a soldier not performing in the MOS for which trained, or not performing the full range of tasks for that Military Occupational Specialty) can be reduced significantly through physical capacity screening.

(3) Migration (the movement of a soldier from one job to another) creates turbulence in units and increases training requirements. Data indicates that male and female soldiers migrate at approximately the same rate from male traditional/female nontraditional Military Occupational Specialties. Migration of both male and female soldiers should be reduced as they are better matched physically to do their jobs.

(4) This table presents the outcomes of the analysis for the above factors. See Figure 6.

Distribution of Current Army Jobs and Enlisted Women by Physical Demands Categories. Figure 7 shows the distribution of every enlisted duty position in the active Army by physical demands categories and the current distribution of women in these categories. Given the distribution of jobs and the physical capacity of men and women to perform those jobs, the Army may have difficulty recruiting qualified women to fill heavy and very heavy jobs. Figure 7 also graphically portrays differences in the physical strength characteristics of male and female post-BCT Army enlistees.

CROSS-VALIDATION TO INSURE THAT THE SELECTION ALGORITHM REMAINS VALID. Once the optimum algorithm has been developed, it will be important to demonstrate the stability of this selection strategy by cross validating it and insuring its reliability over time and across different test facilities and/or testers. Cross validation is essential for determining how much chance variance affected the algorithm and how much was due to subject differences. On factors associated with criterion performance, the criterion related algorithm's predictive power will be expected to "shrink" with cross validation. The degree of this shrinkage is a functional of the number of subjects in the validation sample, the number of factors loaded into the algorithm, their reliability, the extent of theoretical basis for inclusion of factors in the test battery itself; i.e., the larger the sample size, the smaller the expected shrinkage. We have designed the study with these threats to its validity taken into consideration. However, this experimental rigor must be weighed against the practical considerations of administrative cost, time, resources available, and utility of the test battery. Ideally, for the prediction of complex criteria, a battery of tests should be used, each of which is internally consistent, has a good relation with the criterion performance tasks, and has a low correlation with other factors in the test battery. Once the test battery factors have been administered, this set of scores can be combined to yield either a classical predicted criterion score.
or to provide a basis for a decision in the form of a general regression equation:

\[ Y = A + B_1 X_1 + B_2 X_2 + \ldots + B_K X_K \]

**SCORING.** The Multiple Cut-off Scoring procedure is required to insure that the soldier is fully qualified for the occupational specialty. The values of the regression weights (b) are derived from the results of the tests administered and the criterion performance scores provided. However, this approach may result in difficulty in making decisions regarding whether to accept or reject a soldier for an MOS cluster. If they do exceptionally well on the one test factor, it will compensate for doing poorly on another factor in the test battery. But the poor performance on the one factor may cause inability to perform the job no matter how good his/her performance may have been on another factor of the test battery. For example, if the soldier did extremely well in terms of the stamina predictor, but could not lift a piece of equipment critical to the duty performance in the MOS, they should be disqualified for the MOS even if they were able to run a marathon. A more effective approach would be to use a multiple cutoff procedure in which the soldier would be assigned to an MOS cluster in which he/she met the minimum scores in each component of the test battery. Once the soldier had exceeded the cutoff point for each factor (e.g., strength, stamina, height/weight, mental category and medical clearance), he/she would be considered qualified to enter the MOS cluster.

**ANALYSIS.** Discriminant analysis is an additional statistical procedure which will be necessary to meet equal opportunity concerns for testing and personnel selection. Since the decision involves several outcome groups and several predictors that are being measured, the effectiveness of the test battery will be maximized by using the policy capturing model based upon the expected utility of the decision considering its total organizational impact. Figure 8 outlines the management and research responsibilities for the decisions. While the research can be accomplished without management input, the management decision must be accomplished if the research findings are to be effectively applied. Decision makers are frequently presented with several alternative selection strategies.

The utility analysis represents an approach to guide the decision maker in his/her choice of these alternatives, based on institutional considerations (i.e., manning levels, personnel strength in the career field) anticipated as a result of the various outcomes. (See Figure 9). Associated with each outcome is an institutional utility which may be positive or negative. Likewise there is a cost (negative associated with administering such a test battery (UTB)). The decision strategy can then be evaluated in terms of the expected utility (EU) for the organization which can be expressed as follows:

\[ EU = U_1 P(VA) + U_2 P(FA) + U_3 P(VR) + U_4 P(FR) - UTB \]
<table>
<thead>
<tr>
<th>DATA</th>
<th>DECISION</th>
<th>OUTCOMES</th>
<th>UTILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERFORMANCE ON A TEST BATTERY (MEPSCAT)</td>
<td>ACCEPT</td>
<td>VALID (VA) ACCEPTANCE</td>
<td>$U_1$</td>
</tr>
<tr>
<td></td>
<td>INTO MOS</td>
<td>FALSE (FA) ACCEPTANCE</td>
<td>$U_2$</td>
</tr>
<tr>
<td>ACHIEVEMENT MINIMUM CUT-OFF SCORE ON EACH COMPONENT</td>
<td>REJECT FROM MOS</td>
<td>VALID (VR) REJECTION</td>
<td>$U_3$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FALSE (FR) REJECTION</td>
<td>$U_4$</td>
</tr>
</tbody>
</table>

STATUS. Current progress on the validation study can be seen in Figure 9. The development of an initial pre-test has been completed by US Army Research Institute of Environmental Medicine (USARIEM) at Ft. Jackson, South Carolina. Approximately 1,000 men and 1,000 women recruits will participate in testing ($T_1$). The post Basic Training testing will involve a 20 percent sample to assess the reliability of the measurements and improvement in the measured parameters as a function of Basic Training ($T_2$). The development of the criterion performance tasks for the MOS clusters has been completed by ARRO and the test procedures and equipment requirements are being coordinated with the proponent schools. They will be distributed to the 4 Advanced Individual Training (AIT) sites for their preparation of end of training assessment to be accomplished by TRADOC ($T_3$). It is anticipated that all testing will be completed by 1 April 1983 at the end of AIT and that data analysis and alternate selection strategies will be developed for decision during the summer of 1983 ($T_4$). The projected date for implementation of a valid test battery into the MEPS is October 1983 ($T_5$).
The Development of a Transition Plan. The transition planning concept envisions the following actions upon successful validation of the Physical Demands Analysis through the MEPSCAT: (See Figure 10.)

1. New accessions will be assigned only to MOS for which they meet both mental and physical qualifications. This is a gender-free action.

2. Currently serving soldiers who do not meet physical capacity requirements for their current MOS may undergo reclassification training at their reenlistment point and enter another MOS for which they qualify.

3. Existing enlistment and reenlistment contracts will be honored.

A comparable planning concept applies to those 1291 female soldiers assigned to MOS which have a high probability of engaging in direct combat. The action plan to implement this recommendation would proceed along these conceptual lines.

1. Halt enlistments of female soldiers into the 23 additional MOS shown in Table 2. (This has been accomplished.)

2. Plan for the voluntary reclassification training for those female soldiers electing a second MOS for which they qualify and for which an Army need exists and require mandatory reclassification training upon reaching their reenlistment point.

3. Ensure all existing enlistment and reenlistment contracts are honored.

4. The concept envisions a transition period of up to six years as maximum reenlistment options terminate. Every effort must be made to serve the interest of both the female soldier and the Army as this plan is implemented.

CONTRIBUTION OF THE WOMEN IN THE ARMY POLICY REVIEW GROUP'S ANALYSIS. The Review Group's findings respond directly to the recommendations of the May 1976 GAO report to Congress and the Secretary of Defense and will improve Army readiness to perform its combat mission by:

a. Providing a gender-free capability to match people to Army Military Occupational Specialties.

b. Providing a clearer understanding of where women will serve on the battlefield.

c. Reducing personnel turbulence caused by attrition (the premature loss of soldiers) and migration (the transfer of a soldier out of a job for which he/she has been formally trained).

d. Providing increased opportunity for both male and female soldiers to succeed.
# TABLE 1

**DISTRIBUTION OF ACTIVE ARMY MILITARY OCCUPATIONAL SPECIALTIES AND DUTY POSITIONS BY PHYSICAL DEMANDS CATEGORIES**

<table>
<thead>
<tr>
<th>PHYSICAL DEMANDS CATEGORIES</th>
<th>NUMBER OF MOS</th>
<th>NUMBER OF DUTY POSITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Heavy</td>
<td>132</td>
<td>368.4K</td>
</tr>
<tr>
<td>Heavy</td>
<td>48</td>
<td>71.1K</td>
</tr>
<tr>
<td>Moderately Heavy</td>
<td>64</td>
<td>44.0K</td>
</tr>
<tr>
<td>Medium</td>
<td>65</td>
<td>42.0K</td>
</tr>
<tr>
<td>Light</td>
<td>42</td>
<td>46.5K</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>351</strong></td>
<td><strong>572.0K</strong></td>
</tr>
</tbody>
</table>
# TABLE 2

## 23 ADDITIONAL MOS SKILLS TO BE CLOSED TO WOMEN AS ANNOUNCED IN ON. KORN'S, 28 AUG PRESS BRIEFING

<table>
<thead>
<tr>
<th>MOS</th>
<th>TITLE</th>
<th>FIRST CAPER</th>
<th>TEAM CAPER</th>
</tr>
</thead>
<tbody>
<tr>
<td>118</td>
<td>INFANTRYMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>11C</td>
<td>M27 F/'UPP FIRE MUFA</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>11H</td>
<td>RV ANTIRADAR MGR MFR</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>11I</td>
<td>RV INFRAMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>12F</td>
<td>CONBAT ENGINEER</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>12C</td>
<td>BRIGADE CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>125</td>
<td>ADJ SPECIALIST</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>137</td>
<td>EMMET TRENCH CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>132</td>
<td>EMMET TRENCH SR GT</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>CANNON CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>17C</td>
<td>TACTFIRE OPNS SP</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>13E</td>
<td>CANNON FD SP</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>13F</td>
<td>FIRE SUPPORT SP</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>13H</td>
<td>BILLS CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>18F+</td>
<td>LIGHT ADA CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>185</td>
<td>ROLAND CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>18F+</td>
<td>ADA SHORT AS MGR CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>18A</td>
<td>ADA SHORT AS CNT CREWMAN</td>
<td>(</td>
<td></td>
</tr>
<tr>
<td>233</td>
<td>F/XPARPS CREWMAN</td>
<td>(</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** RESERVE FORCES USE ONLY
### Army Modified DOL Demand Categories

<table>
<thead>
<tr>
<th>Light</th>
<th>Medium</th>
<th>Medium Heavy</th>
<th>Heavy</th>
<th>Very Heavy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifting 20 Lbs. max with frequent lifts of 10 Lbs.</td>
<td>Lifting 50 Lbs. max with frequent lifts of 25 Lbs.</td>
<td>Lifting 80 Lbs. max with frequent lifts of 40 Lbs.</td>
<td>Lifting 100 Lbs. max with frequent lifts of 50 Lbs.</td>
<td>Lifting an excess of 100 Lbs. with frequent lifts of 50 Lbs.</td>
</tr>
</tbody>
</table>
MATCHING THE SOLDIER WITH THE JOB

STRENGTH
BASIC TRAINING

SOLDIER PHYSICALLY
QUALIFIES FOR MH,M,L

PRIOR TO ANY PHYSICAL TRAINING

ACTUAL PHYSICAL CAPACITY

MSPSCAT SCORE

PREDICTED PHYSICAL CAPACITY

REQUIRED MOS PHYSICAL CAPACITY

H M H L

SKILL
ADVANCED TRAINING

VH VH

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APPLICATION FOR MANNING THE FORCE
CLASSIFICATION AND SELECTION PROCESS

RECRUITER
PERSONAL INTERVIEW

POTENTIAL
SOLDIER

MEPS

MORAL
MENTAL
MEDICAL
PHYS. CAP.
TEST

ENLISTMENT
INTERVIEW/DOC.
SCREEN

TRAINEE

MOS SELECTION-PHYSICAL CAPACITY TEST

CLUSTER L  CLUSTER M  CLUSTER MM  CLUSTER H  CLUSTER WH

RECRUIT T

PREDICTED
AT T
FIGURE 4

ATTRITION RATES FOR COHORT YEAR 1976-1978

COHORT YEAR GROUP

P = Female
M = Male

— ATTRITION DUE TO PREGNANCY

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FIGURE 5
PERCENT ATTRITION FOR COHORT 78
(BY SEX AND BY PHYSICAL DEMANDS CLUSTER)
FIGURE 6

POSITIVE AND NEGATIVE DIMENSIONS
MALE-FEMALE TRENDS BY PHYSICAL DEMANDS CATEGORIES

<table>
<thead>
<tr>
<th></th>
<th>LIGHT CLUSTER</th>
<th>HEAVY CLUSTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;ATRITION&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>1.021 (28)</td>
<td>3.256 (32)</td>
</tr>
<tr>
<td>F</td>
<td>1.95 (39)</td>
<td>3.123 (49)*</td>
</tr>
<tr>
<td>&quot;RECRUITMENT&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>2.404 (36)</td>
<td>34.403 (17.8)</td>
</tr>
<tr>
<td>F</td>
<td>133 (22)</td>
<td>1247 (36)</td>
</tr>
<tr>
<td>&quot;MALUTILIZATION&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>AAA 1981</td>
<td>95 (21)</td>
</tr>
<tr>
<td>F</td>
<td>23 (25)</td>
<td>204 (33)*</td>
</tr>
<tr>
<td>&quot;PROPOSED REPORTS OF PERFORMANCE DIFFICULTIES&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>No difficulty</td>
<td>Occasional ref to small men having difficulty</td>
</tr>
<tr>
<td>F</td>
<td>No difficulty</td>
<td>Freq ref to women having difficulty or under utilized</td>
</tr>
<tr>
<td>&quot;HIGH DIRECT COM. BAT RISK&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>F</td>
<td>No</td>
<td>High risk</td>
</tr>
<tr>
<td>&quot;MIGRATION OUT OF MOS&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>303 (36)</td>
<td>1.917 (57)</td>
</tr>
<tr>
<td>F</td>
<td>45 (23)</td>
<td>448 (75)*</td>
</tr>
</tbody>
</table>

* Significantly different from males rate/females rate in light cluster
FIGURE 7

DISTRIBUTION OF CURRENT ARMY JOBS AND ENLISTED WOMEN
BY PHYSICAL DEMANDS CATEGORIES

<table>
<thead>
<tr>
<th>Category</th>
<th>LGT Lift Max of 20 Lbs</th>
<th>MED Lift Max of 50 Lbs</th>
<th>NH Lift Max of 80 Lbs</th>
<th>HVY Lift Max of 100 Lbs</th>
<th>V HVY Lift Over 100 Lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women Assigned</td>
<td>14%</td>
<td>20%</td>
<td>13%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Male Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Army Spaces</td>
<td>8%</td>
<td>7%</td>
<td>8%</td>
<td>8%</td>
<td>12%</td>
</tr>
</tbody>
</table>

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FIGURE 8

APPLICATION OF A WORK CAPACITY TEST BATTERY AS A SELECTION STRATEGY

MANAGEMENT REQUIREMENTS  RESEARCH REQUIREMENTS

MILITARY OCCUPATIONAL SPECIALTY ASSESSMENT

ANALYSIS

TASKS
DUTIES
WORK CONDITIONS
SKILLS

CLASSIFICATION

PHYSICAL DEMANDS
CRITERIA
WORK CAPACITY

VALIDATION

WORK CAPACITY
TEST PROTOCOL
IMPLEMENTATION

RESULTS OF
MEDICAL FINDINGS
MENTAL CAPACITY
PHYSICAL CAPACITY

ANALYSIS

RESPER  HEPCOM  TRADOC  USARIEM  ARMY  ARDO  TRADOC

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FIGURE 9

TEST PLAN FOR VALIDATION OF THE PHYSICAL WORK CAPACITY TEST BATTERY

MILITARY ENLISTMENT PHYSICAL STRENGTH CAPACITY TEST (TEST PLAN)

SAMPLE
1,000 MEN
1,000 WOMEN

TASK
ADMINISTER MEPSCAT (BT) T₁ - T₂ PRE-POST TEST

ACTION
USERIEM
TRADOC

SITE/LOCATION
PORT
JACKSON
FT. GORDON
FT. BEN HUOTON
FT. LEW

TIME LINE
6 SEP 1992
16 OCT 1992
1 FEB 1993
APR - MAY 1993
JUN 1993
OCT 1993

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THE DEVELOPMENT OF A TRANSITION PLAN

REDISTRIBUTION CONCEPT IS MOVEMENT FROM
HEAVY/VERY HEAVY TO LIGHT/MODERATE HEAVY M.G.

TARGET 37.1K

TARGET 27.3K

TARGET 22K

TARGET 28K

TARGET 10K

TARGET 7K

LIGHT TO MOD. HVY

E1-E4 E5-E9

HEAVY AND VERY HEAVY

E1-E4 E5-E9

- MAJOR PROFILE CHANGE FOR
  WITA WILL BE MOVEMENT FROM
  A TO B

- NOTHING TAKES PLACE UNTIL
  VALIDATION IS COMPLETE
The training and role of the 91G is in a period of transition. With the advent of the revised 15-week course, training will be of longer duration, broader in scope, and emphasize combat psychiatry and command consultation. To increase 91G morale and competency, efforts are being made to raise the grade structure to E8, to restrict or eliminate 91G10 level practitioners, and to provide greater training opportunities for the 91G. The emphasis in coming years will be quality rather than quantity and greater stress will be placed on preparation for the ultimate test of professional skills - combat.

The Behavioral Science Specialist Course - MOS 91G10 - is taught at the Academy of Health Sciences, Ft Sam Houston, Texas. The Branch Chief is LTC Brian H. Chermol, PhD, the Assistant Branch Chief is LTC Martha J. Dingey, MSW, and the NCOIC is SFC Damos. The AUTOVON number is 471-5716. The Branch missions are:

a. To train students at the 91G10 level to collect and record social and psychological data and to counsel personnel with mental disorders or other conditions which impair occupational or social functioning.

b. To serve as Subject Matter Experts for the 91G Soldier's Manual and SQT and FM's, TM's, and AR's related to mental health.

c. To provide behavioral science instruction to officer basic/advanced students, NCOES students, and other AHS students.

d. To provide inservice training to Behavioral Science Division personnel.

e. To revise TM 8-246.

f. To represent the 91G career field at psychology, social work, and psychiatry symposiums, The Surgeon General's office, and the Soldier Support Center.

g. To assist planning agencies in determining the future role of 91G personnel in the Army.
Branch faculty strength is 14 NCOs (E5-E7) and five officers (to include an Air Force liaison officer/instructor). All officers have a MSW, DSW, or PhD; all NCO's have college training in the behavioral sciences and a few have M.A.'s (Counseling) and MSW's. Future enrollment may include Navy students, if a Navy officer and petty officer are provided as instructors. Enrollment for FY 81 was 250, 298 for FY 82, and projected at 499 for FY 83. Students are active duty Army Reserve, Army National Guard, US Navy, US Air Force, and USMC.

Prerequisites include: grade of E5 or below, completion of MEDCORE (four week), no evidence of immaturity or instability, score of 105+ on ST, ability to read and write English effectively, high school diploma (not GED), and a minimum of 10 months active duty remaining.

The present 10-week course has seven instructional areas:

a. Basic behavioral content (basic psychology/sociology)
b. Psychopathology (diagnosis)
c. Skill mastery (WAIS-R and MMPI)
d. Counseling modalities
e. Practice in the military setting (corrections and command consultation)
f. Drug and alcohol counseling
g. Experiential (practical exercises in interviewing and brief counseling)

A revised 15-week course has been validated and will be implemented by 1985 (depending on classroom/living space availability). The 10 instructional areas are:

a. Orientation to the job of the 91G.
b. Normal human development.
c. Identification of behavior problems
d. Psychopathological disorders
e. Substance use disorders
f. Interviewing
g. Testing

h. Helping the client
i. Psychiatric casualties
j. Command consultations
The advantages of the revised course are: longer period of time to teach more didactic material and practice interviewing and counseling skills (= confidence), an emphasis on combat psychiatry and command consultation, greater use of audiovisual (VCR) materials, and more current reference and information, e.g., DSM-III.

In the revised course, students will be taught the basic principles (return to duty as soon as possible and treat forward) and procedures (triage, treatment, consultation) of combat psychiatry. At the 91G10 level, students will be taught crisis, guidance, and supportive modes of counseling and will be introduced to the methods of Freud, Perls, Rogers, Berne, Glasser, and Wolpe.

Presently there is a shortage of 91G's at the 91G10 level and an excess at the 30 and 40 levels. Promotions have decreased and MOS reclassification has occurred. The lack of E8 positions and the near freeze on senior promotions have had a negative impact on E6's and E7's in the 91G career field.

Upon completion of the 91G10 Course, graduates should be able to perform the following tasks: record and conduct an interview, assess mental status, make appropriate referrals, restrain a patient, staff a case, administer and score the MMPI and WAIS-R, determine suicide/homicide potential, conduct a counseling session, colead a counseling group, collect research data, identify inappropriate use of drug/alcohol; maintain patient record, and assist in administration of medication and patient evacuation as directed.

Graduates may be assigned to: CMHA's, drug and alcohol programs (after completing USADART Course), ACS research labs, AHS, psychology/social work services, combat divisions, the Disciplinary Barracks/stockades or the Retraining Brigade.

Some current projects of the Behavioral Science Specialist Branch are: create 32 E8 positions (AHS, division, large clinics); implement the 15-week course; publish a new student test in February, a new TM 8-246 in 1985, and new SM/SQT in 1984; create a two-week Psychometrics Workshop and ASI for 91G's; host the first annual Senior Behavioral Science Specialist Symposium (March); increase training in child/adolescent mental health for 91G's; restrict the assignments/duties of 91G10 level personnel; and require an E5 in all isolated 91G slots.
RAPID EVALUATION OF FAMILY DYNAMICS: ON THE EVALUATION OF FAMILY CRISIS SITUATIONS

John D. Shoberg, Ph. D.
Major (P), MSC
Clinical Psychology Service
Madigan Army Medical Center
Tacoma, WA 98431

This paper describes methods used in a child and family psychology clinic (located at the 97th General Hospital, Frankfurt) to affect rapid evaluation of family dynamics and problems. Particularly important was the effective utilization of a small staff of behavioral science specialists and professionals employing a diagnostic children's group (emphasizing both social interaction and directed standard projective drawings); kinetic family drawings with whole family participation; structured developmental and a problem oriented parental interview; individual examination of the identified patient and effective staff integration of the data prior to direct feedback to the family. Generally, it was found that a staff of two professionals and a minimum of four supporting paraprofessionals was able to effectively evaluate and affect disposition (usually to treatment) of up to four families in one to four-and-a-half hour period.

One advantage of these methods was that families referred for evaluation and treatment from remote areas with few or no behavioral science resources could begin high-impact treatment, generally the day after evaluation. Since it was rare to have some families available for more than five clinical days, the necessity for rapid evaluation was paramount.

The Setting

During the early 1970's, there was a paucity of psychological and psychiatric resources available to accomplish the mission of general psychiatric, child and adolescent psychiatric and psychological services to the US Army Europe (USAREUR), the joint services European Command (EUCOM), and where needed to the US Army staff supporting the Supreme Headquarters Allied Powers Europe (SHAPE). Where psychological and psychiatric services were available, however, they were clearly present in less than required quantity. For example, in the summer of 1971, there were precisely four authorized active duty Army slots for clinical psychologists within USAREUR Medical Command, only three of which were filled.

The general schema of service delivery in the early 1970's conceptualized the US Army Medical Center, Landstuhl, as the "referral center" for psychiatric problems. The 97th General Hospital (Frankfurt) served as a medical air evacuation center. Child and family psychological/psychiatric services were delivered on an area basis (with some exceptions) by two child psychiatrists at Landstuhl and at Frankfurt by a staff consisting of a part-time child psychiatrist, a part-time clinical psychologist and two or more behavioral science technicians (organizationally known as the Child and Adolescent Psychiatry and Psychology Services or the CAPPs program).*1,2
A unique feature of services available at the 97th General Hospital (97th GH) at that time was a joint 97th GH/United States Dependent Schools Europe therapeutic pre-school which was co-located with CAPPS on Ward B-600 of the 97th. This pre-school served up to 30 multiple-handicapped children and was staffed with two full-time teachers and up to three teacher's-aides funded by the DOD school system. It was served by the 97th GH Pediatrics and CAPPS staff on a consultative basis. And often served both medical/psychodiagnostic and educational diagnostic functions.

Clinical Psychology Service (and CAPPS Clinic) of the 97th provided services to a catchment area with approximately 226 company level and larger commands. In addition this same service supported hospital and other catchment areas including Bremerhaven, Berlin, Wurzberg, the US Embassy-Bonn and the US Counselor Service, Frankfurt. Finally, the 97th received fairly frequent air-evacuated child, adolescent and "family problem" referrals from virtually the entire European, Scandinavian, African Continental and Middle Eastern hemisphere. Of course, the pressures to provide services, supervision, collateral public contacts and necessary administrative support were enormous. As might be imagined, the complications involved in deciding what to do with "drop in from long-distance" air-evacuated families and children (with whom the staff had from four to ten working days to work with) forced the staff to develop highly efficient methods for evaluation and short-term high impact treatments.

Generally, for "long distance cases" our goals came to be: (a) to have the entire nuclear family available including both parents and all children eight years of age and older; (b) to complete evaluation of the identified patient or proband and family needs within one working day; an (c) where indicated to begin appropriate treatment the morning of the next working day. Necessary collateral consultations such as to ophthalmology, pediatrics and for in-depth psychological evaluation were completed and coordinated as necessary.

Development of the Methodology

The Structured Developmental and Problem Oriented Parental Interview

In the course of time, the CAPPS Clinic attempted a number of different formats for obtaining information concerning the identified patient or proband, his/her family and their concerns. Eventually it was found that the most efficient history was gathered (after administrative data such as names, social security number, phone numbers, etc. were obtained through use of a form) by the professional staff rather than through use of parental questionnaire. The following is a discussion of the sort of information which usually proved to be most useful.

Problem list. First, parents were asked to explicitly discuss their concerns about the identified patient and family as well as their hopes/expectations for how the clinic might help to deal with these. A careful elaboration of this information, known to the staff as the "laundry list" was made prior to transition to the history and "mental status" aspects of the interview.
Social. Second, a pedigree of the immediate family structure including a minimum of all persons presently living in the home was obtained. This was recorded in rather formal genetic fashion along with pertinent brief notes concerning each family member. Figure 1 is an abbreviated example of a family pedigree.

Frequently, the parents were also asked to elaborate on their families of origin as well. At this time, information was gathered concerning the ages and occupations of both parents, past marriages (especially where children in the present family structure were of differing parentage), and a compendium of the children including names, ages, problems, activities, and other outstanding information. Strengths and weaknesses, temperament, relationships with each other and friends were also discussed.

School. The child's academic behavior represents his/her "job" performance. Academic achievements and difficulties were discussed next. It was generally found that despite the "laundry list" of complaints, most parents were able to offer at least one facet of school behavior as a strength, even when it was difficult for them to initially identify any other areas of strength in the proband. Generally, it is the author's impression that parent's who had the greatest difficulty discussing strengths in their children had the worst family therapy prognosis and required the greatest cognitive restructuring in treatment.

Motor. Next, information concerning the fine (eg. "describe ___'s handwriting") and gross motor (eg. "is ___ a good runner?") behavior was elicited. Excessive sloppiness in handwriting and awkwardness in gross motor movement has multiple possible antecedents, the understanding of which requires careful diagnostic work beyond the scope of the present discussion.

Adaptability. One of the hallmarks of effective functioning is the person's capacity for, and willingness to accept, change. Anyone who has had the enlightening opportunity to observe either a large number of neurologically impaired or autistic patients can most fully appreciate the desire for sameness and consistency in the surrounding environment. Clinically, adaptability can be roughly gauged through questions such as "how has ___ managed your last move," or "what happens when you change babysitters" or "how does he manage when he has to change schools/teachers?"

Language. Speech and language is intimately involved in the communications essential to successful everyday functioning. Information was sought by asking if the proband was, or had ever been, seen for evaluation or treatment by a speech or language therapist, or if the parents had any concerns previously unstated regarding the child's acquisition or use of language.

Liability. Liability refers to the stability of behavior. The most productive question was "who in the family is most easily upset?"

Attention Span. Attentional deficit disorder has received increasing scrutiny over the past ten years. Indeed, attentional deficits may serve as the substrate of activity level problems, reading, writing, language, listening and
social problems as well. The most productive questions usually were of the vein, "Can sit through a whole T.V. program... Is a fidgeter... Can read through a newspaper article or complete a chore without being distracted."

Memory. Remembering is, of course, dependent on attending sufficiently to allow the information of an engram. And, while attention span and remembering are no doubt highly intercorrelated, parents tend to focus on the end product of memory, or lack of it, as being important. "Could Jimmy do both if you asked him to hang up his coat and take his dishes to the kitchen; without being reminded."

Activity level. Particularly during the mid-70's, parents and educators wondered about and "diagnosed" the symptom of "hyperactivity." Since this was one of the most frequent complaints of teachers and parents alike, an inquiry into activity level usually seemed mandatory; if for no other reason than for "credibility" with the parents. It is noteworthy that activity level does not exclusively imply an antecedent of attention deficit disorder. There are alternative explanations, many of which require independent assessment.

Examination of the Referred Child

Examination of the child who is the focus of the referral is a process that should take into account reports from significant others in the child's life such as teachers, parents and when appropriate and possible, siblings as well. Ideally it should also involve direct observation of the child in his "natural" peer-age group setting, in the family, and "at work"; that is in the classroom setting. However, it is rare for the clinician to have the opportunity for such extensive observations. Therefore, the extent to which accurate inferences may be made concerning the actual everyday functioning of the child is limited by the ingenuity of the clinician and the nature of the sample of behavior he is able to obtain. The more naturalistic the setting the better, in general. Two settings came to be used by the staff at the 97th General Hospital CAPPS Clinic. The first was that of a "children's activity group". The second was a rather more structured formal examination of the child.

Children's Activity Group. The children's activity group concept was born out of an increasing awareness of the limitations of parental and teachers reports and a sense of the need to sample the child's behavior in a more or less "free-respondent" naturalistic setting. The notion here is that while we may well have excellent tools or measuring notions such as "how much", how often and how persistently certain behaviors occur, our measurement of style is often neglected except in clinical treatment settings. The children's activity group evolved after clinic policy had come to require the presence of both parents for each evaluation. Soon after, we came to strongly encourage the attendance of the entire family and any grandparents or others living in the immediate household. The next step was to include an evaluation phase which would serve to sample the quality and style of interaction among the children of the family. Soon after, the CAPPS Clinic began to do multiple intakes in one afternoon. In this context, it became possible to group all the children from two or more
families into one or more activity groups. All that remained was to determine what structure the groups would have. This was generally solved by an eager group of bright, young technicians who developed volleyball, mini-soccer, catch, drawing and other weather-appropriate activities for the groups. The initial emphasis in each group was to create as naturalistic a free-respondent atmosphere as possible. Later on in group activities, the participants were asked to individually produce human-figure (H-F) and sometimes House-Tree-Person (H-T-P) drawings. The H-F and H-T-P drawings (when gathered) were later integrated into the evaluation of each proband; sometimes providing valuable insights into both the level of intellectual functioning of the children and pregnant hypotheses about family dynamics.

**Formal Examination of the Child.** As part of any evaluation for which there is an identified patient, the patient must be examined; if for no other reasons than completeness and credibility. That is, even if the clinician is convinced early on that he/she is dealing with primary family systems issues (as compared with an "individual emotional problem") it is still essential to examine the identified patient for establishing the credibility of one's conclusions with the family.

After initial developmentally appropriate rapport building, the formal exam would proceed in an attempt to establish an estimation of the level of psycho-neurological, social-learning responsiveness and obvious psychotic or neurotic symptoms (if suspected) of the child in an essentially one-on-one "child-diagnostic" atmosphere. The notion here was to perform a quick screening exam. And this exam generally occurred following the staffing of information from the children's activity group, projective drawings, and problem-oriented parental interview as described above. It was also understood that problems requiring further in-depth individual assessment or diagnostic procedures could be performed as necessary at a later time.

Generally the formal examination proceeded along two tracts: (1) a traditional child guidance evaluation of up to 30 minutes, involving age appropriate exploration and play of previously identified potential problem areas; (2) a neuropsychological soft-signs examination of not more than 15 minutes. This practice has generally not been found in most other routine child guidance intake evaluations. The soft-signs examination included fine motor, "torque", perceptual-developmental age, letter reversal, laterality/dominance, handedness, "overstimulation", kinesthesia, left-right confusion, coordination, visual tracking, digit tapping and dysdiadochokinesis tasks and measures. A description of each item, its administration and scoring is detailed in Appendix A.

Up until the summer of 1976 at the CAPPS Clinic, the results of the soft-signs examination were subjectively assessed as has generally been the case for most other neurological "soft-signs" exams. This exam was subsequently refined by Smith *et al.* (1980) and an attempt was made to standardize and establish more objective norms. At present these data have yet to be formally reported. However, initial analyses indicated that at least some of the "signs" such as "letter reversals", the "visual hitch", "overstimulation", the appearance of
"stickiness" in "finger tapping" after age 7 1/2 and dysconjugate movements during dysdiado kinesis have predictive power in terms of identifying children with learning disabilities. Indeed in an initial sample of over 200 children, all children with some of the signs were found to be having learning problems of one variety or another.

In addition, age appropriate exploration or play to explore items from the "laundry list" of concerns was performed in traditional fashion as appropriate. Altogether the data gathered was clinically integrated and staffed as described below. On the average, the entire "soft-signs" aspect of the examination takes less than 15 minutes. In general, the entire individual examination with the child took at most 45 minutes.

Family Group Kinetic Drawing Techniques. The remaining data gathering technique to be discussed is that of the family group kinetic drawing. This technique is a modification of the more prevalently used "kinetic family drawing" which is essentially a singly projective drawing depicting a family member's individually produced drawing of his/her family doing something together. Inferences made from the products of the kinetic family drawing techniques essentially follow reasoning similar to that used in interpreting individual draw-a-person and house-tree-person drawings.

In the CAPPS modification of the kinetic drawing technique, the family as a whole is instructed to work together to produce two drawings. Prior to beginning, both parents and all children were assembled by a technician or team of two technicans. Materials present include a box of crayons or colored pencils and a large pad of plain "butcher block" type paper. The family is instructed essentially as follows: "For this next segment of the evaluation, we'd like you to work on a task together. Here is a box of crayons and here is a pad of paper. What we'd like you to do is to draw a picture showing the family doing something together, as a group. Go ahead now, you'll have about twenty minutes to complete your drawing." While the instructions could be paraphrased in response to questions/inquiries from the family; no further help was offered.

The second drawing to be produced was begun just after the initial task was completed (following appropriate encouragement for previous effort). In this instance, the instructions given were approximately as follows: "Your next tasks should be fun for you. First of all, we'd like you to discuss and plan three possible vacations that you might want to take sometime together as a family. Then, select one of these as the best of the three for you as a group. Then, draw us a picture of the family on this same vacation doing something together. Go ahead now, you have about half-an-hour to forty minutes to finish."

Basically, the notion of the Family Group Kinetic Drawing Techniques is to provide a set of unique tasks, with varying levels of intrinsic stress, in order to produce the opportunity for the family to display their characteristic style of relating to one another. Essentially, these techniques constitute a "projective situation" in which the family (theoretically) displays the nature of its interpersonal dynamics. Not surprisingly then, the success of the technique
depends, in part, upon the astute observation of the interaction by the psychology technician observers. Generally, these observations started with an attempt to answer the questions such as: (1) What are the rules of the game, and (2) Who is in charge here, and the like. Overall, the conceptual set of the observer was most productive if the situation was framed as one where the observer has just walked into a chess game, not knowing the rules of the game. The observer's task was to infer the rules of the game from how the players moved on the board; disregarding all verbally proffered comments whatever about what the "rules" might be. Thus, the staff was interested in knowing the informal dynamics of the family's organization having already assessed the parents stated "rules" of the family from the content of the structured developmental and problem oriented parental interview.

Concept of Operation

Experience at the CAPPS Clinic indicated that the most productive rapid evaluation of family dynamics should include measures of the proband's behavior in one-to-one (dyadic), peer group, and projective family and individual situations in addition to information gathered from parental interviews. Altogether, the specific collective tools and instruments utilized were as follows: (1) The structured developmental and problem-oriented parental interview; (2) A children's activity group used to offer an opportunity for observation of family children in age-appropriate social interaction as well as the gathering of individually produced projective drawings, (3) An individual examination of the proband including neurological "soft signs", and (4) Projective situational family group kinetic drawing techniques. In order to satisfy the press for greater efficiency and service delivery, the CAPPS staff designed an evaluation system which would, using the proven techniques outlined above enable us to evaluate a maximum number of families in the briefest period of time possible. In order to do this, we developed a matrixed evaluation system which allowed a staff of two professionals and a minimum of four psychology technicians to thoroughly assess (to disposition) up to four families within a four to four-and-a-half hour period.

The Plan

Figure 2 presents a flowchart which describes the activities of the staff when organized to provide evaluation services for four families including both parents, an identified patient or "proband", and all other family members integral to the family unit as it was constituted at the time. Please note that each family is represented by letter notation with capital letter "A" representing the parents, "B" represents the "proband" or identified patient, and "C" represents the remaining children (if any) belonging to the family unit. Subscripts 1, 2, 3 and 4 designate to which family the parents, proband or other children belong. Each technician (or technician pair) is designated by Roman numerals and subscript numbers as follows: I₁, I₂, II₃, II₄. The technician's Roman numeral notation identifies the professional with whom he/she would work for the afternoon. The technicians subscript number identifies the family to be worked with.
In order to ensure a complete grasp of the system, it may be helpful to follow family #1 through their evaluation with Professional I and his supporting team (Team I). Starting after the "arrival-burst point" Professional I leads off with a Structured Developmental and Problem Oriented Parental Interview (with A1) while the identified patient (B1) and his/her siblings (C1) begin attending the Children's Activity Group. Note that after Professional I complete the parental interview with A1, he immediately repeats this procedure, this time with the parents (A2) of Family #2.

After completion of the Children's Activity group Professional I meets for the first staffing of Family #1 with Technician (team) I1. At this time, the technicians and professional share their initial impressions and observations. This staffing helps to alert the staff to some of the nuances of behavior that may require further exploration, study or which might simply be observed more intensely in future sessions. Family #1 is reconstituted in the waiting room area while their first staffing is completed. Immediately after this staffing is completed, Technician Team I1 retrieves Family #1 from the waiting room and proceeds with administration of the Family Group Kinetic Drawing Techniques; while Professional I proceeds with a staffing of Family #2 and then examines the identified patient (B2) from this family.

After completion of the Family Group Kinetic Drawing Techniques by Family #1, Professional I examines the identified patient (B1); and where indicated the other children (C1) of the family unit. Any collateral consultations deemed appropriate or necessary (such as to ophthalmology, the clinical psychology assessment center, dentistry or other specialists) are discussed at that time; after which sufficient coordination by the staff would be effected to ensure completion of the necessary service in a timely fashion.

Where family/individual therapy or child oriented parental counseling seemed indicated, it was scheduled for the next available appointment time; usually with either the supporting technical team (e.g. technician(s) I1 for family #1) or the professional (I in this case) responsible for the just completed evaluation.

The reader may notice that the same process is repeated, though in a slightly different order for the procedures for family #2 which also has Professional I as its "team leader". Professional II follows an identical format in effecting completion of the evaluations for families #3 and #4. Thus, the staff is able, within approximately four to four-and-a-half hours, to effectively reach disposition-usually to therapy-of up to four complicated family situations in an atmosphere which fosters a contagion of excitement, hope, and a sense of positive movement. Indeed, an atmosphere which very nicely sets the stage in such a way as to foster an effective intervention.

SUMMARY

This paper describes the development and utilization of a unique combination of clinical techniques designed to assist in the rapid assessment of child and
family crisis situations. Particularly desirable is the combination of individual, peer group interactional, family "projective", and more standard parental history taking methods to provide a maximum amount of data from which to base a treatment plan and/or further in-depth evaluation as indicated. Through careful planning and execution, it proved to be possible for two professionally trained mental health specialists (one clinical psychologist and one child psychiatrist) and four or more psychology technicians to assess up to four families in a four to four-and-a-half hour period.

Over time, the staff found these methods had several advantages over traditional child guidance processes. Some of these advantages were:

1. Efficiency
2. Use of staff at their maximum efficiency at the ragged edge of their capacities.
3. Fosters teamwork among the staff.
4. Automatically lends itself, as a function of the process, to training and feedback to the staff.
5. Built in essentially immediate feedback to the family (rather than their waiting a week or longer).
6. The system allows observation of peer interaction - correcting a frequent deficiency in the majority of intake situations.
7. The methodology includes a psychoneurological soft-signs exam in addition to traditional child guidance intake interviewing procedures.
8. The method provides for the observation of family dynamic processes on a systematic framework.
FOOTNOTES

1. In the fall of 1971, the 97th General Hospital Child and Adolescent Psychiatry Service (CAPS) program came to be known as "CAPPS" with the addition of clinical psychology staff to its effort. From September 1971 until the Winter of 1974 when Dr. (CPT) Thomas Waddell assumed professional responsibility for what amounted to a Psychological Assessment Section of Clinical Psychology Service, the boundaries of the clinical psychology and child psychiatry services were extremely fluid as one officer provided daily direction and control of both services operations. By the summer of 1975, a total of five clinical psychologists had been assigned with duties at the 97th General Hospital. And, responsibilities coverage of the MEDDAC's at Wurzburg, Bremerhaven and Berlin had been assumed by Drs. (CPT's) Stanley Mize, James Thompson, and James Blok, respectively. Finally, an organization known as the Youth Health Center was established through the use of special White House funding as part of an overall nationwide emphasis on curbing drug abuse. The Youth Health Center began with an acknowledged "drug center" emphasis and focused on local DOD health beneficiary teenagers and their families. This center provided adolescent medicine and psychiatric/psychological/counseling services. After the departure of a team of one professional and three paraprofessionals who "established" the center, it was staffed by pediatricians, nursing personnel, a driver, a civilian child psychiatrist, several civilian counselors and two CAPPS donated Behavioral Science Specialists.

In effect, a small staff of "one each" part-time clinical psychologist and child psychiatrist responsible for virtually all child clinical psychology and child psychiatric services to US Army and other personnel located in the northern half of the Federal Republic of Germany had been vastly augmented by the summer and fall of 1975. Indeed the Winter 1971-72 manpower survey had reported a recognized need for seven clinical psychologists at the 97th General Hospital alone.

Dr. (then Major) David T. Armitage, a child psychiatrist, served primarily as Chief, Department of Psychiatry from May 1971 until summer 1972 and later after being surpassed by a higher ranking officer remained as Assistant Chief of the Department until his departure in September 1973. Through this period, he gave overall direction to the child and adolescent psychiatry effort though the needs of the hospital demanded that the majority of his energies be directed toward other efforts much as administration of local effort in the Army's "war on drugs."

2. Due to a lack of authorizations, a volunteer civilian secretary and one other part-time person who served as a child and family therapist rounded out the CAPPS staff. Rather more unusual was the fact that a number of wives of American servicemen, US Counselor personnel and other agencies such as the USO had formulated a committee which privately administered funds (the Child and Adolescent Psychiatry Service Support Fund) which they used as honoraria (starting at $1.00 per hour) to encourage the highly skilled CAPPS volunteers to remain with the clinic. Mrs. Esther Sternberg, a truly exceptional woman who
was the wife of the in-residence USO District Director functioned as primary patroness of the fund for much of the early 1970's. Contributions received to this fund ranged from a few dollars from bake sales to $8,000 or more from, for example, the Frankfurt American Wives Club, which enjoyed the membership of American wives from the local business community, diplomatic corps personnel, and military wives alike.

3. Later, during the winter of 1974, the CAPPS Clinic and its associated pre-school were moved to a 22-room suite of offices at the old 10th Dispensary building in Frankfurt. By that time, the CAPPS and associated staffs had grown to include speech and occupational therapists as well as up to nine behavioral science specialists. Clinical psychology service peaked at a professional staffing level of four Ph.D. level Clinical Psychologists and one masters level Behavioral Science Associate in the late spring of 1975.

4. It is noteworthy that there apparently was no written mission statement to cover consultation to the joint 97th/US Dependent School System Europe therapeutic pre-school, or for air-evacuated families and/or dependents. Therefore, it should probably go without saying that local command group support from individuals such as COL(s) Martin Pfentenhauer and Robert Neims (Hospital Commanders), Dr. (COL) Don McCleod, Chief, Professional Services and Executive Officers such as COL(s) Phillip Haltwick and George Foege was an essential, constant and much appreciated element (by the community and staff alike) in supporting the CAPPS Clinic operation.

5. Included in coverage provided by the CAPPS Clinic were children and families from Bahrein (off the coast of Saudi Arabia in the Persian Gulf); Addis Ababa, Ethiopia; the US Embassy, Warsaw, Poland; and, Khartoum, the capital city of the Sudan.

6. With the exception of a few hours per week of supervisory time and some "treatment time" made available by the child psychiatrist assigned to the 97th (then Major David T. Armitage) the majority of administrative and supervisory input to the staff was provided by the part-time assigned clinical psychologist. Later Dr. (MAJ) Fred Sakamoto joined the CAPPS staff, providing valuable clinical support from the fall of 1973 until the summer of 1976 when he was curtailed in his tour to accept another assignment.

7. Unfortunately, the longevity of the effects of the evolving CAPPS treatment methods remain unmeasured in a direct fashion. This was because meaningful clinical investigation of the sort necessitated by the very nature of psychotherapeutic (and behavioral) interventions was simply not deemed possible by the staff in an acceptable formal fashion in this setting serving a population from such diverse locations. However, on the other hand, the methods utilized appear to have sufficient support in the literature for their collective effectiveness to enable the staff to reasonably, confidently proceed to do what seemed to be needed to be done.

8. From approximately September 1971 until August 1972, the staff generally focused on relatively standard 1 to 1 1/2 hour initial evaluations, extensive
histories and write-ups as taught by Dr. Armitage in more or less traditional child psychiatric social work fashion. Staffing and later "follow-up" as seemed appropriate followed. "As appropriate" for air-evacuated and other families traveling long-distances initially meant consultation offered to the referring physician in the form of an appropriate evaluation of the referral and other apparent problems followed by elaboration of suggestions which the referring physician (usually a pediatrician) might consider for the management of the case. Unfortunately, the staff found that the referring physicians had little or no time if not the expertise for meaningful follow-up in most cases. In the summer of 1972, Dr. Marvin Backer, a clinical psychologist from a private practice group in Albuquerque, N.M. and former Army Psychologist provided the staff with one day of consultation, with some provocative results. Essentially, he wondered if there was any meaningful therapeutic benefit for "long distance cases: if we depended on heavily over-worked pediatricians to implement the staff's consultative suggestions. Investigation subsequently demonstrated that a few heroic referral sources did manage what they estimated were satisfactory results in a few cases utilizing our consultation. However, in an informal survey, the majority felt "swamped" by routine medical demands (after seeing in excess of fifty outpatients per day) and/or felt inadequately trained to manage the behavioral/emotional problems returned to them with consultation from CAPPS. As a result of Dr. Backer's consultation and information from the field, the staff began to plan and execute increasingly rapid procedures for the evaluation and treatment of children and families traveling long distances to our facilities.

9. Initially in 1971, the standard procedure was to have technicians (SIG's or a civilian volunteer) interview the parents to obtain a traditional lengthy psychosocial history. These histories were laboriously written up by the staff and later were discussed in supervision with a professional staff supervisor with responsibility for the case. Sometimes the proband was personally examined by the professional staff, sometimes not, depending on the apparent severity of the case as presented and the experience and skill of the technician involved. It is noteworthy that about 25% of our technicians at the time had completed a masters degree, frequently in psychology and all were at least Baccalaureate level college graduates. Thus, examination and/or interview of the proband and his/her family by the technician alone was deemed sufficient on more routine cases. This policy also had the effect of demonstrating support and confidence in the staff. Histories and information gathered was elaborate by any standard and the write-ups were elegant as a rule. However, the interview and write-up time required was often excessive.

There were, also, numerous efforts by the staff at the development of "forms" to gather information equivalent to that produced by interview. All, almost inevitably failed; probably because the "exclusive" use of a form tends to preclude provocation of the sort of human interaction which is both necessary and sometimes is even sufficient (Rodgers, 1963) to engage patients in meaningful therapeutic or diagnostic experiences. Invariably, the staff would need to "rediscuss" much of the information obtained through the form utilized in order to complete the clinical picture. Therefore, eventually the most useful aspect of any form utilized focused on pure administrative data such as phone numbers, unit address and birthdates.
10. For latency aged and younger identified patients, this information was usually gathered from the parents alone. When a teenager was the identified patient, he/she was almost invariably seen first and alone for much the same information.

11. Basically one's approach to each child depended at CAPP's on the general philosophy of the professional doing the exam, the nature of the problem, age and perceived maturity of each identified patient or proband.

Since Frankfurt's Youth Health Center had assumed responsibility for families whose identified patient was a teenager (by this stage of evaluation of the CAPP's Clinic), the writer will focus his attention on the examination of primarily latency aged and younger patients in the text.

12. While recent literature generally seems to discount mixed laterality as a predictor of behavioral and learning problems, this factor had enough supporting "clinical lore" to warrant consideration in the early 1970's.
Family #1
First Marriage Each
17 years

M
Christine
36 yo

F
George
38 yo

LTC(P) Inf.
V-Corps - Personnel Staff

Elem. School Cert.
subs. teacher

Chrissey
3 6/12 yo
proband

Jane
14 0/12 yo

George, Jr.
15 1/12 yo

Temper tantrums
Sleeps with parents
Extremely active

Eighth grader.
Repeated 2nd grade.
Pending problems.
Adores George Jr.
and dating since
eleven years old.

H. S. Sophomore
Football & basket weaving.
Straight A's. Very
protective of Jane.

Family #2

M
Frieda
25 yo

Mary
32 yo

F
Roger
35 yo

Married 10 years
Divorced 1978

Clark-typist

SSG - Artillery

Used car salesperson

Nova
6/12 yo

Candy
2 1/12 yo

Jimmy
11 0/12 yo
proband

Happy baby.

Seems jealous of
Nova. Regressing,
want to be nursed.

Poor reader.
Stealing hubcaps X3
One trip to Juv. Hall

FIGURE 1.
Fictional examples of a simple family pedigree and a family where there are children from two marriages.
REFERENCES


CONCEPT OF THE OPERATION - RAPID EVALUATION OF FAMILY DYNAMICS

* Appropriate Technical Team May Attend
Figure 2B

CONCEPT OF THE OPERATION - RAPID EVALUATION OF FAMILY DYNAMICS (CONTINUED)

A  Examination of B_3 [Professional]  
Final Staffing of Family \#3  [Professional]  
Feedback on Family \#3  [Professional]  

B  Kinetic Drawings Family \#2 = A_2, B_2, C_2  
[TECH. TEAM \#2]  
Final Staffing Family \#2  [Professional]  
Feedback on Family \#2  [Professional]  

C  Writing Room (Unassisted) A_2, C_2  
B_2  
B_3, C_3  
C_3  
A_2, B_2, C_2  
B_2, C_2, C_2  

D  Writing Room (Unassisted) A_3, C_3  
B_3  
B_3, C_3  
C_3  
A_3, B_3, C_3  
B_3, C_3, C_3  

E  Examination of B_3 [Professional]  
Final Staffing of Family \#3  [Professional]  
Feedback on Family \#3  [Professional]  

F  Kinetic Drawings Family \#4 = A_3, B_3, C_3  
[TECH. TEAM \#3]  
Final Staffing Family \#4  [Professional]  
Feedback on Family \#4  [Professional]  

G  3:00  3:20  3:25  4:00  4:20

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APPENDIX A

NEUROPSYCHOLOGICAL SOFT-SIGNS EXAM

Generally, the formal exam proceeded about as follows:

Fine motor: First, the child was asked to write his name on a piece of blank bond paper. The child will print or write in cursive writing. He/she was then asked to "write your name the other way," thus producing (if the child had the skills) a sample of printing and cursive script.

Torque or interhemispheric interference or confusion. Next the child was asked to draw a circle with the preferred hand (scored per Stanford-Binet, 1960 manual). After this, following a demonstration, he/she was presented with two sets of three "X's" and asked to circle the first three with the preferred hand, the second three with the other hand (after Blau, 1974; later reported in Blau, 1977).

Perceptual-Developmental Age Continued. Next the child was asked to draw a square (Stanford-Binet Manual, approximately 5 years), a triangle and a diamond (Stanford-Binet Manual, about 7 years).

Letter Reversals. The child was presented with a page with 2 1/2 inch high figures depicting the letters "d, p, q, b" and asked to name these. Afterward, the child was asked to reproduce these same letters. Confusion in naming the letters and/or reproducing them for a school aged child was noted and considered, especially in light of a history of reading difficulties.

Overstimulation, Laterality/Dominance.

a. Handedness: For this item, the child was handed a blank piece of paper and a pencil and was instructed to "poke a hole through the paper, push the pencil all the way through, make sure you don't poke yourself with the pencil." The examiner noted which hand is used to push the pencil through the paper as well as which hand is used to accept the items. Generally, the dominant hand is that which is used to push the pencil through the paper. Frequently, the non-dominant hand is used to accept the piece of paper.

b. Visual Dominance: Child was now asked to take the piece of paper and go stand in front of some object, such as a chair in the room, and peek at the examiner through the hole in the piece of paper. The eye which the child utilized to peek through the paper was noted as the dominant eye.

c. Handedness II - Overstimulation Test: After the child peeked through the hole in his or her piece of paper, the child was instructed to crumple up the piece of paper into a ball. The examiner would demonstrate the action of crumpling up the ball as he said, "Now, crumple up your piece of paper into a ball as quickly as you can." The examiner then said, "Now throw it to me and let's play catch." The examiner would then proceed to play catch with the
child, attempting to pass the ball of paper between two participants as rapidly as possible. This item *scored as a soft-sign* if the child became overly excited in the process of playing the "game". Often this item was revealing for children perceived as "hyperactive" by teachers or parents; especially for those children who had up until this point displayed excellent behavioral control in the one-on-one office situation at the clinic.

d. Laterality - Dominance; preferred leg: Now the child was instructed to drop the ball onto the floor and was asked, "Which of your feet is your best kicking foot?" "Now, show me how well you can kick. Take some short kicks with your best kicking foot and then try to take a good big kick at the ball." Examiner notes which leg the child prefers to kick with. Laterality - dominance section of the examination was scored as follows. Generally, it was thought that the child should prefer the eye, arm and leg on the same side of the body. When a child demonstrated a mixture of preferences, for example, a child who demonstrated a preference for left eye, right hand and right foot would be scored as having a soft sign. The excitability subtest was evaluated independently from the results of the laterality-dominance items. In effect, the excitability subtest is a separate item or test in and of itself.

e. Kinesthesia and Laterality-Dominance Choices, Left-Right Confusion: The child was now instructed to come before the examiner and to place either his left or right side toward the examiner while looking at an object on the wall. The child was asked to stand on the right foot. The examiner observes the child's motor actions in making this movement. This item scores as a "soft sign" if there is any hesitation or shifting which indicates confusion over whether to stand on the actual right or left foot.

f. Kinesthesia-Proficiency: The child was to stand on the first choice of foot regardless of which it was for a period of approximately one second for each year of chronological age. This item scores a "soft sign" if the child is unable to maintain balance for the full number of seconds corresponding to actual chronological age.

g. Kinesthesia, Other Foot: The child was now asked to "now stand on the other foot," and this item was scored as above, with the child required to stand for one full second for each year of chronological age. This item scored as a "soft sign" if the child was unable to maintain balance on the second foot or "other foot". (If one has asked the child to stand on the right foot initially, and the child actually had chosen the left, the clinician could have introduced extra confusion by now stating, "Now stand on the left foot," which the child is already standing on;" therefore, the clinician merely refers to the second foot as "the other foot.")

The above two kinesthesia subtests are repeated now with the child, with his or her eyes closed. The same criteria were applied for scoring as a soft sign.

h. Coordination - Trot-Pace: The trot-pace examination was administered by having the child "stand" on the floor on hands and knees and "show me how well
you crawl." The majority of children do a "trot" which means that limbs moved alternate from side to side of the body and are moved individually; for example, left arm-right leg, right arm-left leg. Whatever method of "crawling on the knees and hands" is utilized, clinician now demonstrates the opposite, usually the pace, in which the child is shown how to crawl moving both arm and leg on one side of the body in concert followed by arm and leg on the other side or opposite side of the body moved in concert. The child was asked to practice this method for two passages of approximately 10 feet each passage. Then the child was instructed to return to their original method of crawling. Midway through crossing the floor, the child should be asked to now switch to the new way. This item was scored on the following criteria: (1) Inability to learn to "pace". (2) Marked difficulty in switching from one form of crawling to the other, including inability to switch to pace from the trot mode, or inability to return to the initially-preferred method from the "new method" (usually changing from pace to trot).

I. Visual Tracking: Now the child was asked to seat herself or himself on a chair facing the examiner. The child was then presented with a pencil or pen and asked, while holding his or her head still and steady to follow with their eyes the passage of the pen or pencil approximately twelve inches in front of the child's vertical visual plane. The pencil or pen is now passed from a point approximately 18 inches to the left of the child's head, moving to a point approximately 18 inches to the right of the child's head in the mid-line low, approximately 12 inches below the midline, and high, approximately 12 inches above the midline places. Finally, the pencil is now drawn in a circle approximately the same distance from the vertical visual plane, starting at the zero degree or 1200 mark in a circle circumscribing an area with a radius of approximately 18 inches, going a full 360 degrees. This item may be repeated several times in any of its forms. Scorable errors included inability to maintain stillness of the head during any part of the test, visual "hitching" through the midline, continuance of the eyes beyond the point where the pencil or pen stopped. Generally speaking, it appeared that children with difficulty maintaining tracking through mid-line (losing the target—evidence of briefly—as indicated by a hesitation or "hitch") tended to have reading difficulty. Most often this difficulty seemed to be of the sort where the child would read each successive line in order. Thus, of course, what the child read would not correspond to the actual content of the passage often leading to much frustration for the child, parents, and teachers alike.

J. Dysdiado Kinesis: Next while remaining seated in front of the examiner, the child was asked to place one hand on each hemilateral knee—with one palm facing upwards and the other down. Then the examiner proceeded to demonstrate by raising both of his hands at once, turning them over and then "bouncing" them on his knees, repeating this action successively four or five times (rate: about two bounces per second). Afterward, the child was asked to repeat the movements. This item was scored for either inability to perform or for dysconjugate movement in the process.
HOW PARENTING CAN HELP CHILDREN WITH EDUCATIONAL DIFFICULTIES

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Techniques and activities are discussed which parents can use to help children with educational difficulties. First, an approach is offered for working with parents when their children are having normal, nonpathological reactions to normal, situational stresses. Ideas are then offered for children whose school difficulties are due to acute situational stresses such as divorce or a family death. The paper then focuses on how parents can help children whose difficulties are due to significant developmental immaturity and/or more specific intellectual or motor impairments. Suggestions regarding rules for homework and dealing with school personnel are also made.

INTRODUCTION

Given the high incidence of troubled youngsters and the many stresses faced by military families, it is almost inevitable that an Army clinical psychologist will be asked to do a child and family evaluation regardless of his specialized interests. Typically, this involves gathering data through psychological assessment procedures and interviews and forming conclusions regarding the source of difficulties and interventions required. These are usually conveyed to parents during a feedback session and often include recommendations for special education assistance, referrals to other professionals for further evaluation, and/or some form of therapeutic intervention. However, parents often want and need suggestions regarding more specific ways they can help their child, and many a psychologist, because of a lack of specialized training and practical experience in the area of child, has had to grope for ideas. The purpose of this paper is to offer some suggestions which will be of help to the generalist attempting to work with children and their parents. This paper will center on children who present with reported school difficulties because such difficulties are frequent complaints which often lend themselves to specific remedial suggestions. However, some of the thoughts presented will also be of help in cases when nonschool related problems are the focus of concern.
These suggestions are not meant to take the place of individual therapy for the child when such is indicated, and they are not meant to make therapists of parents. Their practicality will vary greatly, depending on parental characteristics and background, but implementing even a few of them can provide important support for more specialized interventions such as special education or therapy. These suggestions become particularly important when such specialized interventions are not available. As a final preliminary note, if these ideas are conveyed to parents in a single feedback session with no follow up, few of them are likely to be implemented. Periodic follow up is usually crucial to check for understanding and to enhance motivation and follow through of parents.

WHEN A PROBLEM IS NOT A PROBLEM

Complaints of school difficulties can be a reflection of a variety of situations. They may be due to significant intellectual/cognitive impairments, to serious emotional conflict, to significant impairment of emotional/social development and functioning, or to some type of unusual, acute stress such as divorce or a death in the family. However, there are occasions when the behaviors of concern represent a normal reaction to a normal but demanding growth task. In these instances, a parent can be most helpful by relaxing a bit, backing off, and recognizing when a problem is not a problem in the psychiatric sense. Often parents request assistance in this type of situation due to lack of knowledge regarding normal child development, concerns about previous incidents in the child's life which could have been traumatizing, or to a high sensitivity to the signs of struggles all children go through in growing up. In such situations, it is important to reassure parents while, at the same time, validating their concerns as they are probably responding to signs of some distress and struggle in their child, normal though this distress and struggle may be. Acquainting parents with normal child development and the tasks youngsters must struggle to master at different ages can be quite helpful.

For example, assuming more serious problems are not indicated, it might be helpful to explain to the parents of a five or six year old who sucks his thumb occasionally and whose mind seems to wander at times in class that occasional thumb sucking at this age is not unusual, though a recent increase in frequency may be a reflection of some increased but normal emotional tension. This tension could be due to struggles to master increased school demands, social demands with peers, being apart from home and parents for longer periods of time than previously, and attempts towards greater impulse control and conscience development. These struggles are the youngster's, and he is the one who must master them. It is no wonder then that such a child will occasionally seek the comfort of a tasty thumb or that his mind seems not to be on his work at times. Reassurance that the youngster appears to be moving in the right direction and an offer of a follow-up appointment in six to eight weeks to ensure things are continuing to go well is often all that is needed. However, if a parent would like to help their child through his struggles, some of the ideas discussed below may be appropriate as long as they are presented as things all parents can do to help their child grow up rather than as remedial activities.
THE ACUTE CRISIS

Occasionally, normal developmental struggles are being aggravated by some form of acute stress, such as divorce or a family death. In addition to providing as much emotional support and understanding as they can, parents also need to reassure their child that they are still in charge and still parents through insistence on reasonable behavior and continued use of reasonable discipline. This balance between support and understanding on the one hand and firmness on the other is a difficult one for many parents to reach since they themselves may also be in a state of crisis, and periodic moral support from a professional can come in handy. Additionally, there are a number of books which can be helpful and address specific crises. For example, Dr. Richard A. Gardner has written books entitled The Boys and Girls Book About Step-Families (1982), The Boys and Girls Book About Divorce (1970), The Boys and Girls Book About One-Parent Families (1978), and The Parents Book About Divorce (1979). The first three books are designed to be read by children. However, they may also be read and, certainly, discussed with the child by parents. This would also hold for books for children addressing other issues.

EGU BUILDING ACTIVITIES

A frequent finding is that a youngster who is having school difficulties is psychologically immature from a developmental point of view. In other words, he has not mastered age appropriate tasks in such areas as academic mastery, peer relations, increased independence from parents, and impulse control. Such difficulties may be a reflection of emotional deprivation, neglect, or abuse due to parental pathology. However, they may also be due to some form of mental retardation, brain dysfunctioning, or ego disturbance where a child seems prone to idiosyncratic thinking and behavior and where his controls and defenses seem weak. In such instances, anything parents can do to help their child develop more mature thinking and behavior and "build in ego" will be very helpful.

Youngsters with such difficulties are often helped if their parents can add structure to the home experience, i.e., predictability and clarity regarding expectations and consequences. A behavior modification approach can be very useful in achieving his end, and can also help parents teach their children basic self-help skills. Books written with parents are available such as Living with Children: New Methods for Parents and Teachers (Revised) by Dr. Gerald Patterson (1976) and Parent Power: A Guide to Responsible Childrearing by Dr. Logan Wright (1980) that can help with this type of project. A cautionary note: Many of these types of books seem to be coming out of the "tough love" school of thought that is gaining popularity. Recommending that a child spend "time out" in the bathroom as Dr. Patterson does in Living with Children may work well for some youngsters and strike terror in the hearts of others as some children can become quite frightened by bathrooms or toilets. Therefore, it is important that a parent know his child and exercise common sense, and that the mental health professional work with parents in using these books rather than simply giving them the references and sending them on their way.
Other activities than can help a youngster mature include competitive home games such as monopoly, checkers, chutes and ladders, and various card games. These games provide opportunities for children to deal with rules, taking turns, winning, and losing. Organized, adult-supervised activities outside the home such as athletics, scouting, and day camps can provide similar benefits, enhance self confidence, and build social skills.

While the above activities can be helpful, of even greater importance is the adoption of an approach by the parents which fosters more mature thinking and empathy by emphasizing both listening and talking. The goal is to expose their child as much as possible to mature, more adult reasoning. In essence, this is a process which uses modeling to provide a child with the cognitive tools he needs to foster impulse control, empathy, and sound thinking. This is similar to the type of cognitive therapy recommended by Meichenbaum and Goodman (1971) in their work with hyperactive children. The dinner hour, during bedtime stories, and both before and after discipline are excellent times to expose the child to adult thinking and reasoning through talking and listening.

During the dinner, family members have a chance to talk about the day's events and what is happening to people they know, to each other, and in the world in general. The discussions and debates that often evolve can help a child learn his family's culture, i.e., what is considered right and wrong by the family, what kinds of things are important to the family, and how certain situations are traditionally handled. Often younger children are expected to just sit quietly and listen or ignore what they hear. However, the dinner hour provides an excellent opportunity to ask the child how his day was, to comment on what he experienced and observed during the day, and to elicit his thoughts on what others are saying. This also gives parents a chance to provide "training" in how to participate in discussions, re: without interrupting or monopolizing the table and with respect for the opinions of others. Of course some parents may need such "training" themselves.

The bedtime story, in addition to strengthening the parent-child bond and fostering an interest in reading provides a chance to talk about moral issues and enhance a child's understanding of the behavior and reactions of others through discussion of the story and pictures. Asking a child such questions as, "Why do you think the little puppy ran away from home?" or "What do you think he should have done?" can foster thinking and understanding, both of which can strengthen internal behavioral controls. Stopping to answer questions the child raises can lead to similar benefits.

While few parents enjoy having to discipline their children, these unpleasant incidents can have a silver lining in providing additional chances to foster empathy and mature thinking. Of course, it is important for a child to know why he is being disciplined, but what happens after the discipline (the "making up" period) may be even more important. This is because before discipline both parent and child may be too upset for calm, clear thinking, and the child may be too preoccupied with trying to avoid the discipline he knows is coming. After the dust has settled, through, and everyone has calmed down a bit, a parent has an excellent chance to help his child grow up. For example,
he may say such things as, "Do you understand why I got so angry when you poured glue on my stereo? Do you remember how you felt when Johnny broke your new Atari Video Game? Well, that's how I felt." Other examples are "Gee, why did you get so upset when I told you it was time for bed?" or "I know you were mad at your sister, but I can't let you hit her anymore than I will let her hit you."

The main goal is to model adult thinking, give both parent and child something to think about, and foster the reassurance that feelings of affection between the two were not permanently disrupted rather than permanently destroyed. This is also an opportunity for a parent to admit mistakes and apologize to the child if he or she feels, in retrospect, that they may have been wrong. This will model for the child what to do if you realize you've been wrong, lets him know that even parents make mistakes, and helps both the child and his parent to feel better.

REMEDIAL ACTIVITIES FOR INTELLECTUAL/MOTOR IMPAIRMENTS

There are a wide range of specific activities that can help a youngster with specific intellectual and motor weaknesses, and one way to approach this area is to look to formal psychological test results for clues. For example, a child's responses to the Comprehension subtest of the WISC-R can provide hints of immaturity which can be addressed through some of the techniques mentioned above. A low score on the Similarities subtest may indicate impaired abstracting and concept formation abilities. This might be addressed by helping a youngster start a scrapbook where he collects pictures of things that you can eat, things that are animals, or (for the more advanced child) things that are opposites. A child who does poorly on the Bender-Gestalt may respond well to tracing playbooks and dot to dot drawing books. Putting puzzles together can help a child with a variety of problems to include visual-motor coordination, visual integration and organization, attending to important visual details, and visual closure. On more complex puzzles, a parent can help by selecting two or three puzzle pieces for the child to fit together and then add additional pieces for the child to fit to his production. This usually produces better results than dumping all the pieces in front of him at one time which may overwhelm and frustrate him.

Games like Simon Says can help with auditory reception problems, directional confusion, or poor body concept. A cautionary note: Children are frequently confused by right-left commands during this game when the players are facing each other. It is better if the leader stands slightly catercornered to the followers to minimize this difficulty.

A wide selection of remedial activities can be found in Learning Disabilities: Activities for Remediation by Joan Marie Warner (1980) (also, see Appendix for further suggestions). In using these activities, it is important that a parent avoid overwhelming a child with stacks of them, turning fun into drudgery. One or two such activities of a few minutes duration two or three times weekly can often accomplish a lot.
RULES FOR HOMEWORK

Homework often becomes a battleground at home in part because parents do not know what are reasonable rules and what the difference is between helping their child and doing it for him. The following guidelines are offered for consideration.

Some flexibility and common sense are called for with respect to place for studying. While some youngsters require a quiet place with few distractions, others do better if they can study with music playing or in the same room with a parent such as the kitchen. This way they can get periodic help easily and moral support when the going gets tough. Generally, music is okay, but television is too distracting for most children.

With respect to amount of time, a child in the first or second grade probably should not spend more than one hour in a day. This does not include time spent goofing off, breaks, etc. For third through sixth grades no more than two hours is suggested with three to three and one half hours being tops from seventh grade on except for special projects, final exams, etc. It's a good idea to establish a predictable study time when this is possible to instill the study habit. If a youngster has no homework that day, he can spend the time reviewing or reading ahead in a difficult subject. Parents may also want to allow one free day such as a Saturday and maybe two days for young children in first or second grade.

In general, a parent should avoid sitting down with their child to do homework. Allowing him to come and ask for help and then return to his study place works much better. It's also advisable for a parent to set limits on how he will help, requiring the child to do what he can. An example would be to read a small part of a reading assignment to a child who has a reading problem and then have him read the rest to the parent while he or she is peeling potatoes or shining shoes. If a child cannot figure his math, he may still be able to copy the problems from his book before he is helped. If he can't read his social studies questions, he can be helped with the reading and still be required to come up with his own answers without parental correction. It's a good idea for a parent to spend no more than one-half of the scheduled homework time helping a youngster, and it's best to let the child do what he can first.

A proper helping encouraging atmosphere is, of course, important, and parents need to be aware that "I didn't feel like doing it" is often a cover up for "I think I'm too dumb to do it." A parent who can laugh at his own mistakes ("new" math provides ample opportunity for this) will help a youngster avoid approaching homework like he would major surgery. If a parent has a hard time adopting this attitude, he may want to turn to other potential homework helpers such as friends, neighbors, relatives, or volunteers from various churches, clubs, or civic organizations. Paying a tutor may also be worth considering.
DEALING WITH SCHOOLS

Like it or not (and many parents don't), parents must often deal directly with school personnel to get up-to-the-minute reports and advice, or to function as their child's advocate. A parent can often enhance their effectiveness in these endeavors if they can become a part of the school and can be seen by the school as caring and helpful. Becoming a Board member of the PTA or doing volunteer work in the school library or a class can be very effective.

However, for most parents the parent-teacher conference is the primary source of contact with the school. If a youngster has had school problems in the recent past, it is a good idea to schedule a conference for the very beginning of the school year in September to acquaint the teacher with previous and current problems and other background information. A second conference can then be scheduled after a 1 month observation period to plan strategy for the year.

One source of difficulties during parent-teacher conferences is that parents often don't distinguish reasonable from unreasonable requests of teachers. As an example, it is reasonable for parents to expect that their child will not be embarrassed or humiliated by the teacher and that he will protect their child from such humiliation by other children while in her class. It is not reasonable to expect the teacher to lead the entire class in understanding their child or to take responsibility for teaching the child to understand himself or find outlets outside the class for achievement of success and pleasure. It is reasonable to expect a teacher not to assign work a child is totally incapable of doing and that some effort will be made to take into consideration a youngster's handicaps when work is assigned. For example, if a child has a major spelling problem, the teacher might assign a shorter spelling list. He might also avoid counting off for misspelled words in a written answer to a science question. If the misspellings make the words incomprehensible, he may allow a parent to proof-read written answers for misspelled words when the subject matter is not spelling. It is not reasonable, however, to expect that all of a child's classwork will be adjusted so that his handicap is never a handicap, i.e., never being required to read, write, or spell in order to demonstrate his knowledge of a subject.

It is reasonable for a teacher to allow parents to help with homework and to allow them to function as the child's secretary at times if writing is a serious problem. Not penalizing the child for assignments not completed in the time allotted by parents (assuming a good-faith effort has been made), not withholding outside-the-class activities from the child such as recess or field trips because he did not complete his work or failed an assignment (except for clear misbehavior) are other reasonable requests. The teacher may allow another student to see that the child has copied his homework assignments correctly from the board. Allowing parents to call the teacher at home for clarification of a homework assignment (not to get advice on parenting) would also be a reasonable request. Unreasonable requests would include asking the teacher to write out homework assignments for the child, proof-read his written work for errors, and only assigning homework the child can do himself or in the time allotted by parents.
Finally, if a child's lack of class or homework completion is due to misbehavior, it is probably best if the teacher imposes the consequences rather than asking parents to punish the child. After all, it is the school's requirement, so it should be the school that imposes the consequences. The alternative frequently leads to World War III and increased tension in what is likely an already tense family.

Occasionally, parents and teachers are not able to come to a meeting of the minds due to major differences of philosophy or temperament. When this happens, requesting that the lead teacher and/or principal attend a parent-teacher conference can often be helpful. When this does not help or the clash seems to be with the school as a whole, getting the father or a father substitute involved in a conference or school staffing can greatly influence the outcome. Finally, parental persistence, coupled with a small sprinkling of hysteria, will some times work wonders if all else seems to be failing. These suggestions as well as other ideas regarding homework and dealing with schools can be found in The Learning Disabled Child: Ways That Parents Can Help by Suzanne H. Stevens (1980).

REFERENCES


APPENDIX

EXAMPLES OF ACTIVITIES FOR REMEDIATION

Auditory Reception and Discrimination:

(1) Simon Says
(2) Play Guess What It Is (Twenty Questions)
(3) Have child use tape recorder to put on radio plays or be an announcer; then listen to himself.
(4) Show pictures of animals and have child imitate their sounds for different circumstances, e.g., an angry versus a sad dog.

Visual Perception, Integration, Discrimination:

(1) Puzzles
(2) Dominces
(3) Pantomime
(4) Matching buttons by size, color, etc.
(5) Sorting objects along different visual dimensions (big, bigger, biggest, etc.)
(6) Discuss pictures in stories
(7) Scrapbook

Visual Sequencing, Anticipation, and Association:

(1) Cut up comic strips for child to put in correct sequence.
(2) Mazes
(3) Scrabble

Visual-Motor Coordination:

(1) Puzzles
(2) Jacks
(3) Pick-Up-Sticks
(4) Paddle and bouncing rubber ball
(5) Paint by number
(6) Tracing and copying

Gross Motor Coordination and Body Awareness:
(1) Gymnastics and other physical activities emphasizing individual work.
(2) Simon Says
(3) Use mirrors in clothing stores showing simultaneous views of child from all sides.
(4) Complete partial drawings of people
(5) Cutting out shapes with scissors

Grammatic Closure:
(1) Choral reading and speaking (nursery rhymes, songs, etc.)
(2) Listen and read stories (tapes plus story book).

Verbal Expression:
(1) Child reads to parent or invents ending to a story read to him.
(2) Use tape recorder for skits

Motor Expression:
(1) Pantomime
(2) Child pretends he’s a conductor while listening to music. Acts out the music.
GENERAL INSTRUCTIONS:

1. Play with your child
2. Talk to him while playing.
3. Show him how to use toys.
4. Show interest in his accomplishments and praise him.
5. Encourage him to complete tasks he initiates.
6. Keep these safety factors in mind:
   a. Use non-toxic paint
   b. Use unbreakable materials
   c. Do not use objects small enough for the child to swallow
   d. Do not use objects with sharp corners
BIRTH TO 6 MONTHS

Language and Personal-Social Development:

1. Talk and sing to him even though he cannot understand what you say.
2. Repeat the noises he makes.
3. While awake, put him in a place where he can see and hear what is going on.

Visual, Auditory and Tactile Stimulation:

1. Hang pictures on the wall or crib where baby can see them. Cut pictures from magazines or use pictures older children bring home from school.
2. Dangling toys to hang above baby--
   a. Attach ribbon, bright cloth, colored paper, bottle caps, jewelry, mirrors, bells, shiny spoon, beer can tabs, painted spools, measuring spoons, rubber jar rings, etc., to a string or coat hanger and hang it across the crib.
   b. Make a round circle from cardboard or a plastic bleach bottle using thread, tie on colorful cutouts from boxes (e.g., circles, birds, butterflies), hand it from a light fixture or ceiling over the crib.
3. Rattle - (noise makers)
   Fill small cardboard boxes, plastic salt shaker, beer cans, etc., with large stones, bottle caps, poker chips, large buttons, spoons, etc., and tape the end shut. (Use large objects he can't swallow just in case the rattle comes apart.)
4. Soft cuddly toys -
   Sew two pieces of cloth (old towel, cut in pattern) together and stuff with rags, old nylons, cotton batting, Kleenex or toilet paper - or stuff an old sock or glove.
5. Put the child on a blanket on the floor so he can see more of the world around him and have an opportunity to exercise his muscles.

6 TO 12 MONTHS

Language and Personal-Social Development:

1. Talk to him - tell him what you are doing to or with him even though he does not understand.
2. Point to objects and people and name them over and over.
3. Play games with him, e.g., Patty Cake, Peek-a-boo, Where's is Johnny's Nose?
4. While awake, have him in the room with you - let him crawl on the floor and explore or put him in a walker.
5. Let him see himself in a mirror. Talk to him while he is looking in the mirror--"Look at baby's nose." "Here is Johnny's mouth."

Visual, Auditory, and Tactile Stimulation:

1. Soft, cuddly toys.
2. Noise makers -
a. Make a drum out of an empty oatmeal box and give the child a stick to bang with.
b. Fill different shaped containers with previously mentioned objects.

3. Objects to handle and explore (objects which are unbreakable and too large to be swallowed). When the child is in a walker, tie these things to the walker so he can retrieve them when he drops them.
   a. Spoons, rolling pin, large spoons, boxes (cereal, shoe, berry, match), bowls, pots, pans, cans, tins (cake, pie, muffin), cups, glasses, screw top plastic bottles, coffee pot, bandage cans, etc.
   b. Present a variety of textures - (hard, soft, fuzzy, smooth, etc.) - sponges, different types of material (velvet, imitation fur, cotton, wool) - make a ball out of different textured materials and stuff with cotton, rags, nylon, etc.

4. Fill N' Dump Toys -
   Use a container with a large opening (e.g., milk carton, coffee can, oatmeal box) and small objects to place in the container and dump out (e.g., spools, measuring spoons, clothespins, corks, poker chips).

5. Put baby's favorite toy in paper bag and have him find it.

1 TO 3 YEARS

Language Development:

1. Talk to him - listen with interest to what he has to say. Use complete thoughts...not "pick it up" but "pick up the ball from under the table."
2. Read or tell him stories.
3. Have him tell you stories about pictures in books or magazines - have him name objects.
   a. Make a picture book -
      1. Cut out large pieces of paper bag for the cover and pages.
      2. Fold them in half.
      3. Tie together with string or yarn.
   4. Name parts of his body and pictures of people.
   5. Play singing games - Ring Around the Rosy; Row, Row, Row Your Boat; Three Blind Mice or nursery rhymes.

7. Play with puppets; have a conversation using puppets.
   a. Paper bag puppets - fill the end of a small bag with cotton or crumple newspaper, insert a stick or pencil, tie a string around the stuffed area and stick, paint, draw or color a face on bag.
   b. Potato puppets - insert a stick in a small potato; facial features can be created by painting the surface or using bits of paper held in place with pins.
   c. Potato-finger puppets - can be made by cutting a small hole in the bottom of the potato.
   d. Old gloves make good puppets - cut off the fingers and thumb and stuff them with cotton, nylon hose, old rags, etc. The thumb becomes the head and body of the puppet, two fingers become arms when sewn to the thumb section. Bind the head and waist sections off with string or yarn. Decorate with pieces of material, yarn, ribbon.
8. Let him look in a mirror and point out his facial features and body parts.

Personal-Social Development:

1. Play with dolls, stuffed animals.
2. Take the child to the store, neighbor's house, riding in a car, on the bus to the park and zoo - point to and name people, objects, animals, etc.
3. Play games with him - Hide & Seek
4. Dress-up - role playing
   a. Give him old hats, dresses, shoes, purses.
   b. Make hats, masks out of paper bags or paper plates - make dresses out of blankets or material.

Gross Motor Development:

1. Push-pull toys -
   a. Attach a string to a large box and fill it with light weight objects.
   b. Tie a cord to each end of an oatmeal box or coffee can and fill with bells, spools, bottle caps, stones, hair rollers, old jewelry, etc.
   c. Make a train - tie boxes (shoes, milk cartons, salt boxes, etc.) together with heavy string and make a pull string.
2. Cardboard tunnel to crawl through - ends out of large cardboard boxes and attach several boxes together to make a tunnel.
3. Climb stairs
4. Walking board -
   Rest a board 1' wide x 3' long on bricks - encourage the child to walk forwards, backwards, sideways and jump down - as the child's coordination increases, decrease the width of the board.
5. Throw - Catch a ball or bean bag.
   Make a large ball out of 2 pieces of cloth sewn together and stuffed with rags, cotton, nylons, etc.
   a. Give the child spoons, cans, bowls, boxes, cups, glasses, sieves, and funnels, to fill and dump.
   b. Cut a bleach bottle in half - use the bottom for a pail (make a handle out of heavy string) - use the top for a funnel.
   c. Use an inner tube as the outside frame for a sand box and fill the outside area with sand.
7. Water play -
   Outdoors in a large tube or inside in the sink or bathtub, give the child unbreakable containers, sponges, cork, bar of ivory soap, etc.
8. Riding a tricycle.
Fine Motor Development:

1. **Fill N' Dump toys-**
   As the child's coordination increases, decrease the size of the container and the opening (e.g., plastic milk bottle, small jars and cans) and give him smaller objects to put into the container (e.g., buttons, bottle caps, peas, beans, macaroni).

2. **Sorting activity-**
   Give the child two or three containers and bottle caps, buttons, and/or beans and have him put all caps in one container and buttons in another and beans in the other - later use the sections of an egg carton.

3. **Stacking toys-**
   Build a pyramid with different size boxes or cans - the largest on the bottom and the smallest on top.

4. **Nesting toys-**
   Use graduated size boxes, bowls, pots, pans, cups, etc., that fit inside one another - start by using 3 sizes.

5. **Clothespins and a coffee can or loaf pan-**
   Have the child put the clothespins on the edge of the can. This can be used as a sorting activity. Paint the pins different colors and have the child sort them by color.

6. **Blocks-**
   Make from milk cartons (thoughly washed), boxes, wood scraps, cut off tops of 2 milk or cream cartons, push them together, make different sizes - show the child how to build - have him copy what you build.

7. **Stringing objects-**
   Use old shoe lace of heavy string and various size spools - as his coordination improves, give him macaroni and small beads.

8. **Puzzles-**
   Make your own by pasting pictures from magazines to cardboard and cutting it into pieces - start with simple picture of one object and cut into 3 to 5 large pieces. With an older child, use a more complex picture and 5 to 10 small pieces.

9. **Large pencil or crayon.**
   Have the child copy a line or simple shape you make; allow him to draw whatever he wishes; use this time to start teaching colors; use paper bags or cut up cardboard boxes to draw on.

**3 TO 5 YEARS**

Language Development:

1. **Talk to him using complete thoughts and ideas - listen to him -** encourage him to tell you what he did during the day by asking him questions.

2. **Read to him or tell him stories.**

3. **Play singing games-**
   Here we go round the mulberry bush
   This is the way we wash our clothes, etc.
4. Encourage him to make up stories about pictures in books and magazines —
   ("Once upon a time...")
5. Play with puppets

Personal-Social Development:

1. Show him how to dress himself.
2. Give him small tasks to do around the house (e.g., set table, help clear
   table, sweep floor, pick up toys).
3. Dress up - role playing
   Use old clothes, cooking utensils and house cleaning equipment.
   Put chairs together to play train or bus.
   Make a house under the table.
   Paper plates decorated with colored paper, ribbon or paint make
   lovely hats.
   Paper bags make hats and masks.
4. Grow plants in cans.
5. Play outdoor games with peers - Red Rover, Hide & Seek.
6. Throw a bean bag at a target-
   Fill an old sock with beans and sew the end shut - reinforce by
   sewing it several times; make a target out of a cardboard box (to
   look like a tent - attach heavy string to each side to stabilize
   it); cut a hold in one side - paint or color a clown's face around
   the hole. As the child's skill increases, have him stand farther
   from target.
7. Rope ladder
   Make a ladder out of rope and attach it to a low branch of a tree
   for child to climb.
8. Playing jump rope and hopscotch - start between 5 and 6 years of age
9. Riding a tricycle and bicycle.

Fine Motor Development:

1. Fill N' Dump toys
2. Stacking toys'
   Increase the number and use smaller objects to be stacked (e.g., sewing
   spools)
3. Nesting toys
   Increase the number and sizes of objects to be nested
4. Sorting Activities
   Give the child many objects and ask him to sort them according to color
   and shape and/or function (e.g., give the child an egg carton or small
   cans and varied colored buttons and have him sort according to color).
5. Blocks
   Give him various sized blocks and encourage him to build more complicated
   structures - houses, farms, bridges, forts.
6. String macaroni or straws cut into small pieces.
7. Puzzles-
   Make more complicated puzzles using detailed pictures cut into 3 to 20
   small pieces.
8. **Pencil - crayon-**
   Use paper bags or cut up cardboard boxes to draw on; draw a simple picture and have him color it; draw simple forms (circles, squares, crowns, etc.) and have the child copy it; encourage the child to draw his own pictures.

9. **Finger painting-**
   a. Use the want-ad section of newspaper or shelf paper for painting paper
   b. Old shirts or blouses make good smocks.
   c. Recipe:
      1 1/3 cups laundry starch
      1 quart boiling water
      1 1/2 cups soap flakes
      1/2 cup talcum powder (optional)
      Few drops food coloring
      Mix starch with enough cold water to make a paste, add boiling water, stir until clear and glossy. Add talcum. Cool mixture, and add soap flakes; stir until evenly distributed. Mixture should be thick. Add a few drops of food coloring. Pour into jars and cover. Store in a cool place.

10. **Clay or play dough-**
    a. Show the child how to make objects, animals.
    b. Recipe:
       1 part flour
       1 part salt
       1/4 part water
       Mix together to a soft consistency. Will keep 3 or 4 days if wrapped in wax paper and stored in the refrigerator.
    c. Recipe
       1/2 cup cornstarch
       1 cup salt
       1/2 cup cold water
       Mix 3 ingredients and boil. The mixture thickens quickly. Cool and use

11. **Make collages-**
    a. Paste bits of styrofoam, cotton, colorful yarn, ribbon, paper, calendars, catalogue, magazines, pipe cleaners, etc., to a piece of cardboard to create a picture - hang in place for people to admire.
    b. Paste recipe
       a handful of flour
       add water, a little at a time, until gooey (should be quite thick so it won't run all over the paper)
       add a pinch of salt

12. **Sewing cards-**
    a. Draw a design or picture on a piece of cardboard.
    b. Punch holes along the line.
    c. Give child an old shoe lace or large needle and yarn to sew with.

13. **Teach child how to use scissors-**
    a. Show child how to hold scissors - use blunt, child's scissors.
b. Give child a strip of paper 3/4" wide sectioned at one inch intervals by thick lines - have child cut off sections with one snip.
c. Give child wider strips sectioned off in large pieces which require several strokes of scissors.
d. Give him a small piece of paper with long and short lines marked off, long lines go across the sheet, short lines go only half way. The long strips can be pasted and joined together to make chains, necklaces, bracelets, etc.
e. Have the child practice cutting curves - when this is mastered, he can cut circles and other objects.
f. Have him cut zig-zag strips - crowns, mountains, Christmas trees.
g. Draw large, simple, geometric shape: and have him cut them out.

14. Materials for construction-
   Give him wood scraps and nails and help him build things.
BIBLIOGRAPHY


TOYS THAT STRENGTHEN HAND GRASPING & VISUAL-MOTOR COORDINATION

For some children holding one small cube for a length of time is a major task. As these children grow it even becomes more difficult to control their hands with specific skills such as feeding, dressing, writing, block building or ball throwing. Below are listed some toys that a parent can use to help strengthen fingers, the larger muscles in the hand and in the arm.

Infant Toys:

Pull toys—all types

Peek-a-boo Block is a pull toy with a squeeze handle to make it work as a jack-in-the-box.

Activity Box (Busy Box) has ten different tasks that a child can poke, pull, watch and listen to.

Rattles—all types

Play Gym and Bobbing Ball — are toys that attach to the crib for the purpose of exercising fingers and reaching.

Jumbo Peg—is oversized pegs for easy handling.

Balls—made of sponge or soft materials, such as Sponges, Nerf, Lunar, Rubber and Grip Balls.

Cloth Blocks made of cloth with multicolored pictures.

Inch Cubes are made of wood and painted with non-toxic paint.

Snap-Lock Beads are plastic heads that snap together.

Toys for Older Children:

*Blocks:

Soft Rubber Blocks are made for interlocking construction.

Childcraft Table Blocks are various shapes and made of hardwood.

Bristles are blocks with a unique stimulating texture. Stick together easily.

*Balls—all the above

Tumble Ball is a soft vinyl ball that is larger than a playground ball.

(16 1/2")
*Tossing Toys:

Bean Bag Toss are easy to toss and grip.

Swing 'n Fling is a toss game using large weighted "birdies".

*Puzzles: all kinds, including knob puzzles.

*Manipulative Toys:

Tinker Tools are plastic tools, nuts and bolts.

Discovering Ball is a stack toy that forms a ball. Threads on a spindle. Good for tactile, visual and shape experiences.

Chubl Stumps are wax crayons specially made for children with fine motor problems. Easy to hold.

Scissors, blunt end type.

Easy-Grip Scissors are specially designed for handicapped children. They have a blunt end and oblong plastic handle. May also be operated with limb or mouth pressure.

Double-Handled Scissors are made with four holes, allowing the teacher to assist the child.

Easy-Grip Pegs are bright colored pegs with enlarged grip. Can be used with the Small Tactilemate Pegboard.

Reels and Wheels are used to stimulate turning a wheel on a thread reel.

*Pounding Toys:

Work Bench offers pounding, turning bolts, screwing various things and operating a vise.

Pounding Bench or Jumbo Pounder are tight wooden pegs that are pounded with a wooden hammer. Jumbo size is enlarged.

Knocky is a pounding bench consisting of wooden balls to be pounded. Reappears at a return chute.

Pound-a-Round is a large plastic toy that spins and pops beads when pounded.

Little Cannisters and Graduated Boxes are nesting toys made of bright colored plastic.

Beads are all types that thread on a string.
Mighty Mo Automotive Toys are cars, trucks and vans powered by friction created by the child.

Thread Block and Thread Board consists of a wooden needle that is pushed or pulled through holes. Develops finger, eye-hand coordination.

Milk Carrier is a carrier with six plastic milk bottles. Easy open caps.

Single Bend Threading Toy is a stationary wire with a plastic bead that moves on its track.

Kittle in the Kegs is a series of graduated multicolored kegs with a kitten in the smallest one. Screw together.

Manipulock or See-Me-Lock are boards with familiar latching devices and doors that open. Requires a different motion to open and close.

One Dozen Eggs is a carton of plastic eggs that screw apart.

Sound-a-twist is a plastic cylinder that twists and pops little beads inside.

*Musical Toys:

Jingle Bells for the wrist.

Finger cymbals are a miniature size that fit on the fingers.

Tone Bells are zylophones.

Tom Toms are drums

*Sand Toys of all kinds

Ideas for Homemade Toys:

*Using discarded spools of thread, mount them with a nail onto a board. Allow some slack for the spools to turn. Encourage the child to turn them with their hands.

*Make your own dressing pads with a zipper to zip, buttons to button, snaps to snap, strings to thread, string to tie, pockets to open, and a belt to buckle.

*Make your own infant mobiles of squeezable sponge, plastic spools or discarded "junk" that infants like to feel and see.

*Fill an old plastic shampoo tube with different amounts of colored water. Encourage the child to squeeze it in the bathtub or in play with water.
*Attach elastic to a door knob and encourage the child to pull and stretch. You can make a loop handle or thread the elastic through a discarded spool of thread.

*Use spring type clothes pins to pick up paper, clip onto a shoe box, hang some clothes, etc.

*Paste a picture on a piece of cardboard and punch holes in a design. Let the child use a shoe lace to string in and out of the design.

*Make your own lock-board by attaching "wing nut", window lock, hook and eye, or other similar devices.
TOYS THAT TEACH SENSITIVITY TO TEXTURE

The time to begin exposing a child to different textures is during the early months of development. Guide the child into touching, rubbing, patting and "taste testing" many things. Below are listed some toys that will help a child develop a texture awareness.

Balls:

Soft Sponge, Lunar and Nerf Balls are made of soft sponge and come in different shapes and sizes. They are good for rolling, hugging, squeezing and tossing. Non-toxic.

Crawl Ball and Clutch Ball are made of soft rubber, bumpy and easy to grip.

Bunny Ball is a furry ball with ears and feet.

Textured Ball is a ball made of patchwork, each patch having a different feel.

Teethers:

Teething Jack is a rubber jack with different textured points.

Space Ring is a smooth plastic ring inside another ring.

Other Teethers come in many shapes.

Squeeze Toys:

Animal Trio is a vinyl textured pig, turtle and seal.

Baby Shapes is three plastic shapes to squeeze and grasp.

Porcupine is a soft rubber animal with plenty of needles.

Squeak-a-boo is a soft plush puppet.

Toys that attach to the crib:

Bobbing Balls are soft rubber balls that "bob" when you squeeze one.

Play Gym has brightly colored pieces that spin on a center bar. Different textures make it interesting.

Activity Box (Busy Box) has ten different tasks that a child can poke, pull, watch and listen to.
Beads and Blocks:

**Baby Nesting Blocks** is a nesting set of three plastic pieces. Holes of various sizes provide the texture.

**Jingle, Rattle and Clunk Blocks** are easy to grasp because of the finger holes, round edges, and textured surfaces.

**Snap-lock Beads** and brightly colored plastic beads that snap together and pop apart.

**Baby Beads** are bright, smooth shapes on a string.

**Bristle Blocks** are unbreakable nubby blocks that stick together with a slight touch.

Books:

**Pat the Bunny** has different sensations to touch and smell.

**Things I like to Do** has many textures to touch and manipulate.

**How Does It Feel?** has many textures to touch and manipulate.

Sample Textures:

**Tell By Touch** has 10 textured knobs that fit into matching textured holes.

**Shape Texture Trays** has raised textures and discs to match.

**Baby Board** has 5 textures for infants to experience. (hangs on the crib)

**Feel and Match Thickness** is twelve disks of crepe foam rubber in different thicknesses.

Other Toys That Have Texture:

**Baby Mirror** is a non-breakable mirror in a plastic or wooden frame. Finger holes and smooth texture are good for touching.

**Me Doll** is a large curly headed doll with a mirror face.

**Dressy Betsy and Dapper Dan** are dolls that help child learn self help skills by manipulating their many parts.

**Vinyl Animals** are available in zoo or farm animals. (sculptured)

**Touch and See Toy** is a rattle with four activities for baby to try.
Flower rattle has bumpy edges and a smooth mirror.

Fruit and Vegetable Assortment is made of plastic but resembles the real thing.

One Dozen Eggs is a plastic grocery carton of plastic eggs that unscrew to open. Raised nubs inside help a child learn to count.

Soft Sponge Shapes teach shape concepts by squeezing soft sponge.

Ideas for Homemade Toys:

* Fill a paper bag with familiar items to the child, and let him reach in to feel. Once he has learned to identify several items change the items to a new texture to learn.

* To simulate tactile sensitivity cut out matching pieces of cloth having several different textures (velvet, silk, seersucker, terry cloth, corduroy, etc.) Let him match the objects by sight and touch. As he advances use a blindfold and touch alone and match.

* Make a seed box by collecting a handful of different kinds of seed. Feel them with the entire hand or touch just a few with your fingers.

* Fill a box with sand and have some quite sand play indoors. Be sure to make it a shallow box that is lap size (spread a sheet to catch the spills. Dig, pat, push, squeeze and grasp many different things.

* No need to buy sponges cut into shapes, cut your own. Draw a simple design on a thin sponge and cut with scissors. They are great for tub play.

* Make hand mittens of different fabrics. Then use them as soap cloths in the bath tub. Rub the different textures over the body, while you talk about them. Sometimes they feel different when they are wet.

* Using fabric scraps again, cut squares and make some play blocks. Six pieces sewn together make a cube. Fill with old socks or fabric.

* Make a collage box by collecting small "junk". Then help the child glue some of the "junk" onto a piece of paper. Instant art work with texture.

* When making stuffed animals, use a wide variety of textured fabrics. Use buttons, snaps, zippers and other things just to feel.

* Turn an ordinary book into a book with "feelings" by gluing cutouts on the pages. For example: glue cotton balls on the tails of a bunny, a piece of sandpaper for a road, or plastic for the wheels of a car. Children love to read books they can feel.

* Turn an ordinary bath into fun by spraying shaving cream in the water.
TOYS THAT TEACH A CHILD
HOW TO MAINTAIN BALANCE

Learning to stand is a major accomplishment for the child and parents. After learning to creep, it is the next step in the developmental sequence leading up to walking. If the child is physically handicapped or has a psychological fear of falling this task may be very difficult to learn. Below are listed some of the toys that may make this task less difficult to learn.

Toys for Infants and Toddlers:

Johnny-Jump Up is a free swinging seat that attaches to a door facing. Bouncing and jumping on the floor it supports a child up to 32 lbs. Adjustable.

Tumble Ball is a super size (16 1/2") soft foam ball that develops large muscles and coordination as children push, roll and hug.

Kiddie Wagon, and First Wagon have a stationary handle of steel for steady holding.

First Pony is a small wooden rocker.

Table Walker is for the beginning walker who needs support to overcome fear. Adjustable seat.

Roll around and First rider are riding toys where their feet come in contact with the floor. As it moves they develop strong leg muscles needed for standing.

Tunnel of Fun is a nine foot long tunnel for crawling. Collapses for easy storing.

Action Hoops can be used in all manners of creative and active body movement. Five different colors.

Pull Toys and Push Toys are all excellent for stimulating children.

Toys for older children needing help with learning to walk, to walk more smoothly or maintain balance when participating in any motion activity.

Walking Board or Balance Board are both narrow boards inches off the ground, used in promoting a smooth and coordinated walk forwards, backwards and sideways. Some have sloped sides with safety treads.

Tac-Tracks are vinyl pattens of feet to step on. They are used in teaching motor coordination, space relationships, counting, textures awareness and right-left relationships.

Rocking Platform is a square wood platform on rockers. It is used for a wide variety of exercises while standing, kneeling and sitting.
Grid Mat and the Hippety Hopscotch Mat are vinyl mats divided into sections. Can be used to involve a child in a motor task. Mats can be marked on with a grease pencil and wiped clean with a damp cloth.

Sponge balls, Nerf Balls, Lunar Ball, Playground Ball and others are excellent for tossing, catching, and all sorts of games. Many are super soft and can be thrown indoors. Harmless when hit by them is reassuring to children.

Activity Ball is a giant foam filled ball with a handle. Helps build muscles and improvise large motor coordination.

Action Hoops are five large hula hoops for lots of creative play.

Swing 'n Fling is a tossing game done with large weighted "birdies".

Bean Bag Toss Game is aiming bean bags through the holes of a colorful board. Exercises hand-eye coordination while standing.

Punching Bag on Stand and Smack 'Em Bag use the same principle. It encourages the use of arm muscles while trying to maintain balance.

Ropes of all sorts can be used to walk on, over, under, beside, etc.

Doorway Gym Bar is a metal bar that fits any standard doorway. It can be used for swinging, reaching, chinning, or tumbling.

Rope Ladder is a ladder made of ropes and wooden rungs. It can be hung from a tree limb or a special place.

Hop and Clop Stilts are made of vinyl cane and ropes. It takes advanced coordination to walk on the cans while holding the ropes.

Free Play Posts, Play Cubes and Large Building Blocks not only stimulate creative play, but encourage the use of the large muscles in arms and legs.

Space Hopper is a heavy vinyl ball with a handle that rides like a bucking bronco.

Jumpy Jiminy, Bouncer Board and Jog Tramp are jumping devices made to give you the feel of jumping on a diving board without the pool. Gives plenty of bounce.

Ideas for Homemade Toys:

*Large boxes can be used to crawl through, hold on to and carry while walking. Hang one like a jumper, with shoulder straps and the weight of it exercises the child's ability to move with bulky objects. Painted they can become play costumes.
*An old potato sack can be used for a one-legged race. Stuff it with paper crumbled in a wad and it becomes a punching bag.

* Yarn balls can be made by wrapping yarn over and over a board. Secure together with a string and cut. These are just as soft as a sponge ball.

* Using large bleach bottles, cut the bottoms out until the handle and half the bottle remain. Make a 1-hi-11 bat and it can be used to catch the yarn balls above.

* Discarded tires can be used to make an obstacle course. Walking on the edge of them can be challenging and fun. Mounted to a tree limb, they become a climbing tool. Swing them from a rope for an old trick.

* Fill plastic detergent bottles with a little sand and they become bowling pins. A rubber ball will easily knock them down.

* A 6-8 foot 2"x4" board placed on bricks will work for a balance board. As the child improves, cut the board more narrow. Slant it from some steps and the slight incline up and down will be good for the child learning to walk.

* Make your own bouncing board by placing a wooden board on a set of springs.

* A discarded mattress becomes a bouncing playground inches off the ground.

* Using cardboard, cut your own footprints for a child to step on.

* Place a ladder on its side inches off the ground. It is an obstacle walk from one section to another.
Where Toys May be Purchased

Developmental Learning Materials
7440 Natchez Avenue
Niles, Illinois 60648

ABC School Supply, Inc.
437 Armour Circle N.E.
Atlanta, GA 30324

Environments, Inc.
Beaufort Industrial Park
P.O. Drawer V
Burton, SC 29902

Childcraft Education Corp.
20 Kilmer Road
Edison, New Jersey 08817

McGregor's School Supply Catalog
McGregor Company
Athens, Georgia 30601

Abbey Rents (Medical Equipment)
3112 Piedmont Road N.E.
Atlanta, GA 30305

Gibson's Discount Center
Alps Road Shopping Center
Athens, Georgia 30606

J. C. Penney, Inc.
420 East Clayton
Athens, Georgia 30601

Roses Stores, Inc.
Willowood Square Shopping Center
Athens, Georgia 30601

Sears, Roebuck and Company
Beechwood Shopping Center
Athens, Georgia 30606

Sky City Discount Center
480 North Avenue
Athens, Georgia 30601

Zayres Department Store
2405 Jefferson Hwy
Athens, Georgia 30601

Baby Town
175 North Lumpkin
Athens, Georgia 30601
A case of electrical injury resulting in persistent cortical dysfunction is presented. The case illustrates four main points:

(a) patients recovering from an initial comatose state can be best evaluated with a combination of brief serial and then comprehensive neuropsychological measures, (b) the cognitive dysfunction following electrical injury may parallel in some respects that of closed head injuries (CHI) and be measured by tests designed to evaluate CHI, (c) the neuropsychological sequelae of cerebral electrical injury may be more persistent than is commonly believed, and (d) "psychiatric" sequelae may be more related to organic than functional variables.

INTRODUCTION

Electrical injuries generally occur in one of four ways: accidental electrocution from an electric appliance or instrument, lightning, legal electrocution, and electroconvulsive therapy (ECT). Most authorities such as Divincenti, Moncrief, and Pruitt (1969) have felt that electrical injuries have become progressively more common since the first report of a fatality in 1979 and that clinical management continues to present problems.

Comprehensive reviews of the effects and mechanics of electrical injury have been offered by Aita (1965), Artz (1974), Bernstein (1973), Christensen, Sherman, Ballis, and Wuamett (1980), and Solem, Fischer, and Strate (1977). A recent review has been written by Templer and Veleber in which the possibility of permanent brain injury following electroconvulsive therapy has been reviewed (1982). This paper, however, will emphasize results from accidental electrocution as such injuries are usually associated with high voltages and longer contact periods than is the case in ECT.

The clinical manifestations of electrical injuries can be quite complex and varied and are determined by a number of interacting variables including voltage, amperage, tissue resistance, tissue susceptibility, type of current,
current pathway, site and size of electrical contact, duration of contact, and electrical density (Solem et al., 1977). Ordinary house current can be quite dangerous, especially alternating current (Voris, 1980). High tension current (anything above house current according to some authors or above 1,000 volts according to others) can produce bizarre as well as catastrophic tissue damage (Wilkinson and Wood, 1978).

Christensen et al. (1980) divided electrical injuries into four different types, including electro-thermal burn (arc), flame burn—ignition of clothes, deep thermal, and crush injury. Electricity coursing through the human body will generally take the path of least resistance and these authors rated the relative resistance to flow of current in decreasing order as being bone, fat, tendon, skin, muscle, blood, and finally, with the least resistance, nerve tissue. Bone and fat, offering the most resistance to current, usually generate the most heat and therefore it is not unusual to see deep thermal injuries which may leave superficial skin relatively undamaged (Christensen et al., 1980). Such generalizations may not always be applicable, however, as electricity may affect any part of the body and may take either series or parallel paths, or both. Depending on the path taken, bone may not necessarily be heated to any great extent (Lewis, 1978). Additionally, although nerve tissue may offer less resistance, some authors feel that it is more sensitive to the effects of electrical damage and therefore is easily and directly injured (Christensen et al., 1980; Solem et al., 1977).

All authors agree that the effects of electrical injury cannot only be extremely varied but can frequently be quite bizarre. However, this paper will be limited to the cerebral and psychiatric effects of electrical injury. Damage to the nervous system and corresponding neurological symptoms may occur from either the direct effect of the electricity itself or from associated secondary effects. Neurological symptoms may either occur immediately or may be delayed, although there is some controversy about the genuineness of delayed neurological syndromes (Aita, 1965). Mechanisms of direct electrical injury which have been postulated have included those of electrostatic expansion (Pritchard, 1934; Silversides, 1964), direct nerve damage due to neuron sensitivity (Christensen et al., 1980; Solem et al., 1979) and heat production (Aita, 1965; Arzt, 1974; Gaszner, 1969; Pruitt and Mason, 1979), measurements as high as 65°C centigrade being recorded (Roberts, 1965).

Indirect damage to the brain and central nervous system apparently occurs by means of a variety of mechanisms. Research by DiVincenti et al., 1969, indicated that the most frequent was vascular coagulation and thrombosis and that this mechanism might possibly be associated with delayed neurological symptoms seen by some authors. Gaszner (1969) asserted that histological findings suggested that most damage to the cerebral hemispheres corresponded to an anoxic-vascular organic brain syndrome similar to those seen in cases of cardiac arrest, but it was not clear how many of his patients had actually experienced anoxia. He also felt that electrical injury causes brain edema but concluded that no specific changes are produced in the brain when the electric current is not connected with heat production. In general, Gaszner concluded that both the neurological and psychiatric sequelae of electrical injury were postanoxic.
This would of course be consistent with symptoms of disturbances in respiration which have been noted by authors such as Erskine (1979). Other histopathological changes noted have been perivascular hemorrhage, demyelination with vacuolization, reactive gliosis, and neuronal death (Farrell and Starr, 1968).

Symptoms which result as sequelae of electrical injury are diverse. Menden (1965) described symptoms of headache, Parkinsonism, hypertension, and subarachnoid hemorrhage. Hypertension probably results from impairment of brain vasoregulatory centers, and such an increase could of course contribute to cerebral hemorrhage (Suri and Vijayan, 1978). The presence of symptoms such as subarachnoid hemorrhage can, of course, pose some diagnostic difficulty since an electric shock may result in both falls as well as a lack of an indication on the skin surface of electrical burns. Confusion can therefore occur as to whether symptoms usually seen in head injuries have been caused by direct electrical trauma, a secondary head injury due to a fall, or a combination of mechanisms. The similarity of the cerebral sequelae of electrical trauma to those of head injury has been stressed several authors (Hassin, 1933, 1937; Lechowski et al., 1975). Hassin in particular felt that such cerebral changes were due to purely mechanical factors.

According to Aita (1965) immediate death or transient neurological syndromes are most commonly noted with permanent neurological syndromes being somewhat less frequently seen. Among neurological syndromes, DiVincenti et al., (1980) found central nervous system complications to be the most frequent. Neurological syndromes have included immediate unconsciousness as well as prolonged coma (DiVencenti et al., 1969), hemiplegia, aphasia, striatal syndromes, and brain stem syndromes (Farrel and Starr, 1968), narcolepsy, (Roberts, 1966), dysarthria, spastic paralysis, and seizures (Harada, 1979), and EEG changes (Grindal and Suter, 1975; Koerlof, Nylen and Plym-Forsheil, 1977). Hydrocephalus as well as ventricular enlargement have also been noted (Heidrich, 1975).

A number of "psychiatric" symptoms have been noted as sequelae to electrical injury. These have included amnestic symptoms (Harada, 1979); Hofman, 1980; Wilkinson and Wood, 1978), photic and neurasthenic symptoms (Mueller, Endler, and Wedekind, 1978), personality changes (Haase and Luhan, 1959; Harada, 1979), and a type of postconcussional syndrome (Aita, 1965; Gaszner, 1969; Silversides, 1964). The possibility of a delayed paranoid psychosis was also raised by Harada (1979). The paper by Mueller, et al., is important because it is consistent with an earlier report by Iranyi, Iranyi, Grovecz, and Somogyi (1964) which documented persistent (one to two years) symptoms such as sleep disturbance, headache, memory problems, and easy fatigability in half of patients surviving lightning accidents. Such complaints were much more frequent than were persistent or delayed neurological symptoms.

As in cases of head injury, recovery depends not only on the type and extent of cerebral trauma experienced but also upon a variety of psychological, prior educational, vocational, and social variables. Meyer (1976) therefore suggested serial evaluation of the individual patient to include an evaluation of his reintegration into both his family and his social environment. Meyer also
recommended that such an assessment include not only intellectual abilities but practical, social, and vocational skills.

Case Presentation

History

A 23-year-old Caucasian male on active military service in Germany experienced a job related high voltage electrocution injury resulting in cardio-respiratory arrest and emergency resuscitation. The patient was comatose for approximately four days and upon regaining consciousness was severely disoriented.

Neuropsychological Tests Administered

The Galveston Orientation and Amnesia Test (GOAT) is a practical scale which measures orientation to person, place, and time as well as memory for events preceding and following trauma (Levin, O'Donnel, and Grossman, 1979). Scoring ranges from zero to one hundred, with scores below sixty-five being clearly abnormal, those above seventy-five within the normal range, and those in between denoting borderline orientation. The test was originally designed as a brief cognitive measure which could be serially administered to follow recovery of orientation and memory functions after head injury. Included in the complete neuropsychological evaluation were the Visual Retention Test (Benton, Note 1), the Stereognosis Test (Sandpaper designs), Benton, Note 2), the Multilingual Aphasia Examination (Benton and Hamsher, Note 3), the Facial Recognition Test (Benton, Van Allen, Hamsher and Levin, Note 4), and the Test of Three-Dimensional Constructional Praxis, (Benton, Note 5), all well-known neuropsychological measures devised in the University of Iowa Hospitals' neuropsychological laboratories. In addition, a Galveston twelve-stimulus modification of the method of selective reminding, derived from Bushke and Fuld (1974) was also used (Levin, Note 6). The WAIS and the Halstead-Reitan Battery were also administered during the final assessment.

Neuropsychological assessment initially consisted of daily administration of the GOAT and periodic evaluation of memory with alternative forms of the Selective Reminding Test. After hospital discharge the patient returned for complete neuropsychological evaluation 50 days post-trauma.

RESULTS

Neurological Evaluation

Neurological examination during the subacute phase was essentially within normal limits and demonstrated intact cranial nerves and reflexes as well as preserved sensation and motor abilities. The examining neurologist was struck only by this patient's disorientation and continued memory deficit during hospitalization. There was no evidence of an associated head injury secondary to falling.
Electroencephalogram Results

An electroencephalogram obtained from his patient indicated left temporal slowing as well as bursts of theta slowing with frontal accentuation. The record was read as being minimally abnormal.

CT Scan

Computerized tomography was requested, but both military equipment failure and a breakdown in military logistics made it impossible to obtain a CT scan either prior to or post-patient discharge.

Neuropsychological Evaluation

The patient was referred to the Neuropsychology Service seven days post injury. Previous to referral he had been either comatose or severely disoriented and was also air-evacuated from another hospital; orientation is therefore estimated for days four through six as being at a level of severe impairment. The patient remained disoriented, with GOAT scores ranging from seven to sixty, until the tenth day post-trauma. Orientation was then seen to be "borderline" until the twelfth day post-trauma, after which orientation was consistently seen to be normal. At our final assessment 50 days post-trauma, orientation remained within the normal range with a GOAT score of 79.

Although nursing staff felt that the patient was recovering well and he remained oriented as reflected by his normal GOAT scores, his ability to both store and consistently retrieve auditory material as measured by the Selective Reminding Test continued to be severely defective (Figure 1). At our final comprehensive neuropsychological evaluation 50 days post-trauma, the patient's storage ability for his material approached that of normal. However, his ability to consistently retrieve the information he had placed in memory storage continued to be significantly impaired although it had shown improvement from his performance levels while hospitalized.

A summary of neuropsychological scores is given in Figure 2. Our final evaluation showed that most general cognitive and intellectual abilities had returned to normal. However, mild but clearly significant deficits in memory for auditory digits as well as consistent retrieval from memory storage, problems in rhythm identification, and impairment of expressive and receptive language functions remained. Although the Reitan-Indiana Aphasia Screening Test failed to elicit any aphasic errors, the patient was definitely impaired in linguistic functioning, as indicated by Bento's form of the Multilingual Aphasia Examination. Sensorimotor abilities appeared to be generally intact with the exception of decreased grip strength in the dominant (right) hand. This pattern of mild but significant neuropsychological deficit was felt to suggest a relatively greater dysfunction of the left cerebral hemisphere, which of course would be consistent with the EEG results. As most deficits were felt to be mild, the patient was returned to full military duty with no specific rehabilitative treatment and was performing well in his duty position on six-month telephonic follow-up with his commanding officers.
This patient's recovery followed the general pattern which is seen in closed head injured patients manifesting diffuse cerebral dysfunction in that a comatose period was followed by an amnestic syndrome characterized by eventually shrinking retrograde and anterograde amnesia. Although the patient's orientation returned to normal while he was still hospitalized, both storage and retrieval memory mechanisms for novel auditory material were seen to remain impaired during hospitalization and some deficits remained at least 50 days post-trauma. This is important to note because medical staff may overestimate the patient's rate of recovery and level of ability. In addition, this patient's progress was similar to that of Levin's closed head injured patients who showed significant post-traumatic amnesia on the GOAT for less than 14 days and who eventually demonstrated good cognitive recovery (1979). These neuro-psychological similarities between a case of electrical injury and cases of closed head injury are felt to be consistent with the pathological similarities which have noted between the two disorders (Hassin, 1933, 1937; Lechowski et al., 1975). Of course, both the parallels and differences between electric and impulse or impact injury to the brain continue to need clarification. This is because mechanisms of anoxia, heat generation, and electrostatic expansion do not occur in cases of closed head injury (except in some cases that led to anoxia) while these mechanisms in addition to those of mechanical injury, neuron necrosis, and vascular effects apparently contribute to the symptomatology seen in electrical injuries. Effects of anoxia and impulse head injury continue to need partialing out in future studies.

The fact that this patient eventually recovered most functions but continued to manifest some residual mild deficits should be emphasized in that such mildly impaired functions are likely to be missed entirely unless they are specifically evaluated. This is well illustrated by the fact that expressive and receptive language functions appeared clinically to be grossly normal and the Reitan-Indiana Aphasia Screening Test failed to elicit any specific aphasic errors while the patient was seen to be clearly and significantly impaired on selective language functions when further testing was done with the Multilingual Aphasia Battery.

This type of case well illustrates how gradual improvement in mental status can be carefully evaluated by serial administration of brief cognitive tests along with a comprehensive neuropsychological examination. This type of evaluation is not only important in helping to describe the clinical course of a disorder but is especially valuable in a military setting where there are a large number of patients who experience accidents and subsequently develop either conversion reactions or deliberate malingering with the secondary gain of receiving either a discharge from the service or some permanent financial disability compensation. This type of serial testing therefore allows better differentiation of a genuine loss of cognitive skills as opposed to behavioral deficits with a more functional or malingering component.

And finally, careful neuropsychological evaluation of such trauma cases can not only document persistent symptoms which otherwise might have been missed or dismissed, but may help eventually to address the controversy over whether such
sequelae are "functional" or "organic." Many electrically injured patients continue to manifest symptoms quite similar to those seen in a post-concussional syndrome, and it is far from established that such symptoms are primarily functional with no organic impairment. The parallels between electric injury and closed head injury as well as the question of whether or not recovery from electric injury is as complete as most of the neurological literature would suggest are phenomena which deserve continued neuropsychological investigation.
Reference Notes


REFERENCES


FIGURE 1

SELECTIVE REMINDING

PERFORMANCE AFTER ELECTRICAL INJURY

12
11
10
9
8
7
6
5
4
3
2
1

TRIAL 1 2 3 4 5 6 7 8 9 10 11 12

▲ ▲ LONG-TERM STORAGE, 50 DAYS POST TRAUMA 1
○ ○ CONSISTENT RETRIEVAL, 50 DAYS POST TRAUMA 2
▲ ▲ ▲ LONG-TERM STORAGE, 10 DAYS POST TRAUMA 2
○ ○ ○ CONSISTENT RETRIEVAL, 10 DAYS POST TRAUMA 2
1 SCORE WITHIN NORMAL LIMITS
2 DEFECTIVE SCORE
**FIGURE 2**

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**HANDEDNESS:** Right  
**DATE:** June 1980  
**OCCUPATION:** Radio Operator

**CATEGORIES**  
**30**

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**Multilingual Aphasia (%)**  
VN 27%  
CWA 56%  
SR 6%  
TT 24%

**IMPAIRMENT INDEX**  
.28

**APHASIA ASSESSMENT (continue)**

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**NOTE:**  
VN- Visual Naming  
CWA- Controlled Word Association  
SR- Sentence Repetition  
RCWP- Reading Comprehension of Words and Phrases  
TT- Token Test

225
GALVESTON ORIENTATION AND AMNESIA TEST

NORMAL

BORDERLINE

ABNORMAL

Day Post-Trauma

GOAT Score

--- 11 64 44 75 74 80 80 --- 79 ---

... ESTIMATED PRIOR TO TRANSFER
THE HALSTEAD-REITAN NEUROPSYCHOLOGICAL BATTERY
AND
THE LURIA-NEBRASKA NEUROPSYCHOLOGICAL BATTERY
WHEN TO USE WHICH?

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Tacoma, WA 98431

There are many assessment procedures and strategies in neuropsychology for
determining the status of higher cortical functions (Lezak, 1983). Of these
many approaches, the Halstead-Reitan Battery and the more recent Luria-Nebraska
Battery (LNB) are among the most frequently used by clinicians. These two
approaches are somewhat different in their origins, underlying theories, and
administration. Both have demonstrated an ability to discriminate between
groups with and without brain dysfunction (Golden, 1981). The HRB has been in
clinical operation for many years, allowing numerous studies to be conducted
with persons of varying neuropathologies (Reitan and Davison, 1974). The HRB
has proven to discriminate the gamut of neuro-behavioral dysfunctions to
include the more subtle disorders (e.g. seizure disorders, mild closed head injuries,
learning disabilities, transient ischemic attacks, etc.). The LNB has not been
available long enough to establish its ability to discriminate these more subtle
disorders, but there is some evidence to indicate that the potential exists

While there have been several studies establishing the validity of these two
measures, little has been written regarding the views of clinicians who have
used both batteries. Incagnoli (1982) reports that a conference was held in
1981 to discuss clinical applications of the HRB and the LNB. Several noted
neuropsychologists shared their views. Gerald Goldstein presented the argument
that the LNB is best used when the aim of the examination is to define recently
acquired focal lesions and their isolated syndromes. Nelson Butters discussed
the problems of the HRB and the LNB in assessing memory. He argued that both
batteries need to be supplemented to adequately assess memory. He also noted
that the LNB had limitations in the differential diagnosis of amnesic syndromes,
remote memory, and also has insufficient item complexity so that early clues go
undetected (e.g. Alzheimers).

This paper presents the author's current views regarding when to use which
battery. These views are based on evaluations using both test batteries on a
variety of patients having various neurological dysfunctions. The views
presented are based on clinical observations and are subject to modification as experience and evidence dictate. These views should be seen as ideas to be tested and not absolutes.

The author's experience indicates that the LNB has some ability to localize lesions with neuropathologies having localized effects. (Case example presented of an 18 yr. old male with gun shot wound to the left-parietal area. LNB clearly localized the lesion with the localization scales. The HRB also localized the lesion, but required considerable interpretive ability and a greater time investment.) The HRB appears to be more sensitive to subtle disorders and changes. (Case presented of a 38 yr. old male with a cystic dermoid tumor underlying the entire basal-medial aspects of the brain and surrounding the brainstem. The patient was given serial HRB's and LNG's to monitor changes and surgical interventions. The HRB detected dysfunction that correlated with the patient's symptoms while the LNB failed).

These and other cases have led the author to think about the possible reasons why these differences might exist between the two batteries. Why does the HRB seem to be more sensitive? Why does the LNB seem to be effective at localizing? Thinking about the test items and construction of both batteries has led to several considerations. The LNB appears to be a collection of sign oriented tests. There are no real power tests in this battery that require a prolonged period of endurance from the patient. Most tasks are very discrete and require very little time to perform. As with most sign tests, the results are very specific. The HRB appears to have a mix of sign and power tests. Many of the tests require ongoing performance over a period of time to get a single test score.

An analogy of assessing wood chopping ability may serve to clarify the difference between making inferences with sign tests as compared to power tests. A sign approach in assessing wood chopping ability might carefully study the position of the person's hands on the axe handle and try to predict wood cutting ability from this sign. A power approach to assessing chopping ability could have the person chop wood for thirty minutes and predict chopping ability from this power test. Both approaches to assessing wood chopping ability have some validity, but the power test might be a better overall predictor. If the wood chopper had only one hand (a focal lesion?) the sign approach could be a very good predictor and save more time than a thirty minute trial of wood chopping. If the wood chopper had two hands, but was coming down with a case of the flu, a thirty minute wood chopping session might predict better than a sign approach which looked at how well the axe handle was held.

The sign approach in assessment eliminates false positives, but tends to generate false negatives. Sign tests are selective, but they sacrifice some degree of sensitivity for this selectivity. Likewise, power tests lose some degree of selectivity (higher false positives) for their increased sensitivity. If a test battery were composed primarily of sign oriented tasks, you would expect a high selectivity (few false positives) with a corresponding sacrifice in sensitivity. A trade off between selectivity and sensitivity always exists in assessment (Cronbach, 1970).
Reitan (1974) has repeatedly promoted the concept that a comprehensive battery of tests for measuring cerebral dysfunction must consider four levels of inference: level of performance, signs or specific deficits, left/right comparisons, and patterns. In order to consider these four levels of inference, the battery must contain measures that will allow such observations. This concept has proven to be a necessary, responsible, and safe interpretive approach for the neuropsychologist to use in determining the presence of cerebral impairment, the degree of impairment, location, status, type of pathology, and the practical implications. To rely heavily or exclusively on any one of these methods of inference has its problems and dangers.

The LNB is essentially a series of sign oriented tasks arranged by scale. All tasks are rated zero, one, or two regardless of the difficulty. Analog data is essentially converted to digital data. This has some effect upon the sensitivity of the battery and results in poorer discrimination with more subtle disorders. However, the sign tests are selective and reduce the false positives that are often seen with the HRB. Some evidence indicates that the LNB may have better success in discriminating schizophrenia from other cerebral dysfunctions (Purisch, Golden, and Hammake, 1978). This may be due to the fact that schizophrenia is a more subtle and diffuse condition and doesn't manifest the more localized signs of higher cortical impairment. The LNB may be less influenced by some of the diffuse level of performance decrements that would cause the HRB to identify a false positive.

SOME GUIDELINES

Considering the preceding thoughts, the following guidelines are offered for deciding when to use which battery.

1. Don't administer or interpret either the LNB or the HRB if you have not been adequately trained in clinical neuropsychology (INS Bulletin, 1981) and received specific one-to-one training for each of the batteries. Psychologists have a tendency to think they can administer and interpret any test that is in the Mental Measurement Yearbook if they just study the manual the night before. While this may be true of many tests, this is not the case with neuropsychological instruments and should be considered irresponsible and unethical. Receiving appropriate training and supervision before using neuropsychological test instruments is essential. Knowing your neuropsychological test instrument also includes being familiar with its weaknesses and hazards (Lezak, 1983).

2. Because the LNB is composed of many sign tasks, it is important to administer them correctly. In many respects the LNB requires more skill to administer. It is better to have a neuropsychologist administer the LNB to insure accuracy of administration. This also allows the neuropsychologist to observe the patient as an aid to qualitative interpretations.

3. It is probably safer to use the HRB than the LNB for general screening. The HRB is more sensitive and will not miss the more subtle disorders. The impairment index is useful in making the discrimination of brain dysfunction.
The LNB requires greater skill in interpreting signs and their meanings. Don't be fooled by "face-sheet scales." The assessment of brain-behavior relationships is not that simple! A good interpretation of the LNB requires an excellent understanding of Lurian theory (Luria, 1973; 1966). This level of understanding is typically beyond the average clinician. The HRB procedures are rooted in psychometry and are more familiar to psychologists making them less prone to be misunderstood.

4. Don't be misled into thinking that the LNB is easier or shorter to administer than the HRB. You need to supplement the LNB with the WAIS-R and other tests to collect all the needed information. By the time you do all of this, the time for administration is about the same. The amount of time necessary to administer a neuropsychological evaluation should be dictated by the choice of procedures necessary to adequately answer the pertinent questions. It should take as long as it takes! Short cuts are not always appropriate.

5. Both batteries need to be supplemented with other tests to ensure that all neuropsychological functions are adequately assessed considering the particular patient, referral issue, and the specific neuropathology. Memory functions are not adequately assessed by either battery without adding other tests. General intelligence should be evaluated with the Wechsler Scales. Language functions may need other testing. Some neurological disorders will need other measures that have been specifically researched and found sensitive for that disorder.

6. The HRB may be the best choice when assessing the more subtle disorders (e.g. mild traumatic brain injuries, early dementia, seizure disorders). These are typically more generalized conditions needing more sensitive measures for their detection and definition.

7. When assessing acute conditions, the LNB may be useful. The HRB tends to overload when acuteness is present and may not be as useful. The more sign oriented procedure will be less prone to this overloading effect.

8. Cases with known neurological disorders, especially with focal lesions, may be more efficiently assessed with the LNB.

9. When trying to differentiate psychological issues (e.g. dementia vs. Pseudo-dementia, schizophrenia vs. other organic issues, pseudo-neurologic disorders) the LNB may be useful.

10. Persons who are malingering and manipulating are somewhat less successful with the sign oriented LNB.

11. The LNB may specify areas of deficit that can be targeted for rehabilitation therapists (occupational, physical, speech) in a more useful and understanding manner than the HRB. The necessary test-retest for monitoring recovery of brain function may be less of a problem with the sign approach of the LNB.
12. In some cases it will be useful to administer both batteries to the same patient. Occasionally a difficult case will need an exhaustive workup to determine the presence of impairment, its location, and the behavioral implications. Using both batteries in these cases offers useful comparisons and allows first hand observations of these procedures measuring the same problems.

A FINAL THOUGHT

These guidelines regarding the use of the HRB and the LNB have been presented with the hope that they will stimulate further thinking and possible research into why different measures exist, what they measure, and how to most effectively use them. It is not intended that these guidelines be seen as anything other than hypotheses to be tested by clinical experience and research. If these initial hunches prove to be valid, then it may be useful for the clinical neuropsychologist to use the HRB when working for the plaintiff and use the LNB when working for the defense.
REFERENCES


HEALTH PSYCHOLOGY: AN OVERVIEW AND SELECTED APPLICATIONS

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During the past twenty years a number of significant changes have taken place in the health care field. The cost of health care has risen alarmingly. Advances in science and medicine have both heralded the decline of many diseases which previously threatened life and promise hope and treatment for many more. Concurrently with these changes, there has been increasing awareness of the significant roles of environmental factors and human behavior on health maintenance and recovery from illness. The most recent report of the Surgeon General of the United States documents that the greatest health problem in the nation today is disease secondary to dysfunctional habits, behaviors, and life styles. Maladaptive behaviors are the leading cause of sickness and death in our society. Data clearly suggest a strong positive relationship between adherence to salutary health practices and good health. Psychologists are pre-eminently qualified to develop programs which will assist people to lead healthy life styles. Smoking, the leading preventable cause of death in the nation in 1982, is emphasized to document its disastrous impact.

Health Expenditures

Inordinate resources are drained in the treatment of what most would agree are preventable health conditions, i.e., disease processes secondary to smoking, poor diet, and other maladaptive behaviors. Since 1960 it has been clear that the health care costs of the United States and other nations have grown at a troublesome rate (See Table 1). This steadily increasing trend in expenditures is alarming, and must be reversed. Matarazzo (1982) has suggested that its reduction is a national responsibility with the burden for change resting upon the shoulders of many disciplines not the least of which is the science and profession of psychology.
TABLE 1

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Health Care Expenditures as a % of GNP for Selected Countries

Source: Simanis & Coleman (1980)

During our lifetime advances in science and medicine have markedly changed national illness patterns (Matarazzo, 1982). Many previously frightening diseases such as tuberculosis, influenza, measles, and poliomyelitis have been reduced or almost eliminated, but unfortunately, as these conditions have been reduced, there has been a corresponding increase in such illnesses as lung cancer, cardiovascular disease, and drug and alcohol abuse.

In spite of the fact that expenditures have risen dramatically, mortality has remained relatively constant since 1970, suggesting that traditional medical care is not the answer to many of our current pressing health problems. The data suggest that behavioral patterns and environmental factors exercise a major influence and represent the area in which will occur the next major health care breakthrough. Michael (1982) has stated that everyday maladaptive habits and life styles are killing us. Cardiovascular disease, several forms of cancer, drug and alcohol abuse, and motor vehicle accidents clearly justify this charge. Treatment of these disabling and killer problems has produced only marginal results. Perhaps the nation should, as Michael (1982) suggested, reorder its health priorities along lines of the four principal contributing causes of death: (a) unhealthy lifestyles, (b) environmental hazards, (c) biological factors, and (d) inadequacies in the current health care system.

Health Psychology

A renewal of interest in behavioral medicine has sparked the development of the concept of behavioral health. Matarazzo has defined behavioral health as "an interdisciplinary field dedicated to promoting a philosophy of health that stresses individual responsibility in the application of behavioral and biomedical science knowledge and techniques to the maintenance of health and the prevention of illness and dysfunction by a variety of self initiated individual or..."
shared activities" (1980, p. 813). If one accepts Knowles' assertion that "over 99 per cent of us are born healthy and made sick as a result of personal misbehavior and environmental conditions" (1977, p. 58), then this surely is a time for promoting behavioral health.

Many disciplines (medicine, medical sociology, physiology, psychology, and others) are increasingly involved in the prevention of illness and the promotion of good health. Psychologists are increasingly interested in this interdisciplinary field and in 1978 established a division of Health Psychology in the American Psychological Association. The division is composed of more than 3,000 clinicians and researchers. Smoking cessation, stress management, physical fitness, and accident prevention are but a few of the activities engaged in by these psychologists to assist people in preserving and improving their health status.

An interim definition of health psychology was proposed by Matarazzo and modified by the members of the Division of Health Psychology. Health psychology is currently defined as the "aggregate of the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, the identification of etiologic and diagnostic correlates of health, illness, and related dysfunction, and to the analysis and improvement of the health care system and health policy formation" (Matarazzo, 1982, p. 4). Emphasis is on enhancement and promotion of health along with the prevention of dysfunction in currently healthy individuals. Hopefully this field will attract creative efforts by psychologists operating in seemingly disparate subspecialties of our discipline.

Two recent Surgeon General's reports on the health of the nation (Koop, 1982; Califano, 1979) indicated that disease processes secondary to maladaptive habits, behaviors, and lifestyles comprise the major health problem of our time and represent the leading causes of sickness and death in the United States. These reports recommend that behavioral causal factors be the principal focus of the nation's efforts at health promotion and disease prevention. Psychology, with its emphasis on the study of human behavior, can make an obvious and unique contribution in this effort. Matarazzo (1980) has documented that during the past 10 years the largest single area of placement of psychologists has been in medical centers. This points to the clear need for our services. The inclusion of psychologists as staff members of MEDCENS and MEDDACS provides us excellent potential opportunities to contribute meaningfully to the national problems identified by the Surgeon General.

Health Practices

Steadily accumulating evidence suggests that good physical health is in large part the result of good personal health habits. In a study of lifestyles and health status, Belloc and Breslow (1972) found that seven health practices have an independent relationship with health. They are: sleeping 7-8 hours nightly, eating breakfast nearly every day, never or rarely eating between
meals, at or near one's prescribed height-adjusted desirable weight, not smoking, drinking less than 5 drinks daily, and engaging in regular physical exercise. A consistent positive relationship was discovered between these behaviors and physical health. Individuals adhering to six or more of these practices lived approximately 11 years longer than those not engaging in them. It is important to note that circular reasoning does not appear to be a factor in this study, i.e., poor health practices may be a consequence rather than a cause of poor health in that people who are ill may not be able to engage in some of these health practices. The data suggest that the "observed relationships between health practices and subsequent health status and mortality were not attributable to poor health at the time" of the original survey (Schoenborn and Danchik, 1982, p. 33), and demonstrate the importance of life style as it related to physical health.

The National Survey of Personal Health Practices and Consequences conducted a study to provide data on the generalizability of the Belloc and Breslow findings. Their results suggest that the majority of adult Americans do engage in positive health practices. Many people, however, do not engage in these habits, and much work remains to be done in this area. The psychologists who successfully teach people to integrate these practices into their daily lives will clearly be making a meaningful contribution to society. In order to do this people must be made to recognize the role which they exercise in the maintenance of their own health.

One of the greatest challenges facing psychology is that of changing behavioral patterns in ways which will reduce the human and financial costs of preventable diseases. Matarazzo has pointed out that we must develop ways to help our healthy citizens: "(1) refrain from smoking tobacco or abusing alcohol, drugs, and related deleterious substances; (2) reduce their salt and dietary cholesterol intake; (3) use dental floss; (4) fasten their seat belts; (5) exercise regularly; (6) establish proper sleep and rest habits; and (7) employ a few basic home, highway, and occupational safety standards" (1982, p. 5).

Smoking Cessation

The development of effective smoking cessation programs represents an important challenge to psychology. The first Surgeon General's report on smoking (United States Public Health Service, 1964) was followed by a national education program which produced a massive decrease in adult male smoking behavior. From 1955 to 1979 the percentage of adult male smokers in the nation dropped from 53% to 36% (Harris, 1981). Unfortunately, during the same period there was an increase from 25% to 29% in adult female smokers. As Matarazzo (1982) suggested, highly effective advertisements developed in part from input by psychologists may be responsible for some of the increase in female smoking behavior. Skillfully developed slogans such as "You've come a long way baby," appear to have effectively appealed to modern "liberated" women and the "Virginia Slims" brand name successfully capitalizes upon the fear of weight gain frequently associated by women with smoking cessation (Blitzer, Rimm, & Giefer, 1977).
Advertisements have, unfortunately, also been effective with teenage smokers. During 1968 to 1974 the percentage of teenage girls who smoked increased from 8% to 15%, but more recent data suggest that the percentage of teenage smokers is decreasing. This may reflect the effectiveness of educational campaigns by the American Cancer Society, the Public Health Service, and others. A review of the ages at which children begin smoking suggests that many start at about age 12. Children may be increasingly susceptible to becoming regular smokers at about this age. Preventive education programs would be well served to target on 10 and 11 year old children. Psychologists (Hurd, Johnson, Pechacek, Bast, Jacobs, & Luepker, 1980; Botvin, Eng, & Williams, 1980; Williams, Carter, Arnold, & Wynder, 1979; and Evans, Rozelle, Mittelmark, Hansen, Bane, & Havis, 1978) have demonstrated that the incidence of smoking behavior in children can be reduced significantly through well conducted education programs.

The damage to physical health produced by smoking is well known for middle aged and older individuals with long smoking histories as the following data document. A report of the ad hoc Committee on Cigarette Smoking and Cardiovascular Disease of the American Heart Association recently stated that more than 120,000 deaths occur annually in the United States from coronary heart disease produced by cigarette smoking (American Heart Association, 1977). Data collected by Hammond and Horn (1958) show that a 30 year old man who smokes two packages of cigarettes a day has, on the average, a shortened life expectancy of 8.3 years. Mann and his associates (1975) demonstrated that the relative risk of heart attack for smoking versus non-smoking women using oral contraceptives is increased by a factor of more than 11 for women smoking 25 or more cigarettes a day. The Collaborative Group for the Study of Stroke in Young Women suggested as a result of their research that women who use oral contraceptives and smoke have a 200% increased risk of stroke (1975).

The most recent Surgeon General's report on smoking (Koop, 1982) documents that "cigarette smoking is the major cause of lung cancer in both men and women" in the United States. At the present time lung cancer is fatal in 90% of cases within one year of diagnosis. Lung cancer mortality has increased in women more rapidly than any other cause of death. Since 1930 the lung cancer death rate for women has risen nearly 1000%. It has followed an almost parallel rise in female smoking behavior. Men who smoke prior to the age of 15 have a death rate from lung cancer that is nearly four times higher than those who begin after age 25. Smokers (as compared to non-smokers) have from 3 to 18 times increased risk of the following kinds of cancers: laryngeal, oral, esophageal, bladder, pancreatic, and lung. The World Health Organization (1979) has stated that in countries where smoking has been a widespread habit, it is responsible for 90% of lung cancer deaths (for males under 65 years). The World Health Organization (1979) has also documented that cigarette smoking is the major cause of chronic bronchitis in countries throughout the world where smoking has been a widespread habit. In his role as Surgeon General, Joseph A. Califano, Jr. stated that cigarette smoking is the "largest preventable cause of death in America," and that those who engage in this activity are practicing slow motion suicide (Califano, 1979). Califano (1979) documented that the annual cost of smoking is 81 million workdays lost and 145 million illness days lost.
A long smoking history is not, however, necessary to demonstrate the adverse effects of this habit. Butler and Alberman demonstrated in a prospective study of 17,000 births that the mortality in babies of smokers was significantly higher than in those of non-smokers (1969, p. 46). The cause was the excess of low birth weight babies (1969, p. 46). A recent Surgeon General's report documented that "low birth weight is related more to smoking than to any other factor" (United States Public Health Service, 1971, p. 166). The World Health Organization recently stated that "the risk of an infant developing bronchitis or pneumonia during the first year of life is doubled if its parents smoke" (WHO, 1979). MacMahon, Alpert, and Salber (1966) demonstrated that the birth weight of babies of smoking mothers was significantly less than that of mothers who did not smoke. If, as many would suggest, lower than average birth weight is associated with impairment of intellectual functioning and a variety of physical disabilities, then the smoking behavior of pregnant women may have wide reaching implications and costs in the health care system.

Since 1964 approximately 30 million Americans have permanently stopped smoking. The average quitter makes three to four attempts before permanently discontinuing the habit. Historically, stop smoking programs have obtained low follow-up abstinence rates. In part, this may reflect the fact that those able to easily discontinue the habit do so on their own without professional intervention. Clinical work conducted during the last decade, however, suggests that health care professionals are increasingly adept at directing successful smoking cessation programs (Holroyd, 1980; Hunt & Bespalec, 1974).

Smoking is presented in this paper as but one of several national health problems awaiting creative efforts by psychologists. It, along with the other problems identified by Matarazzo, represents clear behavioral health challenges in which we may meaningfully contribute to society. Hopefully these challenges will generate innovative efforts by psychologists and other health care professionals.

The Challenge

Fox has suggested that clinical psychology reorient its efforts from a primary focus on the few experiencing identified psychopathology to the majority experiencing the results of their own maladaptive life styles. He believes that psychologists should reconceptualize training programs and service delivery systems. For many years we have devoted the majority of our resources to securing improved access to our services. During the past 30 years we have progressed from restricted psychometrician roles to autonomous staff professionals providing diagnostic, therapeutic, consultative, and teaching services. As Fox pointed out, our "efforts have been costly, reasonably successful, and probably necessary" (1982, p. 1052). We must, however, greatly expand our delivery of services to general health care issues. We should be concerned not only with helping individuals cope with emotional disturbances, but also with problems associated with illness and modification of unhealthy life styles. Psychology is clearly the discipline best suited for dealing with the behavioral elements of a wide range of health conditions. It is the only discipline with both a comprehensive science base and a well established pro-
fessional component. It "is the only established profession with a comprehensive scientific base that is concerned with the entire spectrum of human behavior" (Fox, 1982, p. 1053). We should be as broad in applying psychology as is the basic science that supports it. "Since the science of psychology is concerned with the totality of human behavior, the territory for the profession of psychology is broad indeed" (Fox, 1982, 1053). As Matarazzo recently stated, "the ball is now in psychology's court" (1982, p. 12). If we fail to respond to this challenge we limit our ultimate effectiveness as a discipline and as a profession.
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Fox, R.E. The need for a reorientation of clinical psychology. American Psychologist, 1982, 37, 1051-1057.


What is the difference between Health Psychology and Behavioral Medicine? Although there is considerable overlap between the two, in this lecture I will attempt to define and then briefly describe these two emerging fields.

**Behavioral Medicine**

Behavioral Medicine is defined as the field concerned with the development of behavioral science, knowledge, and technique relevant to the understanding of physical health and illness, and the application of this knowledge and these techniques to prevention, diagnosis, treatment, and rehabilitation (Boudewyns & Keefe, 1982). I would define Health Psychology as "the study of those behaviors that impact upon an individual's wellness or illness." Behavioral Medicine is multidisciplinary while Health Psychology includes mostly those interested primarily in the study of behavior. Judging from the literature, Behavioral Medicine appears to be the more applied of the two fields. In the future, Health Psychology may well become one of the basic sciences of Behavioral Medicine. At the present time neither area or field of interest has emerged to the point where definitions are well established. Nevertheless, if activity level is an indication of the robustness of the field, then we can assume that both Behavioral Medicine and Health Psychology have a healthy future. During the past few years a variety of journals, training opportunities and associations have been developed to serve the needs of these exciting new fields. In terms of its application to medical problems, the field of Behavioral Medicine may be divided into three areas: (a) Pain Management, (b) Physical Disorders, (c) Prevention Through Habit Control.

**Pain Management**

Patients who complain about chronic pain constitute a difficult treatment population. The therapist feels empathy and a concern for patients with chronic pain, but the treatment options are few. Most drugs used for the treatment of chronic pain pose serious side effect problems.

One reason chronic pain is difficult to treat is that patients differ so much in their response to pain. Some chronic pain sufferers continue to function in their environment; going to work, engaging in recreation, sexual activity, etc., while others take on the role of an invalid and cease almost all normal activity. The latter group may cease functioning in spite of the fact that there are few objective findings that account for the pain. Thus, for some, pain totally controls their lives.
More traditional psychiatric approaches to chronic pain have not been very satisfactory. Psychotherapy, usually insight oriented long term psychotherapy, has not been shown to be an effective treatment program for chronic pain patients. Further, although many psychotropic drugs have been used for pain, there are still few well controlled studies supporting their long term usefulness. On the other hand, several behavioral techniques have been shown to be effective even for the long term. Recent studies have been very encouraging especially for chronic low back pain, behavioral management of headache, and for interventions in the management of patients suffering from acute pain and preoperative anxiety.

Physical Disorders

There has been a great deal of excitement and interest on the part of both scientists and laymen about the possibility that some physical functions, once believed to be involuntary, could be brought under self-control. In recent years, many trails have shown that a variety of psychophysiological activities such as salivation, peripheral blood flow, and cardiovascular response can be brought under control of the patient. Strategies to aid people in control of their psychophysiological functioning constitutes the technology of behavioral medicine. This technology has its scientific roots in experimental psychology, physiological psychology, behavioral psychology, and learning theory. It is exciting to see these basic fields of psychology, once thought by many to be superfluous with regard to practical application, open up these new applications in the field of behavioral medicine.

Some of the physiological functions that appear to be available to self-control include hyperventilation syndrome, genito-urinary problems, gastrointestinal disorders, diarrhea, constipation, enuresis, encorpresis, Raynaud's disease and hypertension. Hopefully in the future with the aid of biofeedback and other behavioral technology, it will be possible to learn to control many other body functions.

Prevention Through Habit Control

Warning - "behavior kills". The great majority, perhaps as high as 80%, of all premature deaths are traced either directly or indirectly to an individual's life-style or behavior pattern.

For years, therapists have encouraged patients not to engage in those behaviors which ultimately lead to serious illness and death. It has long been known that cigarette smoking causes a variety of serious diseases and is the direct cause of death for thousands of Americans each year, yet advertising campaigns, governmental interventions, and medical advice have not been successful in significantly reducing the number of individuals who engage in such behavior. These are often habits with immediate rewards and the patient can easily avoid thinking about the ultimate destructiveness of their behavior. Recently, however, there have been techniques developed by the behavioral psychologists that are effective in helping people modify their health threatening behavior patterns. For example, interventions are now being attempted to help people
change the characteristics of the type A behavior pattern, which include aggressiveness and hard driving style exemplified by the modern day executive. We also know better methods to help patients gain control of their eating patterns and smoking behavior. Medical advice and a call for will power have been replaced by scientifically validated and reliable behavioral treatment regimens that are effective in helping patients control these behaviors. We are also now starting to apply techniques to help people more faithfully comply with traditional medical regimens. In the past, non-compliance with medication taking requirements has defeated the effectiveness of even the most reliable traditional medical treatment.

Research in Health Psychology covers a broad area. A recent issue of the journal Health Psychology, for example, contained one article dealing with the treatment of obesity and another on worker's compensation.

Both fields are growing rapidly, and the range of clinical application and areas of research have expanded considerably over the past five years. For both the practitioner and the researcher, the opportunities appear limitless in these new and exciting fields.

REFERENCE

The Community Psychology Fellowship (CPF) has as its goal comprehensive training in multidisciplinary approaches to community psychology. Training is designed to orient fellows to the broader segments of their environment, to appreciate the interdisciplinary nature of community psychology, to emphasize competency enhancement and primary prevention, and to facilitate community development of intervention skills. The CPF is designed for AMEDD behavioral science professionals (psychologists, psychiatrists, and social workers) who have demonstrated competency in basic empirical and clinical skills at the postgraduate level.

The CPF trained professional will provide leadership in community mental health through activities such as coordination of human service agencies, combat psychology consultation, support of organizational effectiveness staff officers, mental health education, and primary prevention for community and military leaders. Existing AMEDD positions which justify this training are Chiefs of Community Mental Health Activities and Mental Hygiene Consultation Services; Division Psychology, Psychiatry, and Social Worker officer positions; and regional HSC and SGO consultships. Non-AMEDD positions which justify the training include the Organizational Effectiveness Center and School at Fort Ord, the U.S. Army Soldier Support Center at Fort Benjamin Harrison, and DA and MACOM staff positions.

Training Principles in Community Psychology

Training principles are listed as follows:

1. Training in community psychology should adopt a generalist model.

2. Training should include collaborative experience with different professions and disciplines (psychologists, psychiatrists, sociologists, and others).

3. Training should include consultative and educational skills to prepare mental health professionals to help selected soldiers and military units deal most effectively with job-related problems of human behavior.

4. Training should include a basic knowledge of social systems and supervised participant observation in more than one of the several systems.
5. Training should emphasize information and skills required for evaluation of mental health services.

Format.

1. A heavy concentration of applied field experience will be provided through programs ongoing at the CMHA and Psychology Service, WBAMC. Fellows will access organizational effectiveness, conduct mental health community education programs, and develop intervention strategies for Fort Bliss, White Sands, and WBAMC organizations.

2. Fellows may be required to enroll in tutorial courses at local universities to remediate weaknesses and develop identified interests. Fellows may elect to engage in a program of study and experiential training available through the United States Army Organizational Effectiveness Center and School, Fort Ord, CA. In addition, fellows are expected to participate in a University Associates or equivalent level external training experience.

Methodology.

1. In general the method of training will proceed along three concurrent tracts. They include theory and didactic exposure, supervised “hands on” experiences, and individualized practical application. The following training model demonstrates the approach:

<table>
<thead>
<tr>
<th>The Training Tracts</th>
<th>The How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didactic</td>
<td>Tutorial Study</td>
</tr>
<tr>
<td>Experiential</td>
<td>Supervision</td>
</tr>
<tr>
<td>Application</td>
<td>Individual Projects</td>
</tr>
</tbody>
</table>

2. During the didactic tract fellows will be exposed to theory through an individualized program of study to maximize understanding of interdisciplinary approaches to problem solving. Specific didactic training include: primary prevention, mental health consultation, mental health education, epidemiology, combat psychology, organizational behavior, and systems theory.

3. During the experiential tract fellows will receive supervised consultation experiences. They will participate in ongoing CMHA consultation projects in the 1st Air Defense Artillery Training Brigade, McGregor Range and Range Command, the 3rd Armored Cavalry Regiment, Civilian Personnel Office, local schools, and other Fort Bliss and WBAMC organizations.

4. During the application tract fellows will bring to fruition individualized projects developed within the military community, moving on to less intensively supervised experiences, and completing the transition from theory to application.
Qualifications for the Selection of Fellows.

While all AMEDD officers who apply will be considered, the following qualifications are desired:

1. An AMEDD commissioned officer with a recognized commitment to the military (RA or Voluntary Indefinite).

2. A psychologist with a minimum of two years post graduate, post internship military experience, or a residency trained psychiatrist with a minimum of two years post residency military experience or a social work officer with a minimum of four years post Master of Social Work degree military experience. If the social work officer possesses a doctoral degree, then experience requirements will be the same as for psychologists and psychiatrists.

3. Demonstrated leadership.

4. Professional excellence in individual specialty.

5. Appropriate payback and other administrative requirements as directed by OTSG.

Application.

Applications (DA Form 3838) should be sent to: The Medical Service Corps, Career Activities Office, (Autovon 223-5460), U.S. Army Medical Department Personnel Support Agency (USAMEDDPERSA), ATTN: SGPE-MSD, 1900 Half Street, N.W., Washington, DC 20324.
The Health Psychology Fellowship exists to train psychologists to develop and implement behavioral programs designed to optimize health and thereby encourage medical staff to maximize service delivery through increased consideration of psychological health factors. Medical problems in which human behavior is a significant contributor (cardiovascular disease, cancer, and others) are major health hazards in our society. Accordingly, behavioral and psychological principles are increasingly applied to problems of physical health. Research has demonstrated the value of the application of these principles in medical care. Fellowship emphasis is on implementing behavioral and psychological principles in four areas: maintenance of health, patient compliance, assessment of intervention effectiveness, and cooperation and collaboration with other professionals.

Training objectives are as follows:

1. To identify "health related" behaviors and implement programs to enhance health (stop smoking, stress management, weight reduction, etc.).

2. To conduct psychodiagnostic evaluations/consultations using procedures shown to have predictive validity in the treatment of medical or surgical patients.

3. To demonstrate understanding of behavioral and psychological contributions to cardiovascular disorders.

4. To treat patients suffering chronic pain.

5. To intervene with patients experiencing psychological emergencies.

6. To conduct, supervise, and train others in clinical biofeedback.

7. To implement procedures to increase patient compliance.

8. To evaluate program effectiveness.

9. To provide consultation and training for personnel in the health care delivery system.
Program Format

The fellowship will be conducted under a tutorial/preceptor model with extensive patient contact, regular tutorial sessions with clinical supervisors, and formal reading assignments. The total one year training program will require approximately 2500 hours (50 weeks and 50 hours per week). These hours will be divided approximately as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
<th>Percent Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Contact</td>
<td>1200</td>
<td>50</td>
</tr>
<tr>
<td>Didactic Instruction</td>
<td>700</td>
<td>32</td>
</tr>
<tr>
<td>Research</td>
<td>600</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2500</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Fellows will be expected to: (1) participate in both inpatient and outpatient treatment programs for patients seen at WBAMC, (2) conduct and present reviews of selected health psychology literature, (3) conduct a publishable research project, (4) attend required seminars, (5) participate in the training of interns, residents and fellows.

Qualifications for and Selection of Fellows:

1. An AMEDD 68S Psychologist with a recognized commitment to the military.
2. At least two years post internship military experience.
3. Demonstrated leadership.
4. Professional excellence as assessed by academic preparation, OERs, and letters of recommendation.
5. Hold the rank of Captain through Lieutenant Colonel.
6. Agree to 24-month active duty obligation following completion of training.
7. Other administrative requirements as directed by OTSG.

Application

Application should be made on a DA Form 3838. Application should be sent to: Career Activities Office
US Army Medical Department Personnel Support Agency (USAMEDDPERSA)
ATTN: SGPE-MSD
1900 Half Street N.W.
Washington, D.C. 20324
Clinical neuropsychology is developing into a professional specialty with training and credentialing criteria. This has implications for the roles of clinical psychologists. It may no longer be responsible or ethical for the general clinical psychologist to practice neuropsychology. New roles are discussed. It is asserted that these roles clarify boundaries and result in a responsible interface between two professional specialties—clinical psychology and clinical neuropsychology.

INTRODUCTION

Clinical neuropsychology is rapidly becoming a professional specialty with an identity of its own. Last year, the International Neuropsychological Society published (INS Bulletin, 1981) a task force report on education, accreditation, and credentialing which defines the roles and functions of clinical neuropsychologists. The same report specifies training models, training requirements, and credentialing criteria for qualifying as a clinical neuropsychologist. More recently, two boards have been established, The American Board of Clinical Neuropsychology and The American Board of Clinical Professional Neuropsychology, to examine and credential clinical neuropsychologists. Numerous doctoral and post-doctoral programs (Golden and Kuperman, 1980a, 1980b; Sheer and Lubin, 1980) are developing specialized training programs in clinical neuropsychology. These events indicate that a professional specialty with a separate body of knowledge, training, and credentialing is emerging and requires recognition.

Clinical psychology significantly has contributed to the development of clinical neuropsychology. Psychologists have long been concerned with the important diagnostic questions regarding "organic" versus "functional" disorders (Small, 1980; Matarazzo, 1972; Wechsler, 1958). Significant efforts have been made by clinical psychologists to develop assessment procedures that would make the organic/functional discrimination (Lezak, 1976). Many clinical psychologists have made noteworthy contributions to neuropsychological research. Although clinical neuropsychology has a multi-disciplinary history, clinical psychology continues a primary contributor in its development.
In the past, training in clinical neuropsychology was difficult to obtain in a comprehensive, formal, well-organized manner. Most clinical psychologists received cursory introduction to the assessment of organic dysfunction in their doctoral assessment courses. If interested and motivated, they pursued further study in a "bootstrap" manner through reading, brief workshops, and a trial-and-error application. In spite of this limited and haphazard approach to training, some excellent clinical neuropsychologists-psychologists came out of this process and made major contributions.

The recent development of clinical neuropsychology as a professional specialty with training and credentialing requirements signals a change to clinical psychologists and raises a question as to the future responsibilities and boundaries of clinical psychology in issues of clinical neuropsychology. A variety of questions emerge: How much training should the general clinical psychologist have in clinical neuropsychology? Should clinical psychologists attempt to do clinical neuropsychological assessment? What are the ethical and professional boundaries? How will clinical psychologists and clinical neuropsychologists work together? How can specialists in clinical neuropsychology be best utilized? These are some of the difficult and challenging questions facing clinical psychologists and neuropsychologists as clinical neuropsychology evolves into a professional specialty. The author, both a clinical psychologist and a specialty trained clinical neuropsychologist, sees a need to address these issues regarding the role of clinical psychology in clinical neuropsychology, with the hope that such a discussion can lead to a clarification of roles and a sensible interaction of the two professional specialties. With this background the following roles for clinical psychology in clinical neuropsychology are suggested.

**TABLE 1**

**THE ROLES OF CLINICAL PSYCHOLOGY IN CLINICAL NEUROPSYCHOLOGY**

1. Provide candidates for Post-doctoral Specialty Training.
2. Operate under the consultation/supervision model.
3. Provide patient screening.
4. Provide appropriate referrals.
5. Provide psychotherapeutic interventions.

**Proposed Roles**

An obvious role for clinical psychology in clinical neuropsychology is that of providing candidates for post-doctoral training in clinical neuropsychology. In many respects, clinical neuropsychology is an extension of clinical psychology skills. The Ph.D. level clinical psychologist with solid training and...
experience in personality theory, psychopathology, assessment, intervention, and research appears to present an ideal background training for advanced post-doctoral training in clinical neuropsychology. It is difficult to conceptualize any other professional group that is as appropriately qualified to enter specialty training in clinical neuropsychology. The heavy emphasis on quantifiable psychometric techniques of assessment in clinical neuropsychology clearly implies that persons practicing such a specialty have established credentials in clinical psychology. The clinical psychologist is uniquely qualified as a candidate for advanced training in clinical neuropsychology (Benton, 1976).

It seems appropriate that clinical psychologists utilize specialists in clinical neuropsychology much as specialists are utilized in the profession of medicine. General practitioners refer to specialists for consultation with those cases that clearly require specialty input. Medical generalists do not hesitate to use a specialist when the patient presents a problem with needs exceeding the skills of the generalist or when it is evident that the patient's problem clearly is within the boundaries of a specialist. In medicine, this is considered an ethical responsibility and "good medicine". A similar model would appear useful and appropriate between general clinical psychologists and specialists in clinical neuropsychology.

Receiving supervision from clinical neuropsychologists is another role for the clinical psychologist. Supervision helps the general clinician develop skills in screening and referral. General clinicians functioning under the supervision of a clinical neuropsychologist can often extend their services without irresponsibly practicing beyond their ethical limits. For 6 years as a general clinical psychologist the author was able to offer needed clinical neuropsychological evaluations in a responsible manner by receiving supervision from a highly qualified specialist in clinical neuropsychology. The administration of tests were completed by the author, the results were analyzed/interpreted under the direct supervision of the clinical neuropsychologist. Reports were the joint product of the clinical psychologist and the clinical neuropsychologist. This supervision model resulted in needed services being delivered that were beyond the abilities of the general clinician practicing alone. It was also a valuable learning experience.

Patient screening for determining the need for neuropsychological consultation is a role for the general clinician that logically extends from the consultation model. Many patients seen in general clinical psychology settings have a biological basis for their problems (Small, 1980). Some of these persons require comprehensive neuropsychological assessment. Table 2 lists in chronological sequence 25 patients seen during a 2-year period at a psychology service in a military community mental health clinic requiring comprehensive neuropsychological assessment. Many other patients required neuropsychological
## TABLE 2

**Patients Seen During a 2-Year Period in an Outpatient Military Community Mental Health Clinic That Required Neuropsychological Assessment (N=25)**

<table>
<thead>
<tr>
<th>PATIENT</th>
<th>SOURCE</th>
<th>REFERRAL ISSUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parents</td>
<td>Learning disability - school problems</td>
</tr>
<tr>
<td>2</td>
<td>School</td>
<td>Learning disability - school problems</td>
</tr>
<tr>
<td>3</td>
<td>Medical Clinic</td>
<td>Post cerebral vascular accident - dysfunction</td>
</tr>
<tr>
<td>4</td>
<td>Medical Clinic</td>
<td>Functional vs. organic - headaches/dizziness/fainting</td>
</tr>
<tr>
<td>5</td>
<td>Aviation Medicine</td>
<td>Closed head injury aircraft accident - return to flight status?</td>
</tr>
<tr>
<td>6</td>
<td>Patient</td>
<td>Closed head injury - motor vehicle accident - dysfunction - disability</td>
</tr>
<tr>
<td>7</td>
<td>Medical Clinic</td>
<td>Headaches right frontal area</td>
</tr>
<tr>
<td>8</td>
<td>Medical Clinic</td>
<td>Headaches - functional vs. organic</td>
</tr>
<tr>
<td>9</td>
<td>Psychiatry</td>
<td>Unusual behavioral incident - return to flight status?</td>
</tr>
<tr>
<td>10</td>
<td>Patient</td>
<td>Post cerebral vascular accident - dysfunction - duplications</td>
</tr>
<tr>
<td>11</td>
<td>Parents</td>
<td>Behavioral problems - learning disability</td>
</tr>
<tr>
<td>12</td>
<td>Parents</td>
<td>Learning Problems</td>
</tr>
<tr>
<td>13</td>
<td>Administration</td>
<td>Post neurosurgery - right cerebellar AVM</td>
</tr>
<tr>
<td>14</td>
<td>Psychiatry</td>
<td>Memory - refer to neurology?</td>
</tr>
<tr>
<td>15</td>
<td>Medical Clinic</td>
<td>Functional vs. organic (hysteria?)</td>
</tr>
<tr>
<td>16</td>
<td>Patient</td>
<td>Learning problems - self-understanding</td>
</tr>
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<td>Closed head injury motor vehicle accident - return to flight status?</td>
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<td>25</td>
<td>Paraprofessional (91G)</td>
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screening. In fact, every initial interview and evaluation required a screening to rule out possible organic causation of the presenting problems. To do this type of screening requires that the clinical psychologist have a conceptualization of the behavioral functions that are most indicative of possible cerebral dysfunction. Table 3 lists the major behavioral functions that are sensitive to cerebral dysfunction. It is also important that the clin-

Table 3

MAJOR NEUROPSYCHOLOGICAL FUNCTIONS THAT CAN BE AFFECTED BY CEREBRAL DYSFUNCTIONS

ATTENTION/CONCENTRATION

- Alertness
- Flexibility

MEMORY

- Verbal
- Visual
- Registration
- Storage
- Retrieval
- Immediate
- Recent
- Long-term

LANGUAGE AND LANGUAGE RELATED

- Receptive speech
- Expressive speech
- Reading
- Writing
- Calculations

VISUAL/SPATIAL

- Non-verbal ideational
- Drawings
- Orientation of objects in space
- Manipulation of objects in space

MOTOR

- Strength
- Rapid motor speed
- Skilled movements
- Complex motor problems solving

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TABLE 3 (cont.)

MAJOR NEUROPSYCHOLOGICAL FUNCTIONS THAT CAN BE AFFECTED BY CEREBRAL DYSFUNCTIONS

**SENSORY**
- Touch
- Position sense
- Object identification

**INTELLECTUAL**
- Reasoning
- Logical analysis
- Concept formation
- Abstraction

**EMOTIONAL**
- Affect
- Control

A clinical psychologist have an awareness of what types of behavioral manifestations are associated with various diseases (Strub and Black, 1981). Many of the behavioral problems associated with cerebral dysfunction can be screened through a careful history, mental status examination, and skillful use of traditional psychometric data (Small, 1980). Such screening is an important role of the clinical psychologist in clinical neuropsychology.

Making appropriate referrals to specialists in clinical neuropsychology is an important role for the general clinical psychologist (Strub and Black, 1977). The experienced clinician recognizes indicators of cerebral dysfunction through interviews, histories, mental status examinations, and traditional psychometrics. This recognition then becomes the basis on which to refer for a specialized opinion. Knowing when to refer, what problems to refer, and to whom to refer is an essential part of every clinician's skills. These skills help provide responsible and ethical services to the patient. Table 4 lists the most common appropriate referral issues in clinical neuropsychological assessment.

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<td>Common appropriate referral issues in clinical neuropsychological assessment</td>
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TABLE 4

COMMON APPROPRIATE REFERRAL ISSUES IN CLINICAL NEUROPSYCHOLOGICAL ASSESSMENT (FOR ADULTS AND CHILDREN)

1. Assisting in determining the presence/absence of cerebral dysfunction (as an adjunct to routine neurological diagnostic procedures).
   a. Determining the presence of impaired higher cortical functioning.
   b. Determining the level and degree of the impairment.
   c. Determining the locus/lateralization of the dysfunction.
   d. Determining the possible/probable causes.

2. Defining the functional correlates of known cerebral dysfunction.
   a. Determining the functional problems.
   b. Determining the practical significance (real-world implications) of the impaired functions for the patient and family.
   c. Assisting in patient management issues.
   d. Determining rehabilitation potential, planning, and progress.
   e. Determining vocational/educational implications.
   f. Documenting impairments for legal/administrative/compensation purposes.

3. Determining changes in patient status by serial evaluations (pre-post surgery, pre-post treatment, recovery from traumatic brain injury, course of disease process, etc.) for patient management decisions.

4. Aiding in defining the relative contribution of psychogenic and organic components of a patient's problems (the organic-psychogenic interaction).

5. Determining the organic basis of learning problems along with appropriate management and educational recommendations.

A most important role for clinical psychologists in clinical neuropsychology is that the developing and implementing psychotherapeutic interventions for patients with cerebral dysfunction. The victims of neurological disease and trauma often experience significant existential crises. Their lives have been dramatically altered and their adaptive resources weakened. Losses of function limit their possibilities and confront them squarely with existential realities at a time when they often have a diminished capacity to manage. Their roles in
the family and work are changed. They may move from a very autonomous position in their social systems to extreme dependency. Depression is common as well as frustration, anger, and anxiety. These persons and their families often benefit from therapeutic interventions (Small, 1980). Regrettably, the patient and family are not often given the opportunity of professional psychotherapeutic help. Clinical psychologists with skills in crises intervention, grief resolution, brief therapy, family therapy, intensive individual therapy, and behavior modification are uniquely qualified to offer psychotherapeutic interventions. Unfortunately, "brain-damaged" persons are often neglected in this regard and left to their own dilemmas.

**SUMMARY**

Providing candidates for specialized training in clinical neuropsychology, operating under the consultation/supervision model, providing patient screening, providing appropriate referrals, and delivering psychotherapeutic services are responsible and important roles for clinical psychology in clinical neuropsychology. With the development of clinical neuropsychology as a professional specialty, having training and credentialing criteria, it no longer appears responsible or ethical for the general clinical psychologist with limited specialized training in clinical neuropsychology to engage in the practice of clinical neuropsychology. Rather, the roles presented in this paper, which are within the boundaries of the training and professional credentialing of clinical psychologists would appear to offer an ethical and functional interface between the two professional specialties, clinical psychology and clinical neuropsychology. These roles can benefit both specialties, but most importantly the patients they serve.
REFERENCES


BRIEF HISTORICAL OVERVIEW OF CREDENTIALLING IN U.S. NEUROPSYCHOLOGY

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Department of Neurology
Medical College of Georgia

The International Neuropsychological Society, founded in 1966, was the first professional organization in neuropsychology. At its annual meeting in 1976, there was discussion of establishment of some sort of credentialling for neuropsychology in the U.S. Because of its international membership composed of many individuals who were not neuropsychologists, it was decided that I.N.S. was not an appropriate body to develop guidelines for a given profession in a given country. The National Academy of Neuropsychologists, founded at about this time for the advancement of professional neuropsychology in the U.S., voted to accept responsibility for establishment of the procedure for recognizing proficiency in neuropsychology in the U.S., and initiated a number of studies concerning appropriate training and experience requirements for proficiency in professional neuropsychology. In 1978, the president of the National Academy, Dr. Lawrence Hartlage, initiated communication with the American Board of Professional Psychology concerning recognition by ABPP of neuropsychology practitioners, and in January of 1979 formally requesting ABPP designation of neuropsychology as a specialty area in ABPP. This was opposed by the president of INS, Dr. Manfred Meier, and ABPP did not take further action on the issue. The National Academy then moved, under the presidency of Dr. Charles Golden, to consider the possibility of establishing an independent Board of Professional Neuropsychology, and two national surveys were subsequently conducted to study various aspects of training, experience, and diagnostic approaches relevant to professional neuropsychology. Portions of their studies were published in Clinical Neuropsychology, (1980), and presented at a Division of Clinical Neuropsychology session at APA (1981).

Just prior to APA in 1981, Dr. Manfred Meier convened a meeting in Minneapolis, attended by Linus Bielaskus, Edith Kaplan, Charles Matthews, Steven Mattis, and Paul Satz, and subsequently incorporated the American Board Clinical Neuropsychology. Although this Board is not affiliated with any professional organization in neuropsychology, by November of 1981 it included a number of individuals who were themselves members of either APA Division 40, INS, or the National Academy of Neuropsychologists (eg. Arthur Benton, Linus Bielaskus, Nelson Butters, Louis Coats, Leonard Diller, Gerald Goldstien, Harold Goodglass, Lawrence Hartlage, Edith Kaplan, Steven Mattis, Charles Matthews, Manfred Meier, Oscar Parsons, Homer Reed, Byron Rourke, Paul Satz, Ottfried Spreen, and Barbara Wilson). At approximately the same time, the American Board of Professional Neuropsychology, following essentially the ABPP model, was being constituted, and by 1982 has organized a Board composed of 22 ABPP Diplomates with neuropsychology as a specialty. An announcement of receipt of applications for certification and diplomate status was listed in the September, 1982 Monitor by
the ABPN. Approximately one month later, the ABCN sent a mailing to a number of individuals affiliated with neuropsychological organizations, announcing an intention to begin credentialling in 1983. This was followed by a listing in the November, 1982 Monitor by ABCN, reiterating that intention and soliciting inquiries.

Thus at the present time there are two credentialling Boards in neuropsychology in the U.S. The ABPN, based on the ABPP model, presumably will have an initial grandfather period, with subsequent Diplomas based on a work sample and clinical examination. The ABCN, consisting of Board members nominated by other Board members, presumably will have a written examination required for all Diplomates.

Within the past five years neuropsychology has been established as a division within APA, seen the emergence of two major professional journals in the field, and the development of two national credentialling bodies, suggesting that neuropsychology is emerging as a strong and growing specialty in psychology. Critics of two credentialling Boards in neuropsychology fear that development may be hampered by divisiveness. Proponents hope that development may be enhanced by recognizing the diversity of background and practice in modern neuropsychology.
THE ROLE OF CLINICAL PSYCHOLOGY IN NEUROPSYCHOLOGY

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Augusta Veterans Administration Medical Center

Dr. Cripe's paper stimulates several thoughts which I would like to share with you.

Certification

The growing interest in certification in the area of neuropsychology has stirred a pot of controversy related to the difficulty in reaching consensus about "what" should be adequate training and experience, and "who" should be certified as bonafide providers of neuropsychological services. I am mindful of how great a contribution has been made in the study of brain behavior relationships by clinical as well as research oriented psychologists, and can see only continuing professional bickering unless some formula is provided which accommodates the legitimate professional needs of both clinical and non clinical psychologists.

Limiting Factors

There are several factors which appear fundamental in limiting the role of most clinical psychologists who are confronted with behavioral/adjustment problems having a neurological basis:

1. The most basic and pervasive limiting factor concerns lack of adequate knowledge base about the central nervous system and about the types of behaviors subserved by it's structures and chemical make-up. While most clinical psychologists have had some exposure to physiological psychology, few have had opportunity, time, or interest necessary to thoroughly immerse themselves in the formal or informal study of neuroanatomy, neurophysiology, neuropathology, and behavioral neurology, which is necessary for adequate performance in neuropsychological clinical work.

2. A second limiting factor is related to lack of opportunity to regularly encounter both a neurologically impaired population and medical professionals in neurology and neurosurgery. Most clinical psychology practicum experiences provide fine opportunities to learn about psychological factors which contribute to individual adjustment problems, while practicum opportunities necessary to learn more about the neurological bases for psychological/behavioral disorders are remarkably restricted or simply nonexistent. The importance of regular interaction with medical colleagues in neurology and neurosurgery cannot be over estimated in that such professional contacts provide significant education regarding the data which are relevant to neurology and regarding the practical limitations of this data for behavioral and neurological inferences. Daily interaction with the types of clinical issues presented to neurologists and neurosurgeons is essential to obtain accurate perspective regarding where and how neuropsycho-
logical data fit into the overall inferential processes involved in assessing patients suspected of neurological impairment.

3. A third limiting factor concerns the relative discomfort of many clinical psychologists with data which do not conform to the strict validity, reliability prescriptions of traditional psychometrics. Too often, there has been disregard in clinical psychology for other than continuous, level of performance measures. In this disregard, valuable information involving pathognomonic signs of CNS dysfunction (i.e., dysphasia; dyspraxia; dysonia; left vs. right sensory and motor performance comparison; etc.) may be overlooked when in fact these data represent significant behavioral contributions to understanding neurological dysfunctions.

4. A fourth limiting factor concerns the lack of opportunity for most clinical psychologists to receive close supervision from a psychologist with training and experience in neuropsychology. Just as it is critically important for clinical psychologists to appreciate neurological data and the way in which neurologists think and analyze this data, it is also essential to learn from an experienced neuropsychologist how to gather data and make behavioral inferences which complement the overall neurological assessment process.

Clinical Roles

Of the several roles identified by Dr. Cripe, I believe, however, that two are particularly within the expertise of most clinical psychologists:

1. The first concerns "screening", and success in this role depends largely upon clinical skill in evaluation of the "sensorial" aspects of the mental status examination and in selection of psychometric tests which extend this mental status examination.

From a conceptual standpoint, neuropsychological screening procedures should ensure primarily that behavioral evidences of "acuteness" are not overlooked. Thereafter focus upon behaviors which reflect a range of cognitive abilities, and any focal and/or lateralizing deficits will allow more refined inferences to be made. In general both subjective and objective approaches to neuropsychological screening are somewhat predicated upon accurate awareness of what general and specific behavioral dysfunctions are most often associated with an acute change in cerebral integrity. I have found it very helpful to adopt a plan of attack which initially directs my attention to behavioral evidence of reduced mental alertness/quickness in simple cognitive functions, and orders my thinking progressively so that I look next for reduced efficiency in more complex conceptual activities, and finally look for specific behavioral signs and patterns associated with focal or lateralized brain dysfunction.

By directing an orderly focus of attention to aspects of mental status such as level of alertness; range of orientation; capacity for sustained attention; memory for remote, recent, and immediate events; and capacity for abstraction/generalization of response; it is possible for most clinical psychologists to begin to sensitize themselves to subjective behavioral data which can
lead to hypotheses regarding the presence or absence of cerebral dysfunction, the degree of clinical acuteness, and the extent to which cortical and/or subcortical structures may be involved.

By a careful selection of psychometric tests which supplement the mental status examination and afford objective information about overall mental alertness, quickness of information processing, and mental flexibility, one can begin to screen more carefully for the type of general, at times subtle, alterations in mental capability which frequently accompany brain dysfunction. Such frequently used tests as the WAIS when carefully analyzed in terms of common factor groupings (verbal; perceptual; perceptual motor; freedom from distractibility; etc.) can provide useful insights relative to possible brain dysfunction. Adding simple psychological tests such as the Reitan Indiana Aphasia Screening Exam provides information of pathognomomic significance regarding problems of language function, gnosia, and praxis. If one has access to an index finger tapping test, and is willing to develop expertise in sensory perceptual examination techniques, then left versus right comparative information is available concerning both motor and sensory-perceptual adequacy.

A relatively quick neuropsychological screening battery might thus include the following:

a. Structured Mental Status Exam
b. Aphasia Screening Exam
c. The Wechsler Memory Scale (with Russell's 30 minute delay)
d. Trail Making Test
e. WAIS-R

This is a battery of psychological tests which is familiar to most clinical psychologists and can provide important information regarding: alertness and attention span; information processing agility; psychomotor speed; recent, remote, and immediate memory; general problem solving adequacy; verbal versus spatial abilities; and pathognomonic signs of cortical dysfunction involving language and constructional abilities.

2. The second role which can be played well by clinical psychologists is that of offering expert consultation and clinical interventions around psychological and behavioral adjustment problems of neurologically impaired patients. Opportunity exists for clinical work involving: family therapy; rehabilitation planning; individual psychotherapy; and staff consultation. Clinical psychologists are uniquely well trained to understand the general and specific aspects of stress (organic or functional in origin) which affect psychological and behavioral adjustment. Providing this type of expertise within a neurology service can be at least as valuable as providing neuropsychological assessment information regarding brain dysfunction, and is the type of expertise which can be acquired relatively independent of a training program emphasizing specialized neuropsychological assessment techniques.
In sum, I am impressed that when confronted with neurologically impaired patients, clinical psychologists who are broadly trained in a variety of psychological assessment and intervention techniques are in an excellent position to offer valuable clinical services apart from specialized neuropsychological assessment. My own belief is that psychologists who must operate in a predominately neurological setting can provide valuable input based upon their general clinical skills while secondarily becoming more expert in assessment of how brain function affects psychological behaviors.
APPLICATIONS OF PSYCHOPHYSIOLOGICAL PRINCIPLES TO PSYCHOTHERAPY

Ralph D. Bruno, Ph.D.
Richard S. Sherman, Ph.D.

INTRODUCTION

This is an overview of the application of psychobiological principles to psychotherapy and behavior change. Today's zeitgeist in treatment focuses on the biopsychosocial model proposed by Engel (1977). There is an extraordinary amount of evidence supporting the interaction between behavioral factors, general health and adaptability to life stresses (Leigh & Teiser, 1977; Schwartz, 1978). The interaction between the underlying biological processes and what we experience as cognitions, behavior and emotions is referred to as psychobiological or biobehavioral.

Gary Schwartz (1978) asserts that the field of psychology, is uniquely suited to address the integration of biological, environmental, and psychological treatment approaches into a comprehensive psychotherapeutic program. Every environmental social and behavioral intervention results in an alteration of the psychobiological state of the person. This alteration in psychophysiology is present regardless of whether it is expressed as a change in physical behavior, overt verbal behavior, verbal self talk, mental imagery, physical sensations, emotions, alterations in interpersonal relationships or other changes in interactions with the environment (Lazarus, 1981). There is a direct link between biology and behavior change (Schwartz, 1978). Biofeedback is a therapy technique that enables the therapist to use this link in evaluation, treatment and assessment of outcome.

Review of the basic psychophysiological cycles and examples of direct treatment targets are presented first. Then the application of these principles to three levels of using biofeedback and physiological monitoring in clinical practice will be described.
Psychophysiological Cycles

Everyone responds physiologically as well as psychologically to stress. Each person reacts differently in terms of which physiologic system primarily responds and the extent of response to a given stimulus. Figure 1 illustrates the relationship between application of a stressor and resolution of the physiologic response while Figure 2 illustrates the patterns of stress response among people reacting normally and abnormally to stress. Much of the danger resulting from stress initiated physiologic responses appears to stem from sustained responses in which systems do not return to baseline reasonably soon after resolution of the stress. The normal body appears to be capable of absorbing the acute response but is not sufficiently elastic to maintain the response without damage.

The complex cyclic relationships between stress and pain are illustrated for musculoskeletal stress responders in Figure 3 a, b & c. The straight forward cycle in which initial muscular response to stress causes pain due to sustained tension which then causes further stress and tension is shown to be elaborated by factors such as magnification of pain sensations by anxiety and depression, need for pain, and reinterpretation of normal sensations. Many of the clinical problems whose treatments incorporate biofeedback techniques are listed in Table 1.

Three Levels of Application

The fundamental concept is: altering cognitions and behavior produces changes on physiology enabling the measurement of the effectiveness of our intervention (Schwartz, 1978). For example, focusing on an image of a' s or fire place can yield warmth measured in the hands. Between the mental image and the warming response delicate balances of neurotransmitters were altered, the autonomic nervous system shifted to predominately parasympathetic stimulation with dilation of peripheral vasculature and the subjective experience of a more pleasant emotional state ensued. The approaches to therapy that recognize this fact have been at opposite poles of a continuum. One end emphasizes the fact that if the biochemistry is altered, various aspects of the individual's behavior, thoughts, and feelings are modified. This is the medical model of therapy. The second is the psychological model of treatment which focuses on modification of the various manifestations of an individual's psychology (behavior, cognitions, mental images, verbalizations, social interactions, and responses to the environment) to facilitate coping and enhancement of life. The current framework of clinical treatment within a biopsychosocial model requires psychologists to widen their consideration of critical treatment variables to not only recognize that altering various aspects of our psychology alters our biochemistry in predictable measurable, interpretable ways but also to use this knowledge routinely in our clinical practice.

The use of these psychobiological principles in treatment can take two distinct forms, physiological monitoring and biofeedback. Physiological monitoring provides the therapist with information about the individual's state of autonomic nervous system arousal. Biofeedback involves the communication of
this information to the patient in a meaningful manner to facilitate self-regulation using basic learning theory principles. Both uses are discussed in terms of three levels of bridging the barrier between the biological state of the individual and the psychological manifestation of the state.

The first level involves the direct application of physiological monitoring and biofeedback to the treatment of psychophysiological disorders when they are the primary target of treatment. These uses are the most common associations made in biofeedback therapy. They are the musculoskeletal, cardiovascular, gastro-intestinal, respiratory, dermatological and anxiety based disorders that have functional components. This is the most clearly researched and documented use of psychobiology. Remember that adequate treatment of these disorders involves attention to all the elements of good clinical practice. This means biofeedback is a tool or a technique not a complete therapy.

The second level involves the use of psychophysiological techniques to supplement and augment therapy techniques and approaches already foundationed in the literature and in common practice (Rickles, Onoda & Doyle, 1982). While the author is more familiar with the applications in association with Behavior Therapy (Onoda, 1979), important additional knowledge about patients and facilitation in treatment can be gained using psychobiological techniques when the therapist works in other theoretical frameworks such as Psychoanalysis (Werbach, 1977). The literature supporting the effectiveness of Biofeedback at this level is more ambiguous and variable. Clinical single case reports are optimistic while controlled studies vacillate because of lack of control over the many variables that affect positive treatment outcomes (Rickles, Onoda & Doyle, 1982).

Components of several treatments (such as desensitization, covert sensitization, assertiveness training and social skills training) may be improved through physiological monitoring and biofeedback. Five ways these may be enhanced are: (1) The objective evaluation of autonomic arousal and arousal patterns over time. These are reflections of the level of well being or coping that the individual is experiencing; (2) Providing clear, consistent demonstrations to patients of their ability to affect level of arousal; (3) Sorting out of the cognitive variables that facilitate or sabotage effective functioning; (4) The therapist has more knowledge with which to place demands on the patient without overwhelming or stagnating the individual; and (5) Determining when maximum benefit is obtained.

Specific examples include facilitating efficient training in relaxation for systematic desensitization and verifying a level of relaxation that enables counter-conditioning to occur. While biofeedback does not seem to enhance the effective desensitization process (Reinkin & Kohl, 1975; Hiebert & Fitzimmons, 1981), physiological monitoring provides for more precise presentation of hierarchy items and correlation of the person's subjective signals of anxiety or relaxation with an objective measure. Uses with Covert sensitization yields information concerning the effectiveness of noxious images or verbalizations in generating the inhibiting response.
The third level involves the amalgamation of biofeedback and the monitoring applications into a comprehensive approach that is consistent with the application of the biopsychosocial model of therapy (Schwartz, 1973; Price, 1974; Marcus & Lavin, 1977; Fuller, 1978; Lazarus, 1981). This is the least researched area. It involves applying psychobiological principles to the evaluation and treatment of each case. This gives the therapists flexibility to shift emphasis between biological, psychological or social modalities of treatment according to the needs of the patient. The evaluation phase is outlined in detail and implications for treatment are briefly covered.

The use of monitoring and biofeedback modalities in the routine evaluation of patients is easy for psychologists to assimilate. We already use a variety of measures to make inferences about individuals behavior, emotional state and adaptive abilities associated with brain function in determining appropriate treatment. The measurements obtained using biopsychological techniques provide a very direct, objective, consistent, and interpretable source of data (Farris, 1978).

The biopsychosocial evaluation of an individual at this treatment level consists of a medical evaluation, psychometric evaluation, life history outline (Lazarus, 1981), psychophysiological evaluation, and focal evaluation of the chief complaint or target for treatment. The authors' style is to organize the data from the sources into a multimodal framework using the basic ID outline proposed by Lazarus (1981). The psychophysiological evaluation will be outlined below.

There are two parts to the psychophysiological evaluation. First is a psychophysiological survey conducted through interview (Smith, 1982). Second, the direct measurement of several psychophysiological parameters (EMG, Temperature, Skin Conductance Level) correlated with arousal of the autonomic nervous system is conducted. The psychophysiological survey is a careful, detailed review of organ systems that frequently respond to stress with dysfunction. Examples include: (1) Musculoskeletal System (tension headaches, lower back pain, temporal mandibular joint pain, facial tics and muscle twitches, pressing the tongue against the roof of the mouth and bruxism); (2) Cardiovascular System (high blood pressure, heart palpitations, cold hands, Raynaud's phenomena, migraine headaches); (3) Gastro-Intestinal System (ulcers, hyperacidity belching, indigestion, diarrhea, constipation, colitis); (4) Dermatological (sweaty palms, rashes) and (5) Respiratory (asthma, hyperventilation). Each positive response is explored historically and mapped with the usual behavioral indices of frequency, intensity, duration and situation of occurrence.

The measurement of physiological parameters is always done using multiple baselines and by monitoring several parameters while providing feedback on one or two. Muscle Tension (EMG), hand Temperature (Temp) and Skin Conductance level (SCL) are the triad routinely used. Heart Rate (HR) is also recommended if the equipment is available. When performing these measurements it is critical to control for habituation to the equipment and other extraneous variables.
before interpreting the data. The goals of the multiple physiological measures are: (1) to determine which, if any, systems are in excess of normal limits while the person is in a resting state and has habituated to the clinical environment; (2) to note which measures respond when the person undergoes stress; (3) to document which ones return to baseline within a nominal amount of time; and (4) which ones remain abnormally elevated following the stressor; (5) the individual's response to receiving feedback on a parameter (example, EMG) enables the therapist to see how much self-regulation the person can exert over the level of arousal with and without feedback; (6) perhaps the most important use in routine clinical cases is finding out what cognitive strategies the person used to approach the feedback situation and discriminating between the successful and unsuccessful strategies; and (7) finally, the therapist can systematically guide the person through cognitive, imagery or sensory exercises, noting the physiological response and gain data on the types of therapy approaches that may be employed with a higher chance of success.

The data from the psychophysiological survey and multiple baseline physiological measures are then correlated to draw a profile of the organ system or systems that respond to stress. One is selected as a means for the patient to monitor as an additional index of treatment progress (even if the psychophysiological problem is not part of the treatment target). Some of the advantages of this approach are: (1) objective and subjective measures of coping are obtained; (2) prevention of future chronic stress related illness is possible by training in techniques that prevent overstressing the sensitive organ system; (3) the person is probably aware of the hyper-reactive organ system but never related it to psychological factors (Lazarus 1977; Kremsdorff, Kochanowitz & Costell 1981; Carlson 1982); (4) Amiability to various treatment approaches can be assessed.

When this knowledge is combined with the usual data obtained by more traditional psychological evaluations and initial comprehensive treatment plan may be formulated and tailored to the patient's deficits and strengths. Continuous subjective and objective sources of data are available to determine progress in treatment which is obvious to both patient and therapist.

SUMMARY

This has been a review of the basic psychophysiological cycles that underlie the rationale for use of psychobiological techniques as evaluation tools, monitoring instruments and a means of providing treatment under the biopsychosocial framework of therapy. The psychophysiological techniques form the bridge over which the psychologist can enhance treatment within the biological sphere.
REFERENCES


TABLE 1

TREATMENTS INCORPORATING BIOFEEDBACK TECHNIQUES

Biofeedback is not a specialty field of medicine which stands alone. It is a tool to incorporate into a treatment regime from any field which can make use of the tool as part of an overall treatment.

Biofeedback is only the provision of information about the immediate status of a physiologic system to the patient. The rest of the treatment determines what is done in this information.

Feedback is effective only when recorded from a system functioning at other than optimal levels.

CLINICAL biofeedback is a developing field. Most of its uses are in early stages of evaluation but a number have been proven effective in many controlled studies and frequent clinical use.

Almost all techniques relating to stress control and stress induced physical problems use home relaxation exercises in conjunction with biofeedback.

BIOFEEDBACK PROVEN EFFECTIVE: Some of the problems for which biofeedback has been proven to be a major, effective part of the treatment in many well controlled studies and in heavy clinical use include:

1. Muscle tension headaches.
2. Relaxation of spastic muscles.
3. Retaining of muscle movement patterns.
4. Esophageal reflux & fecal incontinence.
5. Strengthening of flacid muscles with intact nerve connections.
7. General relaxation for anxiety in which a directly recordable system is not functioning at its optimal level.
8. Systematic desensitization.

BIOFEEDBACK HIGHLY LIKELY TO BE EFFECTIVE: Some of the problems for which the effectiveness of biofeedback has been frequently documented in the literature but for which few controlled studies have been carried out include:

1. Migraine headaches.
2. Raynaud's syndrome.
5. Reduction of chronic pain due to incorrect levels & patterns of tension.

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(Highly Likely cont)

7. Stuttering & excess vocal cord tension.
8. Stress labile essential hypertension.
10. Writer's cramp.
11. Cardiac arrhythmias.

SIOFEEDBACK POSSIBLY EFFECTIVE: Some problems for which the effectiveness of biofeedback has been reported in the literature but for which there are either no controlled studies or reports of effectiveness are mixed include:

1. Low back pain due to chronic muscle tension.
2. Epilepsy.
3. Cerebral palsy.
5. Dysmenorhea related to stress.
6. Tardive dyskinesia.
7. Skin & joint problems due to insufficient near surface blood flow (e.g. arthritis)
8. Diabetes.
9. Stump pain due to spasms.
10. Stress labile immune system problems.
11. Hyperhidrosis.
12. Subluxation of the patella.
PSYCHOPHYSIOLOGIC STRESS RESPONSES

Richard S. Sherman, Ph.D.
DDEAMC

1. Individualized Responses:

   Different people respond differently to the same stress physically as well as psychologically in:
   a. Magnitude of response.
   b. Systems primarily responding.

2. For Each Person:

   a. Different stresses cause different systems to respond.
   b. Each individual usually has a primary system which is most labile in its responses to stress. This is the system in which psychosomatic disease is most likely to appear.

HOW PSYCHOLOGIC STRESSORS AFFECT THE BODY
(NOT BEHAVIOR)

SHORT TERM

FIGHT OR FLIGHT RESPONSE
(SYMPATHETIC/PARASYMPATHETIC)

Changes in circulation, respiration, muscle tension, digestion, and most other systems.

CHRONIC

WEAKENED PHYSICAL SYSTEMS FROM SUSTAINED FIGHT OR FLIGHT

(blood vessels, disabled muscles, altered hormone balance, digestive probs, ulcers, etc.)

adrenal hypertrophy
lymphatic atrophy
weakened immune system
gastric ulceration
PART OF THE HOLMES LIFE CHANGE SCALE

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<tr>
<td>sex problems</td>
<td>39</td>
</tr>
<tr>
<td>mortgage over $50,000</td>
<td>30</td>
</tr>
<tr>
<td>inlaw problems</td>
<td>29</td>
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<tr>
<td>change in work hours</td>
<td>20</td>
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<tr>
<td>moving</td>
<td>20</td>
</tr>
<tr>
<td>vacation</td>
<td>13</td>
</tr>
</tbody>
</table>
Objective vs "Subjective" Systemic Responses to Stress

Psychophysiological Stress Responses - Levels of Complexity

[Diagram showing the relationship between stressor applied and patterns of systemic recovery over time, with basal levels of function compared to objective and subjective recovery.]
Figure 2

HOMEOSTATIC MODEL
OF STRESS / RELAXATION RESPONSE

LEVEL OF PHYSIOLOGIC FUNCTION AND STRESS

Abnormal Reaction to Stress Patient
Normal Reaction

Incorrect Idea: Proper Response to Stress

Incorrect Idea: Possible Results of Relaxation Training of Normal

Optimal Level of Resting Tension

TIME

SMALL ACUTE STRESS
LARGE ACUTE STRESS

start resolution start resolution
Figure 3

PSYCHOPHYSIOLOGIC PAIN CYCLES - LEVELS OF COMPLEXITY

A. SIMPLE MUSCULOSKELETAL STRESS RESPONDER:

STRESS → ANXIETY → INCREASED SUSTAINED MUSCLE TENSION → PAIN

(Frequently felt most in a weakened part of the body.)

B. MAGNIFICATION:

STRESS → ANXIETY → INCREASED MUSCLE TENSION → PAIN

from job, home, family, etc.

C. PSYCHOLOGICAL FACTORS:

direct

INCREASED SUSTAINED MUSCLE TENSION

PERCEIVED LEVEL OF PAIN

indirect

_CHANGE IN INTERPRETATION OF SENSATIONS FROM BENIGN TO PAINFUL

PAIN SENSITIVITY

PAIN AWARENESS
MUSCLE PAIN

MUSCLES CAN HURT AND BE RELAXED
E. G. - POST EXERCISE PAIN.

BLOOD VESSEL IRRITATION
VASCULAR INSUFFICIENCY
TENDON & LIGAMENT SWELLING OR STRETCHED

MAJOR CAUSES OF MUSCLE PAIN
1. REFLEX IRRITATIONS OF NERVE ROOTS OR
   TRAUMA CAUSING REFLEX SPASMS.
2. MUSCLE CRAMPS.
3. LESIONS OF THE CORTICOSPINAL PATHWAY
   RESULTING IN SPASTICITY.
4. DYSFUNCTION OF THE EXTRAPYRAMIDAL SYS-
   TEM CAUSING RIGIDITY OR DYSTONIA.

KNOTS IN MUSCLES

ACUTE OVERREACTIVITY (SORE AFTER EX-
ERCISE)

CHRONIC OVERREACTIVITY

INFLAMATION OF BLOOD VESSELS, ETC.

NOT ALL KNOTS DUE TO TENSE MUSCLES

<table>
<thead>
<tr>
<th>EMG LEVEL</th>
<th>SITUATION</th>
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<tbody>
<tr>
<td>↑</td>
<td>STRONG MUSCLE CONTRACTION</td>
</tr>
<tr>
<td>↓</td>
<td>MUSCLE STRETCHED TIGHT DUE TO POOR POSTURE</td>
</tr>
<tr>
<td>↓</td>
<td>MUSCLE SWOLLEN DUE TO CIRCULATION TRAUMA, ETC.</td>
</tr>
<tr>
<td>↓</td>
<td>CONTRACTURE (TIGHT CONNECTIVE TISSUE DUE TO CHRONIC OVERREACTIVITY DESTROYING MUSCLE FIBERS WHICH ARE REPLACED BY CONNECTIVE FIBERS. MUSCLES AND LIGAMENTS SHORTEN UP)</td>
</tr>
<tr>
<td>↓</td>
<td>FIBROSIS (MUSCLE FIBERS REPLACED BY FIBROUS CONNECTIVE TISSUES.)</td>
</tr>
</tbody>
</table>
MUSCLE TENSION RECOGNITION & RELAXATION TRAINING

The body normally contains the most sensitive mind-body feedback system in existence.

This training helps the subject make optimal use of this system.

1. TAPE RECORDED HOME EXERCISE:
   a. BASIS - Progressive muscle relaxation exercises developed by Jacobson in the 1930s in turn based on ancient techniques.

AIMS -
(1) Recognize how muscles feel when tense, relaxed, and the difference between these levels.
(2) Relax quickly when wish to.
(3) Recognize incorrect patterns of tension in the usual environment.
(4) Form habit of tensing only when appropriate and limit tension to optimal level for minimal period.

b. TECHNIQUE -
   Gently tense then relax major muscle groups one at a time while carefully noting differences in feelings produced by different levels of tension. 15 minute exercises usually done at least 2x per day.

2. ELECTROMYOGRAPHIC (EMG) FEEDBACK
   a. BASIS -
   Modern electronic recording techniques applied to ancient physical therapy muscle tension recognition methods.

b. AIMS -
(1) Learn to associate feelings from a muscle with actual tension in muscle.
(2) Provide instant knowledge of changing tension to permit development of optimal control strategies.
(3) Provide undeniable evidence of physiologic responses to environmental stimuli.
(4) Be able to recognize and correct inappropriate tension in usual environment.

c. TECHNIQUE -
(1) Surface EMG recording of muscles.
(2) Feedback of type optimal for specific problem and subject's preference.
(3) Frequency of sessions depends on problem. One "in laboratory" session per week is usual minimum.
TREATMENTS INCORPORATING BIOFEEDBACK TECHNIQUES

Biofeedback is not a special field of medicine which stands alone. It is a tool to incorporate into a treatment regime from any field which can make use of the tool as part of an overall treatment.

Biofeedback is only the provision of information about the immediate status of a physiologic system to the patient. The rest of the treatment determines what is done with this information.

Feedback is effective only when recorded from a system functioning at other than optimal levels.

CLINICAL biofeedback is a developing field. Most of its uses are in early stages of evaluation but a number have been proven effective in many controlled studies and frequent clinical use.

Almost all techniques relating to stress control and stress induced physical problems use home relaxation exercises in conjunction with biofeedback.

BIOFEEDBACK PROVEN EFFECTIVE: Some of the problems for which biofeedback has been proven to be a major, effective part of the treatment in many well controlled studies and in heavy clinical use include:

1. Muscle tension headaches.
2. Relaxation of spastic muscles.
3. Retraining of muscle movement patterns.
4. Esophageal reflux & fecal incontinence.
5. Strengthening of flaccid muscles with intact nerve connections.
7. General relaxation for anxiety in which a directly recordable system is not functioning at its optimal level.
8. Systematic desensitization.

BIOFEEDBACK HIGHLY LIKELY TO BE EFFECTIVE: Some of the problems for which the effectiveness of biofeedback has been frequently documented in the literature but for which few controlled studies have been carried out include:

1. Migraine headaches.
2. Raynaud's syndrome.
5. Reduction of chronic pain due to incorrect levels & patterns of tension.
7. Stuttering & excess vocal cord tension.
8. Stress liable essential hypertension.
10. Writer's cramp.
11. Cardiac arrhythmias.

CONTINUED
USES OF BIOFEEDBACK - CONTINUED

BIOFEEDBACK POSSIBLY EFFECTIVE: Some problems for which the effectiveness of biofeedback has been reported in the literature but for which there are either no controlled studies or reports of effectiveness are mixed include:

1. Low back pain due to chronic muscle tension.
2. Epilepsy.
3. Cerebral palsy.
5. Dysmenorrhea related to stress.
6. Tardive dyskinesia.
7. Skin & joint problems due to insufficient near surface blood flow (e.g. arthritis)
8. Diabetes.
9. Stump pain due to spasms.
10. Stress labile immune system problems.
11. Hyperhidrosis.
12. Subluxation of the patella.
THE ARMY PSYCHOLOGIST AS A MANAGER

E. R. Worthington, Ph.D.
LTC (Retired)

Planning: What Do You Want To Do?

1. Mission of the facility: Goals, strategies, policies.
2. Knowing applicable regulations.
3. Relationships with adjacent, subordinate and superior organizations.

Organizing: What Do You Need To Do It.

1. Clinical functions.
2. Consultation (educational) functions.
3. Research functions.
4. Staffing (manpower surveys).
5. Administrative functions.
6. Professional affiliations.
7. Special programs.
8. Volunteers.

Leading: How Do You Get It Done.

1. Personnel.
2. Administration.
3. Clinical/research.
4. In-service education.
5. How do you keep good people.
Controlling: How Do You Keep Everything Going.

1. Budgets.
2. Reports.
3. Meetings.
4. Superior - peer - subordinate relationships.
5. In-house research.
7. Policy manuals.
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THE APPLICATION OF GROUP DYNAMICS TO PREVENTIVE DENTISTRY

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Chief, Psychology Service
97th General Hospital
Frankfurt Army Regional Medical Center
APO New York 09757

The purpose of the present study is to examine the problem of oral disease in the military and attempts at solution. Traditional approaches have generally been either "chair-side" (one-on-one) or "in-mass" (large group instruction). More recent programs have recognized the importance of patients as human beings with needs requiring psychologically based prevention strategies. Examples of psychological approaches include transactional communication, behavior modification, and small group training programs. The Fort Hood Prevention Program is reviewed and serves to illustrate group training of preventive dentistry staff who transferred these newly acquired psychological skills in group dynamics to their own prevention clinic programs. Review of the literature suggests that small group programs might be most effective and efficient in meeting prevention goals of creating oral health awareness in dental patients and in providing the education and training needed for learning specific prevention techniques such as brushing and flossing. The chief advantages of the small group approach are reviewed. Implications and limitations of the study are also discussed.

INTRODUCTION

In its efforts to be more successful in helping patients attain and maintain oral health, the dental profession has begun looking to the behavioral sciences for help. Also, in the military, especially with its shortage of health care professionals, dentists have started focusing their attention on preventing oral disease in much the same way as we behavioral scientists have turned to a primary prevention model. Dentists seem to have discovered that findings from the social sciences, primarily psychology, can be applied to educate and motivate patients to greater oral health care procedures and behavior. For example, dentists are now working conjointly with psychologists in applying group procedures to train and motivate their patients (Durlak and Levine, 1975).

1This was the experience of the author who served for three years as the Psychology Consultant to the Preventive Dentistry Service and Dental Therapy Assistant Program at Fort Hood, Texas, 1975-77.
During the present author's consultation experience at Fort Hood, the main thrust of preventive dentistry efforts was to establish "high-trust, low-fear relationships" with patients. We attempted to accomplish this goal primarily through group procedures training using a variety of behavioral science methods including practical exercises in group dynamics, awareness training, experiential learning procedures, numerous discussions on human relations and helping, transactional analysis, and lectures on topics of interest to the Preventive Dentistry staff which attended monthly seminars. This group of about 10-15 members consisted of the Chief, Preventive Dentistry, the author, interested dentists from each clinic on post, who functioned as Preventive Dentistry Officer for their respective clinics, and certain Dental Residents. It also included a Public Health Dental Hygienist, hygienists from various clinics, and dental assistants who displayed an interest in studying and applying psychological theory to prevention. Not all members attended each session, but most came regularly.

Statement of the Problem

In Europe, military dentists face similar problems as those in CONUS. One Army dentist (Beesley, 1974) stated,

Our primary goal in the U.S. Military has been to acquaint patients with the proper use of dental floss. For the most part Americans know about the toothbrush, and do use it regularly—possibly incorrectly, but regularly. We attempt to have the patient see the use of the toothbrush in its proper light and to recognize floss as the primary tool in prevention. Those of you that are dealing with people that don’t even know what a toothbrush is have possibly a greater problem in creating a health awareness first. For decades in America, we have preached the usefulness of the toothbrush and, after a reevaluation of the shortcoming of this tool, are now having to reeducate patients.

The same dentist pointed out that preventive dentistry was receiving concentrated effort in the U.S. Army Europe and that "Our goal is to interest, to enlighten, to train, and to motivate people." He recognized that many dentists were concerned about their profession's difficulty in helping patients to change their habits in the direction of personal prevention and that simply telling patients how to achieve a healthy status was too frequently ineffective. However, he emphasized that dentists know that dental disease can be controlled.

2"We" refers to the present author and Colonel David E. Layman, D.D.S. and former Chief, Preventive Dentistry Service at Fort Hood, and Ms. Diana Christine Truxal, Public Health Dental Hygienist.

3One of the Dental Residents chose as his required research topic a transactional communication approach to preventive dentistry discussed later in this paper.
by the patient if the patient can be made aware of the problem, receive proper education and training, and become motivated towards oral health goals.

The problem, then, can be stated as follows: How can the dental profession accomplish its goal of creating oral health awareness as well as educating, training, and motivating its patients to action while at the same time trying to meet people's needs? The next chapter attempts to answer this question by presenting an overview of the Fort Hood Prevention Program with emphasis on the applicability of group sessions for training prevention staff and intervention with dental patients.

Limitations of the Study

The major limitation of this study is that theory and example are presented without statistical validation. That is, no formal method of evaluation was conducted in the group programs established at Fort Hood and no statistical procedure is entertained here. However, reference will be made to other programs which have utilized group approaches and preliminary results which are supportive of this proposed method of prevention training. Also, the theory of group dynamics for attitude and behavior change has been fairly well established in psychological research.

Another serious limitation of the study is that attitudes are difficult to measure whereas behavior is more amenable to quantification. To quantify behavior change in this area would undoubtedly require assistance from a member of the dental profession in addition to both a control and experimental group of patients. This was not attempted in the Fort Hood Program given as an illustration.

Finally, it is recognized that there is no "foolproof" system of prevention when dealing with patients. What works for some may not work for others. Some patients may not be amenable to group participation and certain dental personnel may not feel comfortable leading groups. Additionally, the high mobility of military personnel may contraindicate group programs for many. As an example, the Fort Hood Program essentially changed its structure after the Chief, Preventive Dentistry, was reassigned to another post.

Literature Review

Several novel approaches to preventive dentistry have been attempted by dentists and auxiliary personnel utilizing various psychological theories. For example, transactional analysis has been an especially good modality for assessing the doctor-patient relationship and for motivating the patient (Boulton, 1975). One of the Dental Residents attending the group training seminars at Fort Hood also expounded on the applicability of transactional analysis to preventive dentistry. Harris (1977) reviewed the major components of transactional communication (e.g., "Parent, Adult, and Child Ego States") and presented examples in dentistry with emphasis on complementary transactions in communication. For example, if the patient relates consistently on a "Child" to
"Parent" level, the dentist must respond in a parental fashion to teach the patient who is communicating in a child-like manner. Other types of transactions were also discussed with particular attention to communication as the "cornerstone" for patient's dental awareness. Equally important was the concept of "stroking" or giving recognition to the patient and treating him as an "okay" or worthwhile person, an essential goal of transactional communication.

Behavior modification has been another major approach to prevention. Christen (1977) stated:

We have yet to learn how to apply modern psychological knowledge to such common problems as convincing and teaching an individual to accept and apply proved techniques of disease prevention over long periods of his life time.

He cites the failure of a great majority of weight reducers to stay reduced as evidence of people's bondage to their habits and also points out the "low rates of cooperation or compliance with prescribed medical regimens in both preventive and curative situations." Christen's basic philosophy is:

Every patient deserves to know the cause of his dental diseases and how he can prevent them. However, once he is armed with this knowledge, the patient reserves the right to remain sick. Each patient is ultimately responsible for his or her own dental health.

A key work for him is "motivation" which he refers to as "the knowledge and will to act." Christen admits that one cannot motivate another person to do something. Instead, he suggests that "our job is to create an environment that will release this energy." Christen discusses human need systems as motivators of behavior and views motivation as an internal need and drive. In summary, the term "behavior modification" appears to be a slight misnomer as recognized by this Air Force dentist since it generally refers to operant conditioning methods whereas Christen "looks at the subject in terms of motivation and needs and attempts to synthesize various behavioral concepts." He acknowledged that "small group concepts have become popular lately in the military" but reminded group leaders to recognize individual differences in patient needs. He also mentioned the military's tendency to use "large" group instruction procedures by citing the 1919 Philippine National Guard's reported practice of teaching oral hygiene to 1000 men at a time on the parade field.

Beesley's (1974) review of military programs in Europe in the mid-seventies and his discussion of how to integrate prevention programs in general dental practice placed an emphasis on dealing with patients in small group sessions. He stated that,
We are not doing this because of an overload of patients, but because we feel we can deal more effectively with people in groups. This allows us to spend more time working with patients than if we were treating individuals. A 'group' consists of approximately six persons—not mass audiences. Depending on one's ability to work with people in group sessions, the size is variable.

Beesley also pointed out the feasibility of using group sessions in the preventive phase of treatment due to time constraints with the individual approach.

Durlak and Levine (1975) employed a group oral health program at the U.S. Army Hospital in Heidelberg, West Germany. "Systematic evaluation of the program over a five-month follow-up indicated that patients significantly improved their dental health." These changes were measured by "decreased gingival bleeding and reduction of pocket depth measurements." They concluded by suggesting that others consider similar group programs to train and motivate patients in oral health care. They suggested that the group training format produces a more favorable climate for learning by reducing anxiety. They also referenced the positive benefits of social group norms and active group participation on attitudinal and behavioral change. These group leaders combined group dynamics with modeling procedures and positive reinforcement to bring about the desired results in their dental patients.

Matarazzo's (1982) article entitled "Behavioral Health's Challenge to Academic, Scientific, and Professional Psychology" lists the "poor practice of dental hygiene" as one area where psychology can focus its resources to help individual Americans learn to use dental floss. His review of intervention programs (for individuals at risk for heart disease due to poor diet, smoking, and insufficient exercise) reflected that group discussion combined with nutrition education was the most effective format for promoting behavior change. The same findings appear to hold true for preventive dentistry when practiced in small group settings.

Group Dynamics

Group dynamics may be defined as the forces in the group situation which are determining the behavior of the group and its members. The term also relates to an area of research in the social sciences. Group dynamics generally refers to a variety of forces. For example, it includes motivations of the members for being in the groups, relationships among members, status problems, hierarchies in the group, methods of communication, and similar group variables.

4 This definition was taken from "Selected Reading Series: Group Development" (National Training Laboratories, National Education Association), 1961.
Each group will always have its own set of dynamics, its own pattern of forces, which produce effects on its members, e.g., reduced anxiety and pressure to achieve greater productivity in high-cohesive groups. Perhaps the greatest impact of group dynamics for the purpose of this report, however, is the "pressure to uniformity." This refers mainly to a tendency for each group member to change his or her opinion and behavior to conform with other members. This pressure to conform is highest where satisfaction from group membership is high, where cohesiveness is great, and where conformity is vital for group survival (Jones and Gerard, 1967, pp. 611-17). These forces, when applied correctly, can be instrumental in effective group prevention programs as indicated earlier in the literature review.

Some other potential benefits of group versus individual prevention programs may also stem from group dynamics. These include the tendency for the group to become sensitive and supportive of the needs of its members; the greater acceptance of prevention goals when an individual participates in setting goals and determining methods for reaching them; the greater openness of expression as part of a group; and the greater trust in one another and encouragement to grow and improve in oral health care.

A recent survey of motivational research applicable in the military environment (Macedonia, 1978, pp. 50-74) suggests that for successful task performance, a person must first perceive he has the ability to perform that task and, secondly, that performing the task will lead to some reward. This same review makes the following conclusion about groups:

For the Army, groups serve as mechanisms for communication. They provide structure through which objectives can be accomplished. For the soldier, groups provide identities, security, and meanings which serve as guidelines for the behavior expected.

In summary, this review of research agrees that to perform a task successfully, like preventive dentistry, the individual must believe he has the ability to affect his oral health status and likewise be concerned enough to perform the required behaviors. It is the present author's contention that small group prevention programs provide the most desirable climate and structure necessary to teach patients about the oral disease process, and to show them they indeed have the ability to arrest any disease currently in their mouths, and to prevent future oral disease, if properly motivated.

An example of the application of group dynamics to an installation prevention program is presented next. Please note that the application is primarily with preventive dentistry staff who subsequently transferred this training to their own group prevention clinic programs.
AN APPLICATION OF GROUP DYNAMICS: DESCRIPTION
OF THE FORT HOOD PREVENTION PROGRAM

Initial Contact

The Fort Hood "Psychological Consultation in Preventive Dentistry Program" began in 1975 when the Chief, Preventive Dentistry, contacted the Mental Hygiene Consultation Service requesting assistance from the behavioral sciences with the development of his program. The present author was chosen to help because of his interest and professional experiences in community and organizational consultation. The Chief, Preventive Dentistry, had previously been on military assignment in Germany where, for approximately three years, he had reportedly called upon the consultation services of military clinical psychologists, similar to that employed at Fort Hood.

First Phase

The first exposure of the author to prevention services at Fort Hood was a small group meeting of selected dentists, hygienists, and the Chief, Preventive Dentistry. At this meeting, the author became aware himself, for the first time, of the importance of individual responsibility of the dental patient in preventive oral health care. Also discussed were prevention goals and how behavioral science principles can help facilitate attainment of these objectives. Basically, the goal of Preventive Dentistry was defined by the Chief as "preventing oral disease." Equally important to the military, he stressed "lost duty time" of soldiers and the "high cost of treatment." The primary goal of prevention was looked at in terms of (a) fostering health awareness; (b) educating patients in the oral disease process; (c) instilling patient motivation for change, and (d) training patients in specific techniques of prevention, e.g., brushing and flossing procedures. An overview of Army prevention programs was also presented by the Chief and was contrasted with the general dental and prevention programs at Fort Hood.

Second Phase

The second step of psychological consultation was an assessment of the then current prevention program operational on the installation. This program consisted of a centralized Oral Disease Control Facility (ODCF) where nearly all newly arrived soldiers were required to attend a rather large group, one hour orientation class on preventive concepts. This class was also a prerequisite to obtaining general dental services for most dental patients on post. The other type of prevention activity was decentralized and involved individual patient education "chair-side" by staff members who had an interest in preventive dentistry. The psychologist's role at this time was to observe the various parts of the total program and to offer suggestions for improvements.

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5This program was presented by the present author at the Current Trends in AMEDD Psychology Conference, held 8–12 November 1976, San Antonio, Texas.
Third Phase

After having attended the ODCF class, the author constructed a flow diagram (no longer available or applicable) of the dental care delivery system at Fort Hood based on observations and informal discussions with random dental patients and health care providers. The flow diagram included prevention goals and ideas to motivate both patients and staff towards greater prevention efforts with in the structure. These ideas included small group clinic programs and follow-up procedures. The ODCF was felt by the consultant to have certain advantages in reaching a larger number of patients than could be attained at the dental chair alone. However, the ODCF was equally (if not more so) disadvantageous in "turning off" patients by "talking down" to them and through forced participation or coercion as a prerequisite to treatment. The psychologist's observations were relayed back to the Chief, Preventive Dentistry and his staff in a general feedback session. Recommendations for changing certain ODCF aversive tactics were also discussed. Emphasis was placed on positive reinforcement and patient attitude.

The Public Health Dental Hygienist (Truxal, 1976) presented a similar portrait of the ODCF's disadvantages as follows:

We had large mouths with the words 'Oral Disease Control Facility' painted on them and directional arrows pointed the way to the building. We were in a hard-to-find location....maps of the area were also passed out during in-processing at the Replacement Centers. People were referred to us by two methods: either by replacement companies as they in-processed, or by the individual's dental clinic. They were just told to report to the building with the big pink mouths all over it. The outside of the building was rather unattractive....we had long tables with banks of lights and mirrors. We could seat 72 people at one time. We used several televisions to show our taped program and did a lot of walking around and projecting the rest of the time. It was not a very personal program....printed brushing and flossing instructions were handed out for better retention after class....

This hygienist goes on to say how the program was changed to small group instruction classes.

Fourth Phase

Following the initial contact, psychological assessment, and feedback session, the author began to employ group dynamics in monthly small group consultation seminars (10-15 members) which would hopefully provide the group members with information and serve as a model for their own prevention clinic programs. Consultation topics for the group included human relations training, goal setting, group dynamics, transactional analysis, role playing the doctor-
patient relationship, learning theories, attitude change, behavior modification, and other issues of concern to the group such as how to "break the ice" when starting a group. Frequent interim meetings of the consultant with the Chief and Public Health Dental Hygienist were conducted for continued reassessment of objectives, growth of the program, and direction setting for future group meetings.

Results and Discussion

No formal method of evaluation was attempted and the group seminars were finally discontinued in 1977 when the Chief, Preventive Dentistry, was assigned to another post. However, comments from the prevention staff and other dental personnel were highly favorable. They seemed to view the author (and behavioral sciences in general) as the authority on attitude change and patient motivation which are essential for long-term prevention of dental disease. Preventive Dentistry staff members were, in effect, trained vis-a-vis group procedures to become "psychological consultants" to their respective clinics and subsequently began to conduct small group training programs of their own.

One major change that took place was the closing of the ODCF. This mandatory class received innumerable complaints from irate patients, especially dependents and senior military personnel, who resented being "put down" as expressed to the consultant during his assessment interviews. Rather than attend the class, they would often elect to avoid the dental office except in emergencies, e.g., acute dental pain. Consequently, instead of preventing dental problems, the ODCF appeared to be resulting in the opposite effect for many people. The author was not directly responsible for this change, but he did make suggestions to reduce patient hostility and to increase patient motivation for further "small group" prevention instruction and training.

In summary, dentists at Fort Hood discovered that psychological theory can be a real asset to them especially in small groups with respect to techniques of "personal prevention". They not only experienced first hand what it was like to be in a prevention group but developed the skills to return to their clinics (with only a few exceptions) and implement small group prevention programs for their patients.

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary

The purpose of the present study was to examine the problem of oral disease in the military and attempts at solution. Traditional approaches have generally been either "chair-side" (one-on-one) or "in-mass" (large group instructions). More recent programs have recognized the importance of patients as human beings with needs requiring psychologically based prevention strategies for more effective treatment. Examples of psychological approaches include transactional communication, behavior modification, and small group training programs. The Fort Hood Prevention Program was reviewed and served to illustrate group training of
preventive dentistry staff who transferred these newly acquired psychological skills in group dynamics to their own prevention clinic programs.

Conclusions

Review of the literature suggests that small group programs might be most effective and efficient in meeting prevention goals of creating health awareness in dental patients and providing the education and training needed for learning specific prevention techniques such as brushing and flossing properly. The chief advantage of the small group approach results from group dynamics which produces pressures toward conformity to oral health goals. Group experiences are also more likely to produce internalization of values necessary for lasting behavior change or change in personal dental habits. These increase the patient's involvement in the responsibility for his or her own oral health.

Implications

Not all dental patients or staff are suitable for small group prevention approaches because of individual differences in personality, training, needs, or other variables. Also the nature of military mobility may occasionally limit application or permanence of this method. However, when properly applied by dental personnel familiar with psychological theory, group prevention programs have proven to be effective in changing patient behavior. The application of group dynamics to preventive dentistry is likely to result in greater cost-effective dental health care by getting the patient more involved in his or her treatment. This group participation is more likely to bring about desired changes in patient attitude and behavior for improved oral health.
REFERENCES


FOOD AND CHEMICAL SENSITIVITY IN EMOTIONAL DISTURBANCES

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Clinical Psychology Service
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Those of us who work in the mental health profession have generally had occasion to have as patients a number of individuals whose symptom picture did not appear to fit with what we have come to expect or did not follow the predicted course in treatment. This appears to be particularly true of that population of patients that have been referred by physicians after exhaustive medical tests have not found any identifiable disease. Not infrequently, these individuals present themselves with a lengthy medical history with a variety of symptoms in a variety of organ systems. Some of them may actually carry diagnoses of chronic illnesses that appear unrelated to the complex of emotional symptoms that may have them at your door.

This presentation is intended to provide you with a general exposure to the field of clinical ecology and how important it is for mental health professionals to know how diseases known collectively as environmental illness can adversely affect the psychological functioning of humans. The field of clinical ecology is largely the result of the work of a physician named Theron G. Randolph who came to believe, after working with a number of patients for whom traditional medical approaches failed to produce improvement in their chronic illnesses, that viewing the body as an autonomous biosystem was not adequate. He began to study the effects of various external agents on the bodies of many of his patients. This study resulted in his taking a broad view of allergy and using allergic responses as a model for understanding and treating many of the chronic diseases that affect our population.

According to Dr. Alan Lewin (1981), a medical researcher in immunology in San Francisco, many, if not most, chronic diseases, including some forms of psychopathology, have at their roots some form of immunologic system dysfunction. According to Dr. Lewin, the body has two basic systems that are designed to fight invasion from outside agents -- the thymico-lymphatic system and the endocrine system. The thymico-lymphatic system includes the immune and inflammatory responses and is of primary interest to psychologists.

A simplistic analogy using a military model will serve to illustrate the process the body goes through to respond to the presence of the alien body. An antigen (the alien) is detected by the scouts of the immune army which are...
called T-cells. They report the enemy action, and the generals send battle instructions to the platoon leaders known as B-cells. The platoon leaders produce infantry (which consist of antibodies or immunoglobulins). These antibodies do the actual fighting for the immune army. If the battle is not going well -- if they seem to be losing or need some help -- a call may go out for the atomic bomb of the immune system. This agent works by blasting a hole in the cell so that the destructive enzymes will leak out allowing the body to clear the antigen. This process is carried out many times in relatively brief periods in a normal system. However, one of the problems with this system is that the T-cells are highly susceptible to all sorts of stress on the organism. As the stress load on the organism builds, the T-cells population decreases which leaves the B-cells alone to metabolize with antigens indiscriminately. This process is then likely to set off a chain reaction that leads to the immune system going out of control and attacking normal cells as well as aliens.

Associated with the activities of the T-cells and the B-cells is the inflammatory response. Here the body sends certain hormones to the site of the invasion which concentrate blood flow in order to "wash" away the offending substances. The histamines are the immune system's inflammatory agent, and they mediate much of the common inflammation responses associated with allergy. The kinines are another group of hormones that mediate inflammation but are not necessarily associated with the histamine system and are often associated with pain symptoms. They naturally do not respond to antihistamine medications nor do symptoms mediated by them show up in typical skin tests for allergies. In the traditional view of allergic responses, the symptoms are considered largely to be a nuisance and involve sinus congestion, rashes and watery eyes. However, as we shall see later in this paper, this is a very narrow view of allergy and the potential allergic-like reactions can have a psychological functioning. The important thing to remember at this point is that the most effective method of treating this disease is through environmental control rather than through pharmaceuticals.

SYMPTOMS

MUSCLES: Tightness, stiffness, aching, especially tension in the neck, back, and lower extremities.

JOINTS: Swelling, redness, stiffness, aching and sensation of warmth.

LUNGS: Coughing, sneezing, reduced airflow, retraction, feeling of heaviness or tightness, hyperventilation, shallow or rapid breathing.

HEART: Rapid or slowed pulse or heartbeat, violent or throbbing pulse, chest pain.

GENITOURINARY SYSTEM: Frequent urination or urge to void, feeling of urgency or pressure, painful or difficult urination, recurrent infection, genital itch.
GASTROINTESTINAL SYSTEM: Belching, nausea, vomiting, full, bloated feeling, pain, cramps, flatus, gas rumbling, diarrhea, constipation, excessive or lack of hunger or thirst, hyperactivity, gall bladder symptoms.

SKIN: Local or general itching, moist skin, sweating, flushing, hives, rashes, pallor, white or gray tones, easy bruising.

THROAT, LARYNX AND SPEECH: Itching, sore, tight, swollen throat, difficulty in swallowing, choking, excessive salivation and/or mucous, bad metallic taste, hoarseness, tic or fuzzy speech, stuttering or stammering, inability to express what one wishes, inability to control word sequence, or reversal of words, slow and difficult coordination of speech.

FACE, NECK AND HEAD: Headache, migraine, tightness, pressure, throbbing or stabbing pain, burning, tingling sensations, tics, temporary paralysis, stiff neck, head retraction.

NOSE & SMELL: Sneezing, urge to sneeze, itching, discharge, stuffy feeling, obstruction, post-nasal drip, sinus discomfort, hypersensitivity to odors or inability to distinguish between odors.

AUDITORY: Itching, sensation of fullness or blocking, earache, reddening of ears, hearing louder or softer than reality, sensation of air rushing in ears, deafness, ringing, tinking or buzzing sounds in the ear, and abnormal sensitivity to sound.

VISUAL: Ocular muscle incoordination or paralysis, inability to direct optic axes to same object, pupil changes, itching, burning, pain, heavy feeling, drooping upper eyelid, dark circles under eyes, seeing larger or smaller than reality, tearing, blind spots, blurred vision, temporarily dimmed vision, sensitivity to light, inability to see in dark, visual hallucinations.

CENTRAL NERVOUS SYSTEM: Partial or total paralysis, epilepsy, convulsions, dizziness, lightheadedness, fainting, partial blackouts, unconsciousness, vertigo, sensation of imbalance, inability to read or understand words, jumbling of words drowsiness, yawning attacks, extended deep sleep, insomnia, nightmares, fatigue, neurasthenia, lack of concentration, poor attention span, lowered mentality, unhappiness, sulkiness, depression, suicidal thoughts, agitation, hostility, excitability, talkativeness, unreasonableness, erratic behavior, indecisiveness, irresponsible behavior, tense-ness, irritability, explosiveness, and phobias. (O'Banion, 1979).
The above listing of symptoms that have been associated with allergic reactions to environmental antigens just begins to give one a view of the possible pervasiveness of the disorder. It has been my experience that most patients who have environmental illness have many, if not most, of the symptoms listed above at different points in time. The explanation of the complex physiological processes that underlie the symptom picture is beyond the scope of this paper. What follows is a number of descriptions of cases that have been reported by others (O'Banion, 1979; Philpott, 1976) or treated in my own practice that illustrate how an understanding of clinical ecology can increase your flexibility and efficacy in treating patients with emotional problems.

A study described by O'Banion (1979) involved a videotaped demonstration of the effects foods had on the behavior of a 16 year old male. This young man had a history of severe difficulties in school which included both learning disabilities and conduct disorders. He had been removed from several schools because of his aggressiveness and violent outbursts. He was placed on a closely supervised fast for five days and tested on a variety of foods and chemicals for signs of sensitivities. After discovering some of the food antigens an arrangement was made to videotape the changes in his behavior after exposure to some of the offending foods, in this case. Initially, the patient was tested using parts of the WAIS and Draw-A-Person. He was demonstrated to be an attractive young male who was very cooperative and cheerful throughout his initial testing.

The patient was then exposed to a plate full of oranges which he promptly ate. Following the ingestion of the oranges, the examiner attempted to continue with some interviewing and further testing. A clock on the wall above the examiner and the patient marked the passage of time as changes in the patient's behavior began to manifest themselves. His posture began to change within about ten minutes of the ingestion. This change reflected an attitude of defiance and haughtiness as opposed to the cooperative and interested attitude of a few minutes earlier. The symptoms then began to progress quite rapidly for the next forty-five minutes. In attempting to get the patient to repeat the digit symbol subtest of the WAIS, the examiner met with considerable resistance. The patient manifested impulsivity and carelessness in attempting the task and finally took the test paper and threw them at the examiner. His performance on this task was markedly impaired with the symbols failing to stay within the confines of the boxes and numerous reversals. He began to experience feeling very warm and proceeded to begin removing his clothes and pace about the room in a manic fashion. He demanded a variety of things to eat and then began to manifest dramatic mood swings. At one point during the middle of the sequence, he began sobbing profusely and fell to the floor; he remained there motionless for ten minutes before another wave of manic-like activity resumed. In all, two hours elapsed between the eating of the three oranges and his return to his original state. He was shown a video tape of the entire sequence to which he expressed amazement for he was amnesic for all of the events following the ingestion of the oranges. This patient was subsequently found to have aggression and violence as a consequence of ingesting honey.
A case from my own files illustrates the seriousness a cerebral allergic reaction can have on an individual's ability to function. When she was first seen, she was an eighteen year old daughter of a retired NCO who had been diagnosed as having a seizure disorder. The medication that she was taking was not controlling the rather unusual seizures nor was it having any effect upon her other symptoms which included severe headaches, dyslexia, dizziness, temporary paralysis, blurred vision and hyperirritability. In spite of a variety of psychotherapeutic interventions with her and her family, her condition continued to deteriorate. The neurological symptoms became so severe that a partial neuropsychological assessment was given. She had wide variation in her WAIS subtest performance and scored in the brain impaired range of the Wechsler Memory for Designs, and Bender-Gestalt and the Categories Test of the Halstead-Reitan. Additionally, she manifested aphasic symptoms and had an abnormal MMPI with a spike on scale 8. This resulted in a referral to a nearby medical center for a complete neuropsychological assessment. Three weeks after the first testing, she scored in the superior range on all of the measures. This led to considerable consternation and questioning of the parents. It was then that I learned that she had been drinking products containing caffeine since her first grade teacher gave her Coke to "calm her down". In recent years, her Mother had attempted to cut down the consumption of Cokes in their home; but she had been so upset and nervous about the impending assessment that the Mother had taken two six packs of Coke on the trip with them. At this point, the patient and her parents were encouraged to try the five day fast and avoidance of all sources of caffeine. After some initial withdrawal symptoms, the patient showed marked improvement in both frequency and severity of seizures and headaches. Her violent temper outbursts dropped out completely, and she reported improvement in her vision, ability to read and thinking in general. She became involved in investigating her food sensitivities and keeping track of the effects of different foods.

In another case of a 28 year old married woman who had been working as a nurse for several years, the seriousness of environmental illness is illustrated further. At the time she was initially seen in my practice, she was sixty pounds overweight and desirous of getting involved in a weight control program. She had a history of severe depression, chronic GI tract disturbances and severe edema. In describing her attempts to lose weight, she indicated having little difficulty following the diet for the first day or two. Following this, she would begin to experience severe cravings for specific foods, headaches, nausea, stomach pain and heightened emotionality. She was given the environmental illness symptom questionnaire which indicated that she had over eighty percent of the symptoms listed. An attempt was made to have her fast for five days in order to clear out her system, but she was unable to endure the cravings and other withdrawal symptoms. An elimination diet was also attempted, but this failed to turn up any suspect foods, so she was referred to the ecology unit at Brookhaven Medical Center in Dallas, Texas. There she was discovered to have primary sensitivity to a number of chemicals including phenol and antiseptics and to some foods including corn and yeast. Over the next two-and one-half years she continued to take desensitization injections and attempt to control her environment. She eventually received 100% disability from Social Security because of her environmental illness. She is now back to work in a hospital and has lost 60 pounds and is having no further episodes of depression.
In a recent case involving a 36 year old Army Major, considerable emotional turmoil in his life was discovered to be the result of food allergies. His history involved a lot of achievement and acceptance of pressure positions. About four years earlier, he had begun to experience signs of what he interpreted as being symptoms of stress. He began to feel irritable, depressed and generally dissatisfied with his life. This chronic dissatisfaction had begun to interfere in his marital life, and he and his wife separated. During the next year, his depression grew worse and worse until he sought out psychotherapy and medication. After being on anti-depressant medication for several months, the depression began to lift, and he was taken off the medication prior to reuniting with his family. After leaving a Army school assignment to attend the Defense Language Institute, he began to have some of the anxiety and depression-like symptoms that had characterized the previously two years. Afraid of another bout of depression, he came in for treatment. In taking his history and exploring his cognitive style, it was determined that he might be a candidate for evaluation of environmental illness. He responded in the critical direction to the majority of environmental illness. He responded in the critical direction to the majority of symptoms on the symptom checklist and was instructed on the "Caveman's Diet" (Lewin, 1981) which involves removing all foods from the diet containing any derivative of corn, wheat, dairy products, refined sugar and alcohol. Within two weeks of carefully following this diet, the feelings of anxiety and depression had left him. Additionally, his sinuses had largely cleared, he had not had any headaches and felt more energetic than he had in many years. To test the culpability of some of the foods, he began challenging himself on one new food at a time. The first time he ate some bacon, within one hour he began to have a recurrence of some of the anxiety and depression along with mental confusion and irritability. A second exposure to boiled pork chops produced the same sequence of symptoms. On both exposures to pork, the symptoms gradually built-up for several hours and took about three days to clear completely. Since gaining control of his diet, he has not experienced any depression or anxiety not associated with a food exposure and he is doing very well in school and with his family.

In looking into the possible involvement of allergies or sensitivities in the symptom picture of a patient at a mental health facility, it is important to note that the usual picture does not involve immediate reactions following the ingestion of the offending substance. Typically, what occurs is very similar to the development of an addiction to a drug such as heroin. That is, the patient begins to develop a sensitivity to a substance or is born with this sensitivity. When exposed for the first few times, the patient is likely to have a somewhat immediate reaction; however, with repeated exposures, the body begins to develop a tolerance for the substance and the individual cells adapt to the presence of it. At this point, the patient is no longer symptomatic to this substance unless it is withdrawn from the body's environment. When this occurs, the body reacts by increasing cellular sensitivity to the substance which results in withdrawal symptoms. Unfortunately, what makes the identification of the offending substances even more difficult is the masking effect wherein one allergin can make-up for the withdrawal of another substance. This accounts for the cravings that people get for certain foods when being withdrawn from another allergin (Lewin, 1981). A few addictions would, in most cases, go unnoticed;
however, each of these required adaptations by the body result in an increased stress load on the entire system and reduce the body's ability to defend itself to other stressors. Usually, the full manifestation of the clinically significant symptom pictures follows a major trauma to the body such as a disease, injury or psychological stress. According to Dr. Lewin, the most significant index of the likelihood of environmental illness is the acquired intolerance for alcohol.

The cases that were presented earlier illustrate some of the more severe presenting problems that patients have that have been demonstrated to be related to allergy or sensitivity to foods, chemicals and inhalants. Other types of problems that have been associated with allergies include such things as hyperactivity in children and restlessness or anxiety in adults. Enuresis, especially in older children, has been found in my clinical practice to be the result of food allergies and has been some types of learning disabilities. Psychotic-like symptoms such as paranoid feelings and visual hallucinations as well as blackout periods have also been found to respond favorably to dietary and environmental control. Additionally, among the agoraphobic patients that I have treated in the last few years, a large proportion of them have been found to have significant allergic involvement in their symptom picture.

A growing body of physicians are becoming convinced of the importance of further research in the connection between immunologic system dysfunction and emotional disorders. Recently, Sugarman, Southern and Curran (1982) reported on an extensive investigation of the incidence of antibodies in adult alcoholics, depressives, schizophrenics and normals. The results indicated that these clinical populations had significantly more specific antibodies to certain foods (notably eggs and dairy products) and perennial molds than did controls. The investigators were surprised to find that the depressives had the largest number of specific antibodies of the four groups. They urge further investigation to determine what, if any, causative factors might exist between mental disorders and allergies. Until this research is competently conducted, we, as mental health practitioners should include a through review of the physiological and psychological symptoms that characterize the individual with environmental illness and refer those patients exhibiting a significant number of these symptoms to the sympathetic immunologist or direct them to some of the lay publications that describe techniques for self-diagnosis and self-management.
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In recent years a number of computer techniques have been developed to assist the clinical psychologist. Computers can be used to: administer, score and interpret tests; to file, store and sort information; to print forms; to maintain therapy case records; to aid in clinical decisions; to conduct an interview; to schedule clients, therapists, equipment, and facilities; to recommend psychotropic medications; to predict such things as suicide risk, commitment to therapy, and therapy length; to conduct therapy; to perform statistical analyses; and to serve as a word processor. A major portion of the paper is devoted to the advantages and disadvantages of the use of a computer for these applications. A brief history of computer developments relevant to clinical psychology is followed by a discussion of current research and potential uses. Estimates of the cost of various systems and the monetary benefits of such systems are presented with a particular emphasis on the current Army situation. An investigation of available systems is proposed.

INTRODUCTION

The purpose of this paper is to discuss how computer technology can be used to assist the Army clinical psychologist (68S). Like their civilian mental health counterpart, the 68Ss are in short supply compared to the demands made for their services. Computer technology may offer a means of increasing the psychologist's productivity. Psychologists cannot treat all the people referred to them. Computer systems can perform many of the administrative tasks as well as some clerical and clinical tasks which should leave the mental health professional more time for personal treatment of clients.

Computer systems can aid mental health professionals by performing such tasks as administering, scoring and interpreting tests; storing, filing and sorting information; printing information on to forms; maintaining therapy case records; aiding in clinical decisions; conducting interviews, scheduling clients, therapists, equipment and facilities; recommending psychotropic medications; predicting such things as suicide risk, commitment to therapy, and therapy length; conducting therapy; performing statistical analyses; and serving as a word processor. Each of these will be discussed in the benefits section.
The Minnesota Multiphasic Personality Inventory (MMPI) is one of the most widely used personality inventories. Thousands of research articles have been published about this test. It is one of the most important tests the mental health profession has available. A standard administration yields scores on 14 scales, but over 200 scales have been developed (1a).

The first operational scoring system for the MMPI was developed at the Mayo Clinic in 1962. This system used the computer to score the test and to produce a rather primitive interpretation. Roche Psychiatric Service Institute offered a national, commercially available computerized MMPI interpretation in 1966. By 1972, Fowler found seven commercially available MMPI interpretation systems (1b). Early systems mimicked human scoring. The next step was to develop tests that could take advantage of the tremendous memory and storage capabilities of the computer. The computer could be programmed to match the client's scale configuration with the data from the thousands of studies performed to produce sophisticated interpretive statements. In addition, such things as response latencies for each item could be obtained. Significant variations in latency could be automatically identified. Adaptive testing—sometimes referred to as tailored testing or dynamic testing—attempts to increase the efficiency of a test by administering a portion of the test questions. Not all items are equally effective in attaining the test's purpose. One method of making the test more efficient by reducing the number of items involves taking a sample of items and then focusing on areas in which there appears to be a problem.

Completely new tests such as the Computerized Visual Searching Task (CVST) to detect brain damage have been developed (2). Other tests are being developed to take advantage of the capabilities of the modern digital computer. Tests infrequently used because of the computations required such as Kelly's role construct are now manageable with computer assistance. Because data are easily gathered and statistically evaluated, it is likely that both criteria scores as well as the predictive statements that can be made from those scores will be more exact. In the more distant future, each psychologist may have his own software package, which is based on the standard package, but adapted to fit his/her own needs and modified by his/her clinical experience.

Clinically oriented computer systems are relatively new. For example, the prototype system developed by Salt Lake City Veterans Administration Medical Center (SLCVAMC) was begun in 1972. The SLCVAMC system was the first implementation of the automated, interactive, psychological assessment in an actual clinical environment. This project has shown that such a system as distinct advantages (such as savings in manpower and improvements in data availability), and has set the standard for current work in this area (2). In accordance with the "Veterans' Administration and Department of Defense Health Resources Sharing and Emergency Operations Act" (Public Law 97-174), software (the programs or sets of information the computer is told to carry out) is available to the Army at low or no cost. The Army can profit from the experiences of the Veterans Administration in developing computer systems. Considerable development still is necessary to evaluate the benefits of current computer systems, and to modify these systems to meet specific Army needs. Some effort will be necessary to adjust the criteria scores and interpretative statements for the Army popula-
tion. Once the adjustments have been made to the computer system, a site could be selected where the computer system could be compared with the standard paper and pencil system. Finally, cost-benefit analyses could be done.

**BENEFITS**

Many benefits are associated with mental health computer systems. Computers can be used to administer, score and interpret tests and questionnaires(3). Appendix A lists 61 of the tests and questionnaires available on the VA systems. With the computer providing administration, scoring, and a rough interpretation, much of the time of the GBS and the behavioral science specialists (91G) could be used for other tasks such as individual or group treatment. Studies indicate that from one-half to two-thirds of the staff time in assessment can be eliminated with the use of a computer system(4,5,6). One system takes five hours of client time for a full psychological battery and produces an automated report on the same day(4). An important concern is what percentage of the client population can be tested on the computer. Several reports indicate that from 80% to 95% of various client populations are able to be tested using the computer(2,3). It appears that most of those not testable with the computer were also not testable using traditional paper and pencil techniques. The computer system used by the VA includes a five-minute instruction package which teaches the client what to do and assesses whether the client has performed the learning tasks well enough to begin testing(7). The computer is much more reliable than manual methods in providing standard test administration and in scoring tests. The computer also eliminates problems of unscorable test answer sheets. For example, if a person forgets to record the answer to one item, it may be difficult to detect this or correctly score the test. Humans often make mistakes counting items, while this is a very rare happening for computers. The interpretations the computer generates are not intended as a final report. These interpretations have to be reviewed by a trained professional who would delete inappropriate statements, modify or add statements based on data from other sources including clinical judgment. The computer results should not be considered valid unless signed by a trained professional. In fact, a statement should appear on each computer generated interpretation stating that these are preliminary interpretations which are not valid unless signed by an authorized professional.

The use of interpretative scoring systems is a contentious area. The evidence seems to favor those who advocate their use(3,5,6,28). Computer programs can be written based on the judgments or decision rules of some of the best clinicians in a particular area. Programs usually can do as good or better than acknowledged experts. Unlike the clinician who is having a bad day, the computer is very consistent. The computer can be said to have an almost perfect reliability in that the same conclusion should always be reached with the same data. This certainly cannot be said for the human clinician. The data base for which the program interpretive algorithms are determined are often based on more clients than most clinicians will see. Just as new clinicians can be taught rules for interpreting tests; likewise, these same rules can be programmed into the computer. The program helps to focus on the logical structure and exact
meaning of interpretation rules since the programs demand exact, explicit statements. Because the rules now are explicit, they can be scientifically evaluated. The computer also can handle much more data than a human. The computer can check against a number of criteria when producing interpretations. There is such a vast literature on such tests as the MMPI that very few clinicians can claim to use all the relevant data or literature when interpretations are being made (28). The weakness of the computer is that it will only do what it has been programmed to do. Therefore, there may be some data element or pattern of data not included in the interpretation rules that the expert clinician may be able to detect. As stated previously, the clinician remains totally responsible for the interpretation in the proposed system.

In gathering data through the use of interviews, one of the largest sources of variance aside from the person being interviewed is the interviewer. Interviewers commonly forget to ask questions, ask the questions in different ways to different people, record answers incorrectly or fail to follow standard procedures. Rather than dehumanizing the interview, many people feel that the computer is more humane (7, 8, 11). That is, many people feel more at ease answering questions from a computer than a human. Many people are embarrassed when intimate or personal questions are asked by a relative stranger—even though he is a professional. Computers have been found to elicit more relevant information and to be more reliable than human interviews in several studies (9, 10, 11).

Most psychologists need some time with a client before feeling comfortable in assessing the client. The brief observations of the client, when they are introduced to the Visual Display Terminal (VDT) or while they are taking the tests, are not enough. The psychologist can better use the time he spends interacting with the client if he waits until data are gathered, preliminary interpretations are made, and data gaps are identified.

The computer can be used to predict or recommend. Some of the computer decision aids are: assignment of psychotropic drugs (12), the likelihood of treatment success (13), the length of stay (14), probability of elopement (15), danger of the patient to others (16), and to himself (17), and the assignment of a diagnosis (30, 31). New data can be continuously fed into the computer. With this continuous feedback, areas in which the predictions are recommendations need to be changed, and be quickly identified.

Computers may provide action-oriented direct therapies for specific problems (18). For example, one automated system was developed which gives low-level evaluative statements, concrete clinical advice, and referral information to about 56 typical complaints of college students seeking counseling (19). Another program based on cognitive-behavior therapy has been developed for clients with depression (18).

Computers are still not effective for traditional free form therapy. The client must type everything, and this is frustrating for some people. Many
people who have interacted with these programs have felt annoyed because the
computer fails to answer pertinent questions, misinterprets what has been
stated, or has too small a repertoire of responses.

The computer can be programmed to schedule persons, rooms, and equipment.
The burden of determining schedules can be turned over to the computer.
Numerous techniques are available for analyzing and optimizing schedules. If it
has an internal clock and calendar, the computer can be used to remind therapi-
sts and clients of reports, meetings, deadlines, etc.

The final benefit to be discussed is the use of the VDT as a word pro-
cessor. Many reports and forms contain much information that has been put on
other forms, reports or stored in the computer. Time can be saved by allowing
the computer to fill in whatever data it can on a report or form. Since cler-
ical support is typically in short supply, it is important to make the available
support more productive by using an efficient word processor.

For the psychologist, who for whatever reason chooses not to use the auto-
mated interpretations or some other feature, the numerous remaining benefits of
the system probably would still make computer systems cost effective.

PROBLEMS

There are numerous potential problems. The computer system project which
was begun by SL.VAMC in 1972 experienced such problems as computer downtime,
slow interactive VDTs, long programming times, and high maintenance and utility
costs. These problems were not solved until new hardware was purchased and a
new software system developed in 1979.

Software seems to be the weakest link in system development. Software
development time is invariably underestimated. Several systems have found that
MUMPS (a programming language, an operating system, and a data base management
system invented at the Massachusetts General Hospital) has been a very effective
language and operating system for clinical applications.

Many VDT's and their accompanying work stations are not adequately human
engineered. Many people will feel uncomfortable because the work station is not
designed (including adjustability) to fit their particular physical dimensions.
Such conditions as: flicker on the screen; glare; design, size and spacing of
characters; and the contrast between characters and background can make it diffi-
cult to read the material presented on the screen. The human engineering
problems are too numerous to mention in a short paper. "Human Engineering
Guidelines for Management Information Systems" provides a general summary on the
information currently known in this area(20). There also are several papers
which specifically address some of the human engineering problems of com-
puterized mental health systems(21,22,23,29).

The Army may have a population which is different from the population on
which the tests are standardized. For example, at a recent symposium on "Use of
the Minnesota Multiphasic Personality Inventory with an Active Duty Military Population", one conclusion was that the standard norms for the MMPI may not apply to the Army population(24). Therefore, for more valid automated interpretative statements, the cutoff scores would have to be adjusted for the Army population.

Negative attitudes of those who have never used computers are often associated with fears of the unknown, apprehensions concerning its complexity, and fears of being replaced by a machine. With the advent of computer games, computer banking and computer instruction, many people have more knowledge about computers and realize that computer systems can be designed so that they are easy to use and difficult to damage. Although the computer hardware and software may be complex, the user, in most cases, needs to know very few of the details concerning the technical structure of the system. To drive a car or operate a television, one does not have to understand combustion principles, electron flow, or signal transmission. Likewise, the computer user should need to know only very general information to operate the proposed computer systems efficiently.

One of the most difficult problems has been selling psychologists on the benefits to be gained by using computer systems. Clinicians may fit a stereotype of being human oriented, sensitive, and computer phobic. The fears of those who have never used a computer were already discussed. Many mental health workers have developed negative attitudes toward computer systems because of a negative experience in interacting with a computer system which was designed for use by persons with extensive computer training, or was designed without adequate consideration for the user. Therefore, care must be taken to ensure that the initial experience with the new system is positive. Using a computer should be easier that not using a computer. This is why pilot testing is essential. The system presented to the mental health worker should be fully operational with as few bugs or problems as possible. Testing and improving the system needs to be an ongoing process. Pilot tests are followed by correction of the identified problems. Further tests check whether the corrections were adequate or caused further problems. Even after the system is perfected, monitoring is necessary to detect problems that may have been overlooked or that develop after the system is operational.

Once a computer system is working, people become dependent on it, and are unable to perform their tasks without it. This dependence develops because of the tremendous amount of manpower that would be needed to perform the tasks that are done by the computer. Downtime, time when a computer is not functioning properly, is especially exasperating to those who are dependent on the computer. There are solutions to downtime problems, although some may not be possible due to their costs. For example, in the SLCVAMC, downtime problems were solved by switching to a different hardware and software system. This may not always be possible. Other solutions may involve providing alternative power supplies.

Some automated interpretation algorithms are proprietary. Access to the particulars of these systems is usually not available. Therefore, it is impossible to independently evaluate or modify these interpretations. The solution to this problem is not readily apparent.
There has been at least one attempt at use of the computer system in a mental health setting by the armed forces.(25). In 1968, Walter Reed Army Medical Center initiated a project known as Computer Support in Military Psychiatry (COMPSY). This attempt apparently was not successful for several reasons. The analytically oriented staff felt that the behaviorally oriented computer system did not supply the information they needed. Auxiliary personnel felt that the computer system increased their workload rather than decreasing it. One lesson to be learned from this experience is that although a system may be well designed for one institution, another institution may find that it does not fit its needs.

At the 1982 Combat Psychiatry Conference, computer testing was mentioned. The general implication of the discussion was that computer testing could negate the need for psychologists. That is, psychologists would not be necessary to check the computer-generated interpretations. By being in forefront of computer testing development, psychologists can insure that only professionals with adequate training administer and interpret psychological tests.

COST

One of the first questions asked in cost-benefit analyses is how much the technology or items cost. The following costs are approximate. Unlike the costs associated with many other technologies, computer costs may go down as well as up.(26). The cost of computer hardware (the physical machine and its accompanying peripherals) has gone down dramatically if the power and flexibility of the computer being purchased is considered in the calculation. Software has tended to increase in cost. Computer experts predict both of these trends will continue. Since the software has already been developed for the Veteran's Administration, the Army will save a considerable amount of the software development costs if it adopts the Veteran's Administration system.

There are many approaches that could be taken to evaluate computer systems for Army use. The recommended approach is to purchase a microcomputer compatible with the VA system, and to install the VA software on it. The price range for this approach is $8,000 to $10,000. This would allow purchase of a microcomputer with a floppy disk (a storage device on which information is recorded), a VDT, a printer, and an optical character reader. The VA system is available to an Apple II microcomputer as are most testing programs that are commercially available. With the Apple II, the user would have control over the system, that is, the software could be changed to eliminate problems or to make it more applicable to Army requirements. The Apple II could be adapted to all of the uses previously mentioned.

An example of a less expensive but less desirable approach would involve purchasing a VDT, a printer and a modem for between $1,750 to $3,000. Telephone communication would be used and would have to be available, and an agreement with the VA would have to be worked out for use of their computer. This option has many drawbacks. The Army would have little control over the system, and there would be no opportunity to correct problems with the system or modify it for Army use. Phone systems are the weakest link in the system and are usually
a continuous source of aggravation. Several systems have been unacceptable to users or failed because of telephone difficulties.

There are several areas in which data concerning any system need to be obtained: such as downtime, maintenance costs, system response time, etc.

The cost of the system should be weighed against current costs of mental health professionals, technicians, administrative, and clerical support. The cost savings certainly should be more than those accruing directly from the greater productivity of the psychologist himself.

CONCLUSION

The computer system should be designed so that people use the system because the benefits they get from it outweigh the costs of using it. Computer systems need to be designed so that they are easy to use and easy to learn for both the client and the mental health workers. Systems that have been successful have been reliable; that is, they have not been plagued by downtime. Professionals should not have to become computer scientists or learn a whole new vocabulary to operate the system. The client and clinician will have to learn certain things but, just like a television or an automobile, knowledge of the physical laws or technical details should not have to be understood in order to use the system effectively and efficiently.

Although computers will increase the productivity of mental health workers, computers cannot do everything. Client-computer interaction is not necessary for all tests or all clients. It may be less expensive to collect data for some tests by using computer readable data sheets rather than VDTs. No data were found on what percent of the population prefer a computer readable data sheet to a VDT or vice versa. For example, people with bifocals or trifocals may have difficulty with VDTs unless they can adjust the angle of the screen. Computer systems may be used for only parts of a test, such as calculating the scores for Exner's comprehensive Rorschach system.

A pilot test is proposed to examine present systems, to determine whether one or a combination of several may be modified to meet Army requirements, and to calculate the costs and benefits of adopting such a system. The pilot test would probably take at least one year.
REFERENCES


1b. Hansen, K.E., Automated testing systems: Design and Development Issues, paper presented at the 1981 American Psychological Convention, Los Angeles, CA.


APPENDIX A

Tests Available

<table>
<thead>
<tr>
<th>CODE</th>
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<tbody>
<tr>
<td>16PF</td>
<td>Sixteen Personality Factor Test</td>
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<tr>
<td>ACL</td>
<td>Adjective Check List</td>
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<tr>
<td>AOR</td>
<td>Analysis of Relationships</td>
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<tr>
<td>BECK</td>
<td>Beck Depression Scale</td>
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<tr>
<td>BIPL</td>
<td>Bipolar Psychological Inventory</td>
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<td>BRAS</td>
<td>Behavioral Type-A Scale</td>
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<tr>
<td>BUSS</td>
<td>Buss-Durkee Anger Inventory</td>
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<td>CES</td>
<td>Classroom Environment Scale</td>
</tr>
<tr>
<td>CMT</td>
<td>Concept Mastery Test</td>
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<tr>
<td>COPS</td>
<td>California Occupational Preference Survey</td>
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<tr>
<td>CORN</td>
<td>Cornell Index</td>
</tr>
<tr>
<td>CPI</td>
<td>California Psychological Inventory</td>
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<tr>
<td>DEMO</td>
<td>Demonstration Program</td>
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<td>EPSS</td>
<td>Edwards Personal Preference Schedule</td>
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<td>EPQ</td>
<td>Eysenck Personality Questionnaire</td>
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<td>EWI</td>
<td>Experimental World Inventory</td>
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<td>EYSN</td>
<td>Eysenck Personality Inventory</td>
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<td>FEAR</td>
<td>Fear Inventory</td>
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<tr>
<td>FES</td>
<td>Family Environment Scale</td>
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(Appendix A cont.)

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<td>Group Environment Scale</td>
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<td>GZTS</td>
<td>Guilford-Zimmerman Temperament Survey</td>
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<td>IBT</td>
<td>Irrational Behavior Test</td>
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<td>ICL</td>
<td>Leary Interpersonal Check List</td>
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<td>JENK</td>
<td>Jenkins Activity Scale</td>
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<td>KUVR</td>
<td>Kuder Vocational Preference Inventory</td>
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<td>M168</td>
<td>Minnesota Multiphasic Personality Inventory (168-item MMPI)</td>
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<td>MARR</td>
<td>Marriage Adjustment Inventory</td>
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<td>MATE</td>
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<td>MENA</td>
<td>Menstrual Attitude Scale</td>
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<td>Sex Knowledge Inventory</td>
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<td>SOW</td>
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<td>STAI</td>
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<td>Work Values Inventory</td>
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<td>WAS</td>
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<td>WES</td>
<td>Work Environment Scale</td>
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<td>Zung Depression Scale</td>
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### APPENDIX B

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<th>CODE</th>
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<td>ALCO</td>
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<td>Anger Questionnaire</td>
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<td>Appearance Problems</td>
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<td>CRIS</td>
<td>Crisis Events</td>
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<td>EATP</td>
<td>Eating Problems</td>
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<td>MARP</td>
<td>Marriage Problems</td>
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<td>MEDH</td>
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<td>PAIN</td>
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<td>PROB</td>
<td>Problem List</td>
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<td>Sex Problem Screening</td>
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<td>Demographic Information</td>
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<td>SOMP</td>
<td>Somatic Problems</td>
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<td>TENS</td>
<td>Tension Questionnaire</td>
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Two experiments were conducted to determine how soon after birth infants are able to distinguish their father's voice from that of a male stranger. The dependent variable was latency of crying cessation following initiation of adult speech. In the initial experiment, 21 infants with an average age of three days were tested and in the second experiment, 22 seven day olds were the subjects; there was equivalent representation of sex in each subject group. Comparisons were conducted in a single session for each infant. Results indicated that while there was a clear effect of the father's voice with the younger subjects, statistically significant effectiveness was only documented with the seven day old infants. Within one week of birth infants are capable of discriminating their father's voice from voices of other males.

One of the major questions about human development concerns when the process of emotional attachment between infants and their parents begins. The prerequisite for the initiation of emotional bonding is that the infant be able to discriminate his parents from other adults. Historically, research on the developing capabilities of infants to differentiate among adults has focused on infant discrimination of mothers (Ainsworth, Bell, and Slayton, 1972; DeCasper and Fifer, 1980; Hulsebus, 1975). Most recently, DeCasper and Fifer found that 3-day old infants could discriminate their mother's voices from those of female strangers.

The area of father-infant interaction has been neglected in child development research. The basic question of how soon infants can recognize their fathers has not yet been sufficiently investigated. A recent study (Hulsebus, 1981) revealed that infants as young as 2 weeks can discriminate their father's voice from that of a male stranger. Since some of the subjects in this study, younger than 14 days of age, were able to discriminate their fathers' voices, it was evident that 2 weeks is not the lowest limit of father discrimination.

The purpose of the present experiment was to determine the youngest age at which infants are capable of recognizing their fathers' voices. While there are several adult behaviors that could be used as a basis for comparison, speech was selected as the variable easiest to control. Visual comparisons do not offer as desirable a basis since there is some question as to how clearly neonates can see. The other major sensory modality involves tactual stimulation. The dif-
ficulty with this modality is that it is extremely unlikely that one person could precisely deliver the same touch sensations as those given by another adult. Crying was selected as the infant behavior to be measured. It is one of the few neonatal behaviors that is under voluntary control and it is the earliest social behavior that can attract parents from a distance. Finally, it is a discrete behavior that can readily be measured with regard to frequency and duration. The rationale for the comparisons to be conducted was that if the infants were not able to discriminate the voices they heard, a pattern of equivalent preference between fathers and strangers would be expected.

Method

Subjects

The subjects for these experiments were infants delivered at Madigan Army Medical Center. Only healthy infants were tested. Parents on the obstetrical ward were asked to take part in this study after it had been described to them. For the first experiment the average age of the infants was 3 days; there were 21 infants in this group. The experiment measured the responses of infants 7 days old; there were 22 infants in this group. Sexual representation was equivalent in each group.

The male stranger was a male who had not spoken to, held, or touched the infants prior to the study.

Apparatus

The tape recorder used for recording the test sessions was a General Electric portable cassette recorder. An Esterline Argus multichannel event recorder was used for the transcription of the crying patterns and for interrater reliability measures.

Procedures

In the first experiment, the 3-day olds were tested in a quiet room on the obstetrics ward. In the second experiment, the 7-day olds were tested in quiet rooms in their respective homes. Other than the location of testing, all of the procedures were the same for the two experiments.

A single comparison session was held at a time the parents reported to be between feedings. The use of a single test session ensured that most environmental and individual infant variables would be constant for each adult. Each infant was placed on his back in a crib or infant seat. The adult speaking to the infant located himself behind the head of the infant so that he remained out of the infant’s field of vision. Comparisons began after a consistent crying pattern developed - a period of approximately 15 seconds of continuous crying. In order to control for the content of the verbal stimulation received by the infants, the father and male stranger spoke from a prepared script for 1 minute; “What's the matter, (child's name)? Now, don't cry, ______. Everything is
going to be all right. What's the matter, _____? Are you hungry? Now, don't cry. Everything will be all right. That's a good baby, _____ You know I will take care of you. It's going to be fine now. You will feel good again soon. " (This was repeated until the full minute had elapsed.) Thus, the infants had to discriminate on the basis of the voice qualities of the speech of each adult. Each adult spoke with a pleasant voice. In order to control for order of presentation effects, half of the infants heard the father speak first and half heard the stranger speak first.

Once the crying had reached the previously mentioned criterion, the first adult spoke to the infant for one minute; a portable tape recorder recorded the adult's speech and infant's crying. When the minute had ended, the child was picked up and held by the mother until protesting had ceased for several minutes. After being soothed in this manner, the infant was returned to the crib in the same manner he had been placed initially. When crying developed again, the second adult took a position behind the infant's head and began to speak from the script. His speech and the infant's crying were also tape recorded. The conclusion of the second person's speaking ended the comparison.

The dependent variable was the latency between the beginning of the adult's speech and the onset of a criterion length pause of 5 seconds in crying. Since breathing pauses during periods of crying last approximately 1 second or less, a 5-second or longer pause in crying was thought to indicate a definite change in crying pattern. The basic assumption underlying the statistical comparisons was that if infants cannot distinguish their father's voice from a stranger's voice, the response pattern expected for group would constitute a 50:50 split in the relative frequency of which adult the infants pause to first. A further assumption was that a familiar voice that had presumably been associated with the meeting of emotional needs would be more likely to interrupt the pattern of crying (i.e., be more soothing) than would an unfamiliar voice.

The crying patterns recorded on the cassette tapes were transcribed onto a multichannel event recorder. Comparisons of independent transcriptions by two monitors revealed agreement rates in excess of 97 percent as to which adult the criterion pause developed first.

Results and Discussion

Experiment 1

Of the 21 3-day old infants whose data was compared, 12 paused first to the father, 6 paused first to the stranger, and 3 demonstrated no differences. The latencies were compared in a t test for matched pairs; the results were not significant (t = 1.27, df = 20, ns) A chi square test was conducted as a measure of the degree of relationships between the observed frequencies and those expected if there were no differences in the ability to discriminate father from stranger. The $X^2$ was not significant ($X^2 = 2.00, df = 1, ns$). Thus, although there was a clear preference by 3-day olds for their father's voices, the shift was not statistically significant.
Experiment 2

These infants were 7 days old when tested. Of the 22 infants for whom data were obtained, 16 paused sooner to their fathers, 3 paused sooner to the male stranger, and 3 demonstrated no difference in latencies. A matched pairs t test of the latencies was significant for these 1-week olds ($t = 2.10, df = 21, p < .05$). These babies paused significantly sooner when their fathers spoke to them. A chi square test of the numbers of infants pausing first to father and stranger was conducted. The chi square was significant ($X^2 = 10.36, df = 1, p < .01$). Thus, infants 7 days old clearly demonstrated discrimination capabilities between their fathers and strangers.

These results clearly indicate that within a week after birth infants are capable of discriminating their fathers from other males on the basis of their voice qualities alone. These findings are consistent with the results of DeCasper and Fifer (1981) who found that infants 3 days old demonstrated the capacity to distinguish their mothers from other women by listening to their voices. The several day difference in the average age of mother and father recognition between the DeCasper and Fifer study and the present study may be due to either a slightly earlier development of mother recognition or it may be an artifact of the different methodologies employed. In the DeCasper and Fifer study, the infants heard tape recordings of their mothers and female strangers reading stories to them. The length of presentation of the two voices was determined by the infant’s sucking pattern – long versus short bursts of sucking on electronically monitored nipples. Consequently, the infants were exposed to much longer periods of listening to their mothers and to strangers than they were to their fathers and strangers in this study. Such early recognition of fathers is impressive when one considers that the fathers typically spent considerably less time interacting with their infants that the mothers did.

With the demonstration that infants can discriminate their fathers within a week after birth, additional stimulation is provided to the developing research area of father-infant interactions. Certainly, by this age, the necessary prerequisite for emotional attachment has been met. Further growth should occur in research concerning this specific area of emotional development in infancy.
REFERENCES


In response to repeated requests for information about how to develop training programs for the management of combat stress reactions, a series of workshops were planned. The purpose of the first Users' Workshop on Combat Stress was to present a forum to exchange ideas, share information on resources, and identify points of contact among combat division behavioral scientists. The first Users' Workshop on Combat Stress was held at the Academy of Health Sciences on the 3rd and 4th of September 1981. Combat units were contacted regarding the purpose of the workshop; the Academy of Health Sciences agreed to pay for one member of each mental health team provided the home post paid for the additional participants.

First Users' Workshop on Combat Stress.

The first Users' Workshop addressed the needs felt by mental health care providers in several key combat units (the 82nd Airborne Division, the 101st Airborne Division, the 2nd Armor Division, the 1st Cavalry Division). These needs included: (1) presenting authoritative information on current threat estimates, concepts on countering and defeating the threat, and casualty estimates; (2) discussing the projected tasks and functions of line and health care personnel who will identify, refer, treat, and/or prevent combat stress casualties; and (3) setting goals, establishing methodologies to achieve these goals, and deciding upon means for evaluating goal attainment.

Participants from the combat units were asked to bring and describe whatever training programs, handouts, packets, or written ideas they had for training soldiers, leaders, medical, and mental health personnel. The mental health staffs were to be prepared to: identify their unique training needs, commit themselves to developing and conducting their own training programs, evaluate their own programs, and share the results of their programs and evaluations, with the other participants.

The curriculum began with a presentation "Combat Stress Casualties in Perspective" which presented the assumptions about the projected high intensity central battle scenario on an integrated battlefield. The treatment principles which have proved effective were reviewed and their importance documented through a brief historical review of military history. A "Threat" analysis was presented to emphasize the factors in Soviet doctrine which would be most likely to induce stress casualties: (1) unrelenting intense combat for extended
periods of time, and (2) isolation of defending combat units from their support base by use of penetration and fire. Units fighting on an integrated battlefield will be very much isolated and forced to react to the intense physical and psychological stresses.

As a result of the perceived threat, the Army undertook a reorganizational effort to assure its units would be able to perform under adverse conditions and remain resilient. The organization of Division 86 was discussed, with emphasis on changes to the medical battalion. Within the Medical Support Company will be the Mental Health Section; this activity will be crucial in developing training programs for effective prevention and treatment of other casualties. The Theater of Operations Psychiatric Support System (TOPSS) Concept presented a concept of psychiatric support to provide early and appropriate interventions designed to prevent over evacuation of stress casualties in a conventional war. The different tasks and functions of combat stress casualty identifiers were given. It becomes crucial to the success of any training program for leaders to be aware of the tasks and functions necessary for the appropriate recognition, disposition, and treatment of stress casualties. The unit leader must be able to assess all members of the unit not functioning up to the demands of the tactical situation. Effective training must emphasize unit cohesion, team building, and development of the buddy system. Individual soldiers must be aware of normal reactions to the stresses of the tactical situation. Soldiers need to be reassured; coping skills must be developed. Individuals must expect to carry out duties (although not necessarily symptom free). Units must carry on independently, with no expectation of evacuation. The functions and responsibilities of individual soldiers, unit leaders, medical personnel, and mental health personnel were discussed.

Three task groups were formed (Fort Hood, the 101st, and the 82nd); groups were instructed to define their goals, decide how to reach the goals, and determine how to evaluate the progress toward achieving the goal. Most goals focused on establishing training programs and reorganizing resources to achieve maximum effects.

A training program developed for the Community Mental Health Activity at Fort Knox, Kentucky, entitled Project COPE (Combat Operations and Psychiatric Effectiveness) was presented. The three task groups were dissolved into three mixed groups which were required to role play medical personnel at the Battalion Aid Station. Participants were required to triage psychiatric and medical casualties (represented by analog field medical cards), provide effective interventions with soldiers presenting stress reactions, maintain effective radio communications, and cope with increasingly stressful demands. Evaluators provided feedback to participants on the effectiveness of their treatment and dispositions. After the exercise, the experience of the participants was processed for feelings and insights into how a training program might be developed.

Participants were asked to work toward achieving the goals defined in their task groups. A network of resources had been established. Contributions from the participants were collected, edited, and assembled into a proceedings which
were sent to each participant. The collected proceedings were intended to serve as a reference resource, a commitment toward disseminating information, and a reminder of intended goals and methodologies. It became clear that additional workshops were needed to reach other Army units; this lead to the second Users’ Workshop.

SECOND USEPS’ WORKSHOP ON COMBAT STRESS

The Second Users’ Workshop was conducted on the 29th and 30th of April 1982. The intent was to have units/posts send both line officers with command or training responsibilities and mental health officers. Participants were asked to be willing to exchange their own training materials. A more diverse group attended the Second Users’ Workshop, which allowed for a modification in the manner and types of presentations.

The curriculum started with a presentation “Combat Stress Casualties in Perspective” which reviewed the assumptions about the central battle scenario and the treatment principles. “The Threat” of Soviet attack doctrine and rear area incursions was discussed.

To meet the new threat and make the best use of new equipment, the Army as organized under Division 86 was presented. As part of a program to identify needs, deficiencies, and corrective actions - the Army has been conducting the Mission Area Analysis. As part of the Army effort, the Medical Department engaged in its own Mission Area Analysis. An interdisciplinary working group, using the TOPSS Concept with its emphasis on deficiencies for conventional war, expanded the TOPSS Concept to the added threats of the integrated (NBC) battlefield. The Mission Area Analysis was presented to the workshop. The Combat Psychiatry and Mental Health Services Mission Area Analysis categorized the major tasks of the Combat Mental Health Services into three functions: (1) prevention through education, command consultation, and early intervention; (2) differential diagnosis and triage; and (3) management of casualties. On the integrated battlefield, differential diagnosis of functional from physiological disorders will be difficult. Effective education and prevention programs are required, particularly at basic, NCO, and Officer training programs. In addition to improving training, other needed changes include: providing doctrine for the organizations, augmenting TOE units with available TDA personnel, training and deploying reserve elements earlier in the projected conflict. Knowledge of the tasks and functions of individual soldiers, unit leaders, medical personnel, and mental health personnel are necessary.

Participants were encouraged to make presentations. A forceful talk by CSM Stock (Ranger battalion, Fort Lewis) on “Influencing Combat Behavior” described the stages of behavior in combat, the feelings evoked, and the skills that can be developed to increase soldier confidence. Preparation and leadership are critical in influencing combat behavior.
The role of Organizational Effectiveness consultants was discussed, particularly in reconstituting units. Other presentations focused on the role of occupational therapists with managing casualties.

Three task groups were formed. Groups were asked to assess the needs of the members in terms of concerns, problems, or issues related to combat stress. Solutions for the needs were to be developed. Organizational Effectiveness consultants were used to facilitate the task group discussions and process. The most common themes were: how to develop and present an effective combat stress program, for whom, and where?

Participants were tasked with returning to their respective posts to work on developing effective training programs. As in the First Users' Workshop, contributions from the participants were assembled into a proceedings. The proceedings from the Second Users' Workshop were sent to all participants in both the First and Second Users' Workshops. The intent was to remind participants of their commitments and to increase the network of individuals working on the problems of combat stress.

Additional hours of instruction on combat stress have been given to students at the Academy of Health Science. Command support for combat stress training programs has been quite helpful. The Academy of Health Sciences is only part of the process; the participants in the Users' Workshops must continue to expand the programs to address stress reactions.
PRINCIPLES OF COMBAT PSYCHIATRY

Behavioral Objectives

After the workshop, the participant will be able to perform the following:

1. List and define the principles of combat psychiatry.
2. Describe the type of battlefield conditions anticipated in future wars.
3. Define the term "combat stress casualty".
4. State the ratio of Combat Stress (CS) casualties to wounded-in-action (WIA).
5. Identify the factors necessary to reduce the high probability of combat stress casualties.
6. Identify and manage high numbers of combat stress casualties in a simulation exercise.

Nutetaking Outline

1. List and define the principles of combat psychiatry.
   a. Brevity--Treatment should be brief.
   b. Immediacy--Treatment should be instituted as soon as possible
   c. Centrality--Treatment should be centralized
   d. Expectancy--Convey positive expectation that soldier will return to duty (RTD).
   e. Proximity--Provide treatment as far forward as possible.
   f. Simplicity--Keep treatment methods simple.

2. Describe the type of battlefield conditions anticipated in future conflicts.
   a. Integrated battlefield: use of all available weapons (including nuclear, biological, chemical (NBC), lasers, microwaves).
   b. Battles will be highly intense, continuous (day & night), lethal, highly mobile and fluid.

3. Define the term "Combat Stress". A near normal response to the stress of battle characterized by expectancy of rapid resolution. Two categories include Combat Reaction (e.g., marked anxiety with inability to perform goal oriented task) and Combat Exhaustion (temporarily worn out soldiers).
4. State the ratio of CS casualties to Wounded-In-Action (WIA).
   a. 1 CS: 3 WIA. However 50 out of every 100 battle casualties within the FIRST 48 hours may be CS casualties.
   b. This ratio will vary with intensity.
   c. Highest rates among combat troops.
   d. Highest ratio of CS to WIA among support troops.
   e. THE CS CASUALTIES MAY BE THE MAJOR SOURCE OF REPLACEMENTS IN THE FIRST FEW HOURS AND DAYS OF BATTLE.

5. Identify the factors necessary to reduce the probability of CS casualties.
   a. Use BICEPS to prevent over evacuation.
   b. Increase unit cohesion.
   c. Reduce soldiers' "other life" stresses.

   ***


1. KUMANO WAR (603 B.C.):
   * "Evil Gods Spewed Out Poison -- People and Things all Became Ill"
   * Malady disappeared after troops rested and moral restored

2. CIVIL WAR:
   * Nostalgia: "Mild Insanity Caused by Disappointment and Longing for Home"
   * Defective Character, Poor Moral Turpitude
   * 5,200 Cases Hospitalized
   * Poor Medical Evacuation Channels
   * 1863 - Incidence Rate -- By Directive
   * Psychosomatic Hospitalizations Soared

3. RUSSO-JAPANESE WAR (1904-1906):
   * Russian Psychiatrists Assigned Forward
   * Forward Treatment Centers Established
   * First Accurate Description of Traumatic War Neurosis
   * Initially Effective -- Later Broke Down
   * Proximity

4. WW I:
   * Gen Gorgas Dispatched Committee to France (1917)
   * Formation of 110 Bed Psychiatric Hospitals Suggested
   * Base Hospital #117 Established
   * 3,300 N/P Patients Admitted
     50% Rtn to Combat
     41% Other Duties
   * Proximity Re-Emerged as Primary Treatment Principle
   * Clinical Picture: Tremors, Paralysis, Mutism, Ganser Syndrome

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(Historical Review cont)

5. WW II:

* No Effective Treatment-Evacuation Policy Existed Until 1943
* No Designated P/N Consultant TSGO
* Feb 20, 1943 -- Kasserine Pass -- Green, Well Equipped American Troops Were Tested by Africa Corps
* Situation Rectified
* P/N Center Located on Normandy Beachhead
* Clinical Picture: Depression, Apathy, Psychosomatic
* "Tremblers of WW I Became Gastric Neuroses of WW II"

6. KOREA:

* Psychiatric Casualties Initially Low - Troops Retreating
* Pusan Perimeter - Casualty Rate Increased - Static Defense
* All Divisions (Pusan) Had Division Psychiatrist
* Too Many Evacuated to Japan
* NP Centers Established in Korea
* 80% Rtn to Duty

7. VIET NAM:

* Atypical When Compared with All Previous Wars
* Low N/P Casualty Rate (5%)
  * Limited Tour of Duty
  * R & R
  * Superior Aero-Medical Evac Policy
  * Intense, Brief, Sporadic Engagement With Enemy
  * Full Compliment of Divisional Mental Health Officers
* What is "Viet Nam Veterans Syndrome"?
* Delayed Stress Reaction?
* Depressive Variant?

8. ISRAELI CONFLICT (1973):

* Many Similarities to Envisioned Central Battle Scenario of Western Europe
  * Brief -- 3-4 Days
  * Mobile
  * Fluid
  * Intense - Initially Fought 24 Hours a Day
* Heavy Casualties
* Integrated - Air, Armor, Artillery Closely Coordinated
* High N/P Casualty Rate
* Re-Emergence of Treatment Principles
* Treatment:
  * Rest
  * Encouragement
  * Ventilation (Abreaction)
Maximal use of Combat Psychiatric Techniques

Maximal Attention to other Life Stresses

Minimal Unit Cohesion

Maximal Unit Cohesion

Minimal Attention to other Life Stresses

Minimal use of Combat Psychiatric Techniques

FIGURE 1: Three Dimensional Model for Evaluating Unit Readiness in the Treatment and Prevention of Psychiatric Casualties
EVACUATION CATEGORIES

1. URGENT. Immediate surgery or resuscitative treatment is essential to preserve life or limb. Vascular injuries with uncontrollable bleeding, and massive abdominal or chest wounds are examples. Evacuate at once to the combat support or evacuation hospital, by air if available, in accordance with division SOP, those cases which must be evacuated within 4 hours.

2. PRIORITY. Priority identifies patients requiring surgery or resuscitative care to preserve life or limb, but who may be delayed for a short period; evacuation may be delayed 24 hours. Although each case must be evaluated individually, the management related to the special conditions present, no patient should be kept in a forward aid station any longer than is absolutely necessary. Final surgery results depend chiefly upon reducing the time lag between wounding and initial wound surgery. Evacuate by air if available. Destination may be either combat support hospital or clearing station.

3. ROUTINE. Routine category includes all other cases. Evacuate by motor or air. Destination is usually to a clearing station. Evacuation may be up to 72 hours.

4. TACTICAL-URGENT. The foregoing are three presently recognized evacuation categories. For control purposes within some units, subpriorities are employed. For example, tactical-urgent is sometimes used to identify patients who do not meet the medical criteria for urgent yet who must be evacuated promptly to enable the unit to continue its mission.

CASUALTY TRIAGING

1. Immediate: Patients who, upon receipt of prompt medical attention, have a good chance of survival.

2. Minimal: Patients requiring only minimal treatment and are expected to return to duty immediately.

3. Delayed: Patients for whom treatment can be delayed without impairing their recovery. Hospitalized.

4. Expectant: Patients for whom immediate surgery or active treatment is not likely to alter a fatal outcome, but require complicated or prolonged medical care to improve life expectancy. Hospitalized.
Alternatives  

Any medical facility may be bypassed when the condition of the patient warrants such practice, and the evacuation means that permit such movement are available. 

<table>
<thead>
<tr>
<th>Alternatives</th>
<th>Medical Facility</th>
<th>Evacuation Support</th>
<th>Normal Evacuation Flow</th>
<th>Normal Evacuation Method</th>
<th>Levels of Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Theaters or ZI</td>
<td>General Hospital</td>
<td>Evacuation Station</td>
<td>Combat Support Hospital</td>
<td>Battalion Aid Station</td>
<td>Medical Aid Hand</td>
</tr>
<tr>
<td>USAF Evacuation Aircraft</td>
<td>Field Ambulance</td>
<td>Air Ambulance</td>
<td>Field Ambulance</td>
<td>Frontline Air Ambulance</td>
<td>Walking</td>
</tr>
<tr>
<td>USN Evacuation Vessels</td>
<td>Field Ambulance</td>
<td>Air Ambulance</td>
<td>Field Ambulance</td>
<td>Field Ambulance</td>
<td>Litter</td>
</tr>
</tbody>
</table>

Figure 1. Evacuation system, theater or operations.
CONCEPT
DIVISION-LEVEL

BAS

BN

BDE CLR

DIV CLR

EVAC HOSP

CORPS MED
CLR CO

GEN HOSP

HOLDING
TIME
FEASIBLE

48 HRS R.T.U.
90%

96 HRS

168 HRS R.T.D.
5%

EVACUATION

RECONSTITUTION

333

Table 1

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>TASKS/FUNCTIONS</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY/SQUAD</td>
<td></td>
<td>1 - 2 hours</td>
</tr>
<tr>
<td>Individual soldier, squad leader, platoon sgt, platoon leader, 1st sgt, company cdr</td>
<td>Assess all members of unit who are not functioning up to demands of tactical situation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Determine nature and amount of fatigue, stress, duration of exposure, disease, fear, chemical exposure (self-induced and/or external), radiation exposure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognize preventable measures for transient battle reaction/battle fatigue</td>
<td></td>
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<tr>
<td></td>
<td>Emphasize unit cohesion, team building, buddy system</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decide whether reactions are normal for individual in combat/tactical situation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognize and assess whether individual is disabled: a) apparent wound, injury, disease, chemical or radiation exposure b) transient battle reaction/battle fatigue c) will individual's behaviors be disruptive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reassure individual of normal reactions to situation: a) individual must cope by himself or at least within unit b) individual must be able to carry out his/her duties (although not necessarily symptom free)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Instill expectation to return to duty: policy of no evacuation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If soldier's symptoms are disruptive and/or he cannot exercise combat skills or effectively perform his duties in a reasonable amount of time, call aidman</td>
<td></td>
</tr>
</tbody>
</table>
aidman 91B

(E3-E6)

Decide whether reactions are normal for individual in combat/tactical situation

Assess whether individual is disabled:
   a) apparent wound, injury, disease, chemical or radiation exposure
   b) transient battle reaction/battle fatigue
   c) will individual's behaviors be disruptive

aidman 91B

Reassure individual of normal reactions to situation

Assess individual from personal knowledge of individual's past history and experience:
   a) how long in combat
   b) previous stress reactions
   c) previous medical treatments (what, how long ago, recovery time)
   d) tactical situation

Assess capability of functioning/not functioning:
   a) knowledge of common symptoms of transient battle reaction/battle fatigue
   b) course of transient battle reaction/battle fatigue
   c) phases of transient battle reaction/battle fatigue
   d) employ acceptable treatment methods
   e) provide crisis treatment for transient battle reaction/battle fatigue

Instill expectation to return to duty

Insure individual's history and past military performance (if known) is documented

Only if tactical situation allows, consider evacuating individual to Battalion Aid Station for rest and further evaluation if necessary

BATTALION AID STATION

4 - 6 hours

91B (E5-E6)
91C (E5-E6)
PA, physician

Check for whether individual is disabled:
   a) apparent wound, injury, disease, chemical or radiation exposure
   b) transient battle reaction/battle fatigue
   c) will individual's behaviors be disruptive
Instill expectation to return to duty

Assess capability of functioning/not functioning:

a) tactical situation
b) knowledge of common symptoms of transient battle reaction/battle fatigue
c) individual's past history, experiences, and past military performance
   1) how long in combat
   2) previous stress reactions
   3) previous medical treatments (what, how long ago, recovery time)
   4) evaluation by aidman
d) course of transient battle reaction/battle fatigue
e) phases of transient battle reaction/battle fatigue
f) employ strategies for coping
g) employ acceptable treatment methods

Assess whether individual's behaviors will be disruptive

Assess for return to unit if capable of functioning in combat role (although not necessarily symptom free)

Only if not capable of functioning in combat role and if tactical situation allows, consider evacuating individual to Brigade Clearing Company for rest and further evaluation.

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**BRIGADE CLEARING STATION**

12 - 24 hours

91G (E5-E6),
Mental Health
Officer (M.H.O.:
60W, 68R, 68S)
physician,
dentist

Provide consultation during pre-deployment, pre-combat, and during combat to individual soldiers and commanders

Determine needs of units, strengths and weaknesses

Consult with commanders and staff elements on mental health aspects

Educate as required
In combat at Brigade Clearing Station:

Check for whether individual is disabled:
   a) apparent wound, injury, disease, chemical or radiation exposure
   b) transient battle reaction/battle fatigue
   c) will individual's behaviors be disruptive

Instill expectation to return to duty

Assess capability of functioning/not functioning:
   a) will individual's behaviors be disruptive
   b) tactical situation
   c) knowledge of common symptoms of transient battle reaction/battle fatigue
   d) individual's past history and experiences
   e) course of transient battle reaction/battle fatigue
   f) phases of transient battle reaction/battle fatigue
   g) employ strategies for coping
   h) employ acceptable treatment methods

Determine if brief psychotherapy is required, either individually or in groups

M.H.O.

Employ brief psychotherapy if necessary

M.H.O.

Determine if medication is required then make recommendation

M.H.O.

Screen need for medication and administer if necessary

If rest is required, insure individual is monitored for changes in mental and/or medical status (particularly after medications)

M.H.O.

Supervise individuals not capable of returning and functioning in combat role, but who are temporarily used in combat support role at the brigade level, if tactical situation permits

M.H.O.

If soldier is not capable of functioning in either combat or combat support roles and if tactical situation permits, consider evacuating to Rear Clearing Area at Headquarters and Support Company for further evaluation
The role of the 91G in combat will be to provide triage services at the divisional level, to provide brief treatment when appropriate, and to evacuate those patients who do not respond to rest/treatment or who have a serious mental disorder which was preexisting. Differential diagnosis will often be difficult and many psychiatric casualties will also have physical injuries or illnesses. To be effective, the 91G must have good clinical and military skills, must have credibility with the soldiers and their commanders, and must prevent himself or herself from becoming a psychiatric casualty. Efforts are under way to increase the 91G grade structure in division to reflect the degree of maturity and experience necessary to be effective in combat.

As presently configured under the "H" TO&E, each of three medical companies has two 91G's (E4 and E5) and the medical support company has three 91G's (two E5 and one E4) plus a psychiatrist, social worker, clinical psychologist, and patient administrator (E4). Presently, units are converting to the "J" TO&E. In this configuration each of three medical companies has two 91G's (E6 and E5) and the medical support company has two 91G's (E5 and E4) plus a psychiatrist, social worker, and clinical psychologist. It has been proposed that the three medical companies have two 91G's (E5 and E7) and that the medical support company have three 91G's (one E8, one E7, and one E6). It has further been proposed that an additional psychiatrist and a 91F be assigned to the medical support company. The increase in grades represents a recognition of the skills needed. The E8 would function as the Division Mental Health Section NCOIC and may accompany the division psychiatrist as one of the two two-man teams to support the assaulting brigades (the social worker and psychologist would serve on the other team). An E8 would also generate the respect necessary to effectively deal with officers and senior NCO leaders or those who may become psychiatric casualties.

Corps level units who have an area support mission would receive at least one 91G to assist in assessing psychiatric casualties in the rear areas. One crucial addition would be a 91G to the Evacuation Hospital since it would receive ambulatory psychiatric patients from the division medical support company, as well as from nondivisional units in its area of responsibility.
Some of the considerations of which the combat 91G should be aware are:
50% of casualties in NBC war may be psychiatric, psychiatric casualties represent the largest source of replacement personnel, the NBC battlefield will be highly lethal and futuristic, combat may continue around the clock with soldiers dressed in protective gear, corps and division rear areas are primary targets of NBC weapons, behavioral science personnel will be involved in the administration of medication, continuous combat may necessitate the use of stimulants and sleep aids by combat troops, supported units will be highly mobile and hard to locate, many psychiatric casualties will flow to the rear parallel to the medical evacuation route, primary duties of the forward 91G's will be triage, differential diagnosis will be difficult (gas/laser hysteria, chemical reaction, drug/alcohol intoxication/withdrawal, etc.), 91G's may provide group processing to units after battle, behavioral science personnel will need to deal with irradiate soldiers (600+ - 1000+rads), and 91G's will need to join their supported units early in the unit training cycle to ensure a knowledge of the personalities to organizations involved and to achieve credibility in the eyes of the troops and commanders.

Behavioral Science Specialists can be expected to perform the following tasks in combat: triage, administration of medication, patient evacuation and restraint, treatment (bathe, feed, clothe, rest, ventilate, brief supportive/guidance therapy), consult with GMO's, PA's, 91B's, and CO's, administer pre-battle survey (morale), conduct postbattle debriefing/processing, identify drug/alcohol intoxication or withdrawal, provide patient accountability to provide other clinical and military services as directed.
The author describes the impact of stress and fatigue factors on the functioning of a battalion sized unit engaged in continuous combat operations during REFORGER 82. As fatigue and stress increased there was a corresponding decline in combat efficiency as reflected in errors of taticle judgment, decreased map reading ability and impaired communication abilities on the part of unit leaders. Opportunities for effective preventive interventions by mental health personnel in a combat environment are described as are some considerations for handling stress casualties in a field environment.

For many AMEDD Psychologists, indeed most AMEDD Behavioral Scientists, our roles as mental health professionals and as military members seem to follow parallel paths which only infrequently overlap. That is, most of our activities clearly belong to one role (assessment, psychotherapy) or the other (Administrative Officer of the Day) with only a small minority requiring a true integration of the two roles. The author recently had an opportunity to participate in one such integrating experience when he accompanied a Squadron of an Armored Cavalry Regiment on REFORGER 82 as an observer/augmentation to their Medical Platoon.

The purposes of this trip were: first, to gain familiarity with the unit and its functioning as a part of a long-term consultation project; second, to observe the unit for the effects of stress and fatigue in a simulated combat environment; and third, to assess the applicability of current mental health plans and thinking in a highly fluid and mobile combat environment. An armored cavalry unit was particularly well-suited for these observations in that such units are designed to be highly mobile, to fight over extended distances and to possess sufficient firepower to independently engage much larger units in direct combat. These are many of the same elements which characterize the tactics and organization under which much of the army will fight in future conflicts. Wass de Czese and Holder (1982) in describing changes in the new Operations Manual, FM 100-5, emphasize initiative, depth, agility and synchronization as characterizing the new operational concepts. Moving fast, striking hard, and
finishing rapidly are seen as keys to avoiding enemy counterattacks and counter-
fires. MG Robert Elton, CG of the 9th Inf Div, the division selected as the
High Technology Light Division testbed, indicates that the depth to which a
typical division will operate has been greatly expanded (Tice, 1982). Now,
instead of looking 15-20 Km forward, divisions will operate out to 70 Km and to
the rear about the same distance. MG Elton also describes future tactics as
characterized by mobility, speed, offensive initiative and deep strikes at the
enemy's second-echelon forces. Barbara and Brown (1982) describe in detail
plans for using brigade size forces to conduct such strikes against enemy sup-
port facilities located between the first and second-echelon divisions. These
factors can only add to the anticipated difficulties in maintaining the mental
health of soldiers who are involved in continuous operations with highly lethal
weapon's systems in high-intensity combat.

The armored cavalry squadron which the author accompanied on the six week
REFORGER exercise deployed to Germany as part of an Armored Cavalry regiment
which consisted of three cavalry squadrons and a regimental base. Each squadron
is composed of three line troops, a tank company, a howitzer battery and a head-
quartes troop. Each squadron is completely mobile and may be employed as a
separate unit or as a part of a regimental force. Squadron medical support is
provided by the organic medical platoon consisting of a physician's assistant, a
platoon leader, and approximately 26 enlisted medical aidmen. The regimental
base has a similar medical platoon and a regimental surgeon. Brigade level and
higher medical support must be obtained from Corps assets. It is important to
note that there is no organic mental health support for this type unit forward
of the Corps rear area.

A squadron size force when deployed for combat typically is organized into
four functionally and physically separate areas of operations consisting of the
Field Trains area, the Combat Trains area, the tactical operations center and
the line unit combat areas. During the deployment period the author was able to
gather data from all four locations under varying conditions. Initial obser-
vations were gathered from the unit as a whole while based with the medical pla-
toon in the Field Trains area of the Marshaling area. This period of
observation consisted of the 10 days prior to the actual start of exercise play
during which the unit drew prepositioned vehicles and equipment, rail-loaded the
vehicles, moved by troop trains to the exercise area, off-loaded the vehicles,
and formed into its combat configuration in the assembly area. During the first
week of actual exercise play the author divided his time between the Battalion
Aid Station located in the Combat Trains and the Tactical Operations Center
located just to the rear of the actual combat elements. During this period the
squadron was engaged in 24 hours a day combat operations as part of the offen-
sive action of a Corps covering force. During the second week of exercise play
the author road and lived with one of the line troop commanders in his armored
personnel carrier. This week was again characterized by continuous combat
operations with the squadron acting as part of the Corps covering force on the
defensive. An additional feature of this period was a night exercise after
three days of continuous operations which involved disengaging the squadron from
battle, moving approximately 50 miles by roadmarch to an unfamiliar location and
immediately being thrown into a counterattack against overwhelming enemy forces.
Approximately six weeks prior to deployment on the exercise the author began acquainting himself with the officers and senior noncommissioned officers of the squadron by participating in normal preparation activities, attending squadron staff meetings and by visiting key personnel in their typical work areas. Thus, by the time of deployment he had met with all key personnel in the units and had explained his role and purpose in accompanying the unit on REFORGER. These activities were quite successful in gaining acceptance and freedom to operate within the unit. During the entire deployment period the author was allowed total freedom to observe whatever he wished. Particularly impressive was the willingness of the unit personnel at all levels to discuss almost any aspect of the unit's functioning, unit problems, and their own experiences of stress and fatigue.

Data was gathered by the author from direct observations, personal conversations, informal group discussions during lulls in battle, monitoring of radio communications and participation in staff meetings and briefings.

The wide range of observations and data collected during this exercise will take some time to organize and analyze properly. Preliminary analysis has led to some interesting support for previous observations of units functioning during continuous operations and to supporting data for previously proposed roles for mental health personnel in a combat environment.

Manning (1979) and Manning and Ingraham (1980) have addressed the issue of round-the-clock high-intensity combat operations by a field artillery battalion in Europe. During their observation of the unit while engaged in a 36-hour continuous operations scenario they found that impaired judgment due to sleep deprivation was a major problem for senior leaders. They note that the sleep deprivation was in part self-imposed due to an unwritten code which indicates that sleep is only for the weak. Of particular note is that while they found forced-paced activities, such as requests for fire from forward observers and higher headquarters, being handled efficiently they also found that self-paced activities such as updating meteorological reports, plotting pre-planned fire and no-fire zones and setting out perimeter guards being increasingly neglected. Studies by Britain's Army Personnel Research Establishment (1977) and follow-up studies have shown that as little as three to four hours of unbroken sleep per night produced significant improvement on tasks of both cognitive performance and military effectiveness.

Observations of the sleep behavior of the armored cavalry squadron reinforce the findings of previous studies and help to generalize them to front line units. The author specifically noted his own periods of sleep per 24 hour period at each of the functional areas of operations described above. In the Field Trains area during the week immediately prior to the start of exercise the author averaged 4.8 hours of sleep per 24 hour period. Often this was not the unbroken sleep recommended by the British studies but rather sleep punctuated by frequent interruptions. Typically these interruptions consisted of patients being brought to the battalion aid station for treatment, requirements to perform immediate maintenance on equipment such as generators, or the need to assist with maintaining a radio watch. While in the Combat Trains and Tactical
Operations Center areas during the first week of exercise play the author averaged 2.8 hours of sleep per 24 hour period. Again, this was not typically a period of uninterrupted sleep but rather small increments snatched as opportunities presented themselves. During the second week of combat play while riding with the troop commander the author averaged 2.1 hours of sleep per 24 hour period. At this location all sleep was obtained in less than one hour increments. Bear in mind that the author had no specifically assigned duties during these periods and was thus more likely than others to be able to sleep when an opportunity presented itself. Finally, while riding with the troop commander the author also recorded his sleep behavior which averaged less than one hour per 24 hour period. The platoon leader's sleep behavior was not directly observed, however, it was noted that at all hours of the day or night when called by the troop commander on the radio each answered immediately himself. Thus, it seems safe to conclude that they receive little if any more sleep than the troop commander who was directly observed.

One difference between this unit and the artillery unit observed by Manning and Ingraham was that the almost perpetual movement and continual engagement in direct combat with enemy forces played a greater role in leader sleep deprivation than did self-imposed factors. Fear of being caught napping by a superior during the infrequent lulls in battle was still present but seemed to play a lesser role than in the artillery unit.

The effects of sleep deprivation and stress factors on unit leaders whose future careers depended heavily on their performance during the exercise were progressive and dramatic. On an operational level errors of judgment on the part of leaders began to show after two to three days of continuous operations. On one occasion a troop level commander who had been warned by a neighboring unit that he was in danger of being encircled was unable to take effective action to prevent it. Within an hour his entire troop had been destroyed. On another occasion the entire squadron was easily lured into an enemy trap which caused significant losses. Both of these sets of circumstances had presented themselves earlier in the exercise and had been appropriately handled with very successful outcomes. Highly dedicated and effective squadron staff officers in later conversations with the author confided that after three days of exercise play they were so exhausted that they simply found a secluded spot, stopped their jeep and turned off their radio to obtain three or four hours sleep. This could be disastrous for the unit during actual combat.

As the exercise progressed the time required for leaders to accomplish routine tasks began to increase. The commanders' deployment and positioning of their platoons on the ground took significantly longer as did the time required to read the operational maps. The effects of fatigue and stress on map reading abilities were also apparent in the increased reporting of incorrect map coordinates and positions and in increased errors in locating themselves on the ground in relation to the maps.
Radio transmissions were equally subject to increasing errors as the period of stress and sleep deprivation increased. Particularly susceptible to these factors was the use of call signs. It became common for leaders to identify themselves by an incorrect or previous day's call sign and/or to use the wrong or previous day's call sign for the person being called. Often communicating with the correct individual was based more on voice recognition than on proper call sign identification. Keying the mike for 20-40 seconds while trying to think of calls signs or even to remember who had called became common. This may be particularly lethal in an electronic warfare environment. Similarly, the length of transmissions increased due to less precise communications. Messages which earlier in the battle had taken 30 seconds began to require two to three minutes. At the same time irritability with subordinates and anger toward superiors increased significantly when either failed to grasp quickly what was being said. Often this resulted in a need to repeat the original message. On several occasions commanders gave up attempting to communicate with subordinates by radio and simply drove to their location to show them what they wanted done.

Information flow was likewise influenced by stress and fatigue factors and the increased irritability of leaders at all levels. As these factors increased the amount of information available about higher and adjacent units decreased. Information flow within the individual troops became the minimum necessary—often no more than "follow me." Similarly, information flow up the chain decreased even further, perhaps in part due to the increased irritability of leaders in their dealings with subordinates. The information flow between combat elements and their supporting elements also decreased to the point where it led to much shorter notice moves for the supporting elements than would have been necessary. This is extremely disruptive to their functioning and may directly impair their ability to sustain the combat elements.

The vehicle accident record of the squadron was another factor which appeared to be related to the effects of stress and fatigue on the judgment of both vehicle operators and unit leaders. All seven of the squadron's major vehicle accidents involving serious injury or property damage occurred following three to four days of exercise play. No serious accidents occurred prior to the start of the exercise nor after it had finished. Three of the seven accidents definitely involved poor judgments on the part of leaders who had previously demonstrated a considerable concern for the safe operation of motor vehicles.

In their studies, Manning and Ingraham additionally focus on "the will to continue" as an important issue involving junior enlisted personnel. They report that they found this to be even more important than physical endurance and related it to a lack of unit cohesion and esprit. In the present case this was evident at the troop level and seemed to be a function of unit organization and employment policy. Each troop receives certain dedicated support elements from squadron/regiment such as medics, ground surveillance radar operators, red-eye air defense teams, etc. Since these elements are not organic to the troop they support, they are often not seen as belonging to the troop. This attitude is encouraged by a failure to consistently employ the same people in support of the same troop and by the frequent turnover of personnel in the support
sections. On a practical level this resulted in several supporting elements being "forgotten" in the chain of notification when a troop size unit moved location at night. Other supporting elements described such things as being threatened with withholding of rations if they didn't comply with the commander's wishes and as having been forgotten when water rations were being distributed. Most of these instances appear to have been oversights in the heat of battle but nevertheless they severely impacted on the "will to continue" of the individuals involved. Perhaps the trend to centralize functions at battalion and higher levels makes good sense from a cost analysis perspective; it surely does not from that of unit cohesion on the battlefield.

The recommended roles for mental health workers was the second area of interest for the author. Rath (1980) has suggested three major tasks for mental health personnel in combat: consultation to command to minimize the rate of psychiatric casualties and to maximize combat effectiveness; management of psychiatric casualties for maximum return to duty; and maintenance of effectiveness of mental health personnel.

The author found ample opportunities to engage in both preventive consultation activities and to assist in the management of psychiatric casualties during the exercise. The preventive activities fell into three main categories: 1) advice to commanders; 2) rumor control efforts; and 3) tailgate supportive interventions with commanders, staff officers and enlisted personnel. On several occasions he was able to provide feedback to the squadron and troop level commanders on the results of various policies and procedures which were negatively impacting on troop morale. Frequently this feedback dealt with misinterpretations by subordinate commanders and leaders of the squadron commander's directives or the spirit of his directives. One area where this feedback proved to be particularly helpful was regarding information flow to the enlisted personnel. For example, on the day before exercise play began the author noted that many junior enlisted personnel from a variety of sections appeared to have little idea of what was to happen during the exercise and even less of an idea as to where the squadron fit into a large picture. Incredibly, a few even thought the unit was to engage in a tank gunnery exercise with no opposing forces. Interestingly, informing the troops had been a theoretical point of interest for the squadron commander. Following his re-emphasis of this point at the day's staff meeting it was noted that most section leaders were conducting exercise briefings for their men. On another occasion during the defensive phase of the exercise one particular troop was doing exceptionally well in defeating attacking enemy forces but then repeatedly being ordered to fall back to new defensive positions. This was becoming very demoralizing for the hard fighting soldiers. Once this was brought to the attention of the troop commander he quickly informed the soldiers that it was in no way a reflection on their performance but rather necessitated by the pull-back of adjoining units. As this information became known, the soldier's moral and fighting efforts rose again to their previously high level.

In the confusion of combat activity, rumors and misinformation were common and at times very detrimental to effective combat operations. This was especially true as formal channels of communication became less effective and
psychologically accessible due to the previously noted effects of stress and fatigue. In this situation it was found that a mental health worker who is seen as approachable by the enlisted soldiers could serve a useful function. At times this function involved on the spot corrections of misinformation or rumors and at other times it involved informing commanders of the impact of various rumors or misinformation so that they could take corrective action.

An activity that appeared to be of significant value in preventing stress casualties amongst leaders and in maintaining the combat effectiveness of some units was the provision of tailgate supportive therapy to unit commanders. This primarily involved finding a relatively quiet time and place to talk with a unit commander who had previously been observed exhibiting signs of stress build up. These talks were not in any way defined as therapy and were not exclusively problem centered. It is the author's belief that this was extremely important to the commanders for they are the one group which is very isolated psychologically under battle conditions. In a garrison setting they often gather together to share mutual concerns, offer support and exchange information. Due to the expanded distances over which they had to operate this mutual support was not possible during the exercise play. That the commanders themselves found these talks to be helpful was demonstrated by several expressions of appreciation even after the exercise was long over.

The effectiveness of these and other such preventive interventions and consultations was very dependent upon the credibility of the author not only as a mental health professional but also as a fellow soldier. In part this credibility was based on face to face familiarity with the commanders and leaders developed prior to deployment in their work areas, at staff meetings and at the officer's club. In part it was based on the willingness to share the hardships of family separation and field duty with them. And, in part it was based on demonstration of some appreciation of what their jobs and functions were, conveyed in their language.

The same credibility with commanders was extremely important to the effective management of the psychiatric casualties which occurred. A case in point was that of an E-6 scout platoon leader who developed a toxic psychosis from eating nightshade berries several days before the start of the exercise. This unit had observed this individual in a state of total disorientation, running through the woods without boots or equipment and to have put his hands around his driver's neck as if to choke him. Since he is the person who is to first make contact with the enemy and warn the unit of their approach, all members of the unit were somewhat dependent upon him for survival in combat. You can imagine their concern when he returned to duty from the hospital just before the start of the exercise. His unconditioned acceptance back into the unit by the commander and the rest of the unit was greatly facilitated by explanations of what had happened to him and of the temporary, nonrecurring nature of his illness. This would not have been possible had not the commander and unit members truly believed that the author understood the nature of this man's job as well as his illness. They had had too many previous experiences with medical experts who had not understood their work and its setting to have simply
accepted him back "on the say so of some rear echelon doctor." Similarly, explanations to the soldier himself of what had happened to him and reassurance that he would be able to function properly by the hospital staff did not have the same impact as did the same reassurances from someone whom he felt knew his job and situation.

This, and other cases ranging from manipulative soldiers threatening suicide to situationally distressed soldiers who had received "Dear John" letters from home, often required quick assessments and immediate intervention efforts which could not usually be performed in our customary office manner. Due to the fast pace of the battle activities and distances involved, almost all contacts were of a one-time crisis intervention variety. Follow-up contacts were the result of later accidental meetings or, occasionally, the result of a specific effort by the author to find the soldier. Most frequently follow-up reports were obtained during brief encounters with the soldier's superiors or fellow soldiers. At this point some might raise the issue of confidentiality as a problem. In fact, a soldier's unit and superiors were well aware of any difficulties or unusual behavior long before medical personnel. Actually, with some exceptions, too much confidentiality in a combat environment may be detrimental to both the individual and the unit involved by delaying or complicating the soldier's re-entry and conveying the attitude that there is something wrong with having strong feelings or problems.

Working with soldiers in a combat environment required a significant shift in therapeutic orientation from that of assisting a person to seek his optimal level of functioning to helping him return to the minimum level of functioning necessary for him to continue in his duties. It further required a shift in thinking concerning who the client actually was. Basically there was a need to identify with the unit and its function as the primary client, over and above the individual, in order to convey the degree of expectancy of return to combat that has been consistently identified as necessary for treating psychiatric battle casualties. Further, this identification, blended with appropriate clinical skills and a measure of reality therapy, was of significant value in preventing manipulative epidemics.

Finally, based on the above observations of a unit engaged in continuous combat operations, several points stand out as deserving future attention or re-emphasis as the case may be:

1) Mental health professionals must begin to reconsider their garrison mode of operations if they are to be prepared psychologically to function in a combat environment and if they are to develop the skills necessary to function in that environment.

2) Face-to-face familiarity of unit leaders and members with the mental health worker provides the most important source of credibility for the mental health worker and greatly increases the likelihood of quick cooperation in a combat setting.
3) Familiarity of the mental health worker with units and the functioning of unit leaders prior to combat is extremely beneficial and may provide the only baseline data for assessing the effects of stress and fatigue on both the unit and its members.

4) Mental health workers must not only believe in and practice preventive intervention, but also must educate commanders and leaders regarding the tactical impact of such factors as stress and fatigue using the language of the commanders.

REFERENCES


Tice, J. Fast attack: Potent new light division shaping at Fort Lewis. Army Times, September 27, 1982, I.

Behavioral science professionals (psychiatrists, psychologists, and social workers) and paraprofessionals (behavioral science specialists) have been assigned at the division level since World War I. Based on the research by Thomas Salmon, it has become an accepted doctrine that psychiatric casualties can be returned to effective duty if they are treated very quickly and close to their units after becoming ineffective, and if they meet an attitude that shows the trust that they will soon get better. These three concepts of immediacy, proximity, and expectancy are the cornerstones of military psychiatry.

Despite the overwhelming historical evidence and the obviously significant psychological implications inherent in nuclear, biological, and chemical warfare, the US Armed Forces have not incorporated psychiatric casualty exercises into the tasks of field training. In an attempt to remedy this apparent training lacuna, the 1st Armored Division programmed two psychiatric mass casualty exercises into brigade level ARTEP training.

In general, the exercise proved to be extremely valuable. On the one hand, it has increased the awareness of both line units and medical teams of the significance and treatment of psychiatric casualties. It served a particularly important function for the mental health team. During these exercises, the team members were brought together in a setting which focused their attention on the requirements of a combat situation. The instructions provided during the exercise to the behavioral specialists has greatly enhanced their knowledge of the basic principles of managing combat psychiatric casualties. For combat, this training is mandatory in view of the likelihood that behavioral specialists may be functioning independently, serving at times as primary information source to other medical team members (e.g., at the battalion aid station level) as to the proper management of psychiatric casualties.
CRISIS INTERVENTION IN MILITARY UNIT SETTINGS: A DEVELOPMENTAL APPROACH

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Tacoma, WA 98421

As a result of his observations of children, adolescents, college students and older adults, Erik Erikson made several important contributions to theories of personality development. In part, he suggested eight stages of psychosexual development which essentially describe the human life cycle from infancy to old age. These stages represent conflicts which come into focus at various ages which must be resolved in order for an individual to most successfully cope with his/her environmental circumstances. To the extent that military unit and individual behavior present social circumstances requiring adjustment and coping skills, these stages appear to often be recapitulated and otherwise represented in military units. It is posited that the eight stages of man delineated by Erikson can provide an effective framework for conceptualizing unit and individual problems. Likewise, a knowledge of the stages is posited to offer direction toward the styles of leadership and alternative courses of action which commanders may wish to consider in order to most effectively resolve unit and individual problems. Thus, in this paper the eight stages of man will be discussed along with their implications for effective interventions in military unit problems.
HIGH-IMPACT SHORT-TERM TREATMENT OF TROUBLED FAMILIES WITH LATENCY-AGED AND YOUNGER CHILDREN

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This was the second segment in a two-part series of lectures on family/child assessment and treatment. In this lecture, strategies and methodology for high-impact short-term intervention for troubled families were discussed. Techniques are drawn from humanistic, gestalt and behavioral management of the family. These techniques have been proven to be highly useful in both traditional child guidance settings as well as in general pediatric and family practice clinics; even in the face of severe time limitations. Both theoretical and practical strategies were discussed and demonstrated.
COMMUNITY MENTAL HEALTH ACTIVITY AT A MEDDAC SETTING:
DOCUMENTING HEALTH CARE SERVICES ADVANTAGES
BY LOCAL TREND SUMMARY REPORTS

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The feasibility of organizing mental health assets of a MEDDAC into a CMHA structure is being examined throughout various medical treatment facility locations. Pro and con justifications have been based, by and large, on interprofessional parochial domains. Data acquired before and after the formulation of a CMHA are summarized to highlight the following CMHA advantages: A twofold increase in direct services, a threefold increase in Command referrals and indirect consultative services, a reduction in rate of psychiatric casualties (admissions) and evacuations (MEDCEN transfers), and a reduction in hospital stay for admissions. Data is additionally available to depict: Extent of "lost duty time" (man/hours) of active duty personnel due to mental health care, prevalence rate of CMHA contacts by specific unit affiliation (Basic vs Advanced training), gender and rank. This information is vital not only for program needs and health care cost projections but also for input to installations' Directors of Health Services for advising Post Commanders in matters pertaining to the mental health status of assigned personnel. A sample Memorandum For Record of "Trends in Mental Health Support" is included for potential format reference and usage.

Stage Setting

In May 1976, Health Services Command promulgated regulatory guidance (HSC Regulation 10-1) that reaffirmed and elevated in status the organizational element and functions of the Community Mental Health Activity (CMHA). Two significant provisions were stipulated: (1) that mandated the establishment of a CMHA in lieu of a hospital Department of Psychiatry and Neurology and Social Work Service at small MEDDACs, and (2) that allowed the MEDCEN/MEDDAC Commanders to designate "any qualified behavioral science officer" to serve in the capacity of Chief, CMHA.

The impact of these new provisions were realized without fanfare at a few of the medical treatment facilities where actual changes in organizational structure took place. In the majority of MEDDACs, these provisions by and large were considered and accommodated by simply changing the name of the "Mental Hygiene Consultation Service" to CMHA and all else remained the same. These CMHAs continued to thrive within the organizational scheme as a subelement Service of the Department of Psychiatry of the Hospital. In at least one MEDDAC, at Fort McClellan, Alabama, the spirit and intent of the Health Services Command regulation was immediately implemented and actualized. All mental health and behavioral science assets were subsumed within the CMHA, which by guidance, was
elevated in status from a Service within a Hospital Department to an "Activity" parallel in organizational structure to other local Medical Activities, such as the US Army Hospital, Dental Activity, Veterinary Activity and the Preventive Medicine Activity -- the Chiefs of which composed, with others, the Executive Committee of the MEDDAC Commander.

The feasibility of organizing mental health and behavioral science forces of a MEDDAC into a CMHA structure has been examined throughout various medical treatment facility locations. Pro and con justifications so far have been based, by and large, on interprofessional parochial domains and rank structure of assigned professionals. To the knowledge of this writer, no data has been presented which compares the merits of an interprofessional composite CMHA organizational alignment with that of a traditional, separate Service, organizational structure. The remaining portions of this paper address the process of discovery, experienced by the writer, that eventuated into a comparative summary of advantages in organizing behavioral science assets into a CMHA at a MEDDAC site.

Ripened Regulations Fertilize

Once a qualified behavioral science officer is appointed as Chief, CMHA, it behooves that individual to discharge his responsibilities with, among other traits, knowledge of both the professional and the staff requirements essential to the position.

Most Clinical Psychologists, who would be selected and designated by MEDCEN/MEDDAC Commanders to function as Chief of a CMHA, have gained and demonstrated sufficient clinical/professional experience to be able to "wear the technical hat" very comfortably and competently. Most Clinicians are less experienced in donning the "staff arena hat." When tasked to assume the chieftain honor of a CMHA, Clinical Psychologists are given the opportunity to discover varied avenues to enhance not only mission attainment but also their scope of influence and effectiveness as a mental health official for the Medical Treatment Facility and for the supported military installation.

It is a necessity for success as a Chief (of anything) that one thoroughly review all pertinent official guidance that alludes to, or directly defines, or otherwise impacts on the operations and functions of the organizational element and position to which you are responsible. In an effort to be successful at a new position, yes -- and more importantly to insure the best quality of care for clients -- the writer remembers compulsively going about the business of studying all relevant regulations, and some seemingly irrelevant ones, also. The self-imposed task was tedious, memorable and valuable.

It came to my awareness, over the course of the first few months as Chief, CMHA, that -- whether or not anyone locally was familiar with the old Army Regulation 40-216, entitled, "Neuropsychiatry," published in 1959 -- old regulations from Department of Army level not only define policy but remain in effect until revoked or superseded. Psychologists mostly know this numbered regulation today by recent attempts to modify its proposed revised editions. The original document, and most likely any subsequent revision thereof, however is valuable for its delineation of areas of responsibility as well as authority that comes with the territory of any chief mental health official.
Much to my surprise, a minimum of eleven (11) "staff responsibilities" were elaborated in this document that were directly pertinent. (The language used in the available old and discolored copy of this regulation referenced Mental Hygiene Consultation Service... an obsolete title today within HSC.)

Of import to the present paper, MHCSs used to be required to send a monthly feeder report to The Surgeon General Office, among other reasons, to "determine the current status of mental illness in the Army so that trends in type and frequency of disorder may be discovered and corrective measures initiated." This once routine feeder report form is obsolete nowadays, and I suspect so, because the contained information was more directly relevant to local Commanders' "need to know" than it was for OTSG level. In any case, the report was abolished. But, the staff responsibilities remain for the CMHA Chief "to maintain adequate statistical data on mental health problems as an aid in evaluating trends and to advise on the number and type of potential psychiatric casualties."

Configuring meaningful data systems was seen as a "shoe-in" skill of which we, Psychologists, have plenty of moxie. In our training we have learned, sometimes the hard way, that what may be considered meaningful to some may be seen as garbage to others. A search to find out what kinds of information would be important and helpful was undertaken by sampling probable content areas through discussions with the MEDDAC Commander and the installation Commander and his staff. The general question was: "What did the Director of Health Services (the MEDDAC Commander) need to know in advising the Post Commander, and his subordinate commanders, in matters pertaining to the mental status of assigned personnel and pertaining to mental health services and psychiatric casualty trends?"

Fruits of Growth

Candid inquiry resulted in numerous qualitative areas of concern. Points of interest varied. How many and what kind of people seek or are referred for mental health services? How much "lost duty time" results from active duty personnel obtaining mental health services? What is the prevalence rate of CMHA contacts for the post military population? How many people are referred to CMHA from unit commanders, from medical clinics? What units are making use of available mental health resources? Is there a difference in mental health support requirements for women as compared to men, trainees versus permanent party? Can we track variations in psychiatric casualties (hospital admissions) to derive prevalence predictors? Can we show reduced stays in hospital and transfer (evacuation) rates? Does the CMHA concept work, with constant or reduced staffing and increased post missions and population?

The questions posed obviously were vital for health care program needs and cost projections as well as for local commanders having training missions. In addition, because of the recent organizational restructuring, data was available to compare the feasibility of a unitary CMHS concept to a previous multiservice organization of mental health and behavioral science resources, elsewhere found in competition and duplicating services.
A Memorandum For Record, entitled, "Trends in Mental Health Support during CY 77 at U. S. Army Medical Department Activity, Fort McClellan, AL," is attached to this paper as a sample for potential format reference and usage.

A brief summary of CMHA advantages highlights: a twofold increase in direct services, a threefold increase in Command referrals and indirect consultative services, a reduction in rate of psychiatric casualties (admissions) and evacuations (MEDCEN transfers), and a reduction in hospital stay for admission. Eighty percent of the psychiatric casualties were managed by local outpatient mental health resources and/or command channels.

As a closing comment, Clinical Psychologists stand available and ready with skills to take full advantage of similar opportunities to impact on AMEDD programs review and to support Medical Treatment Facility commanders.
MEMORANDUM FOR RECORD

SUBJECT: Trends in Mental Health Support during CY77 at US Army Medical Department Activity, Fort McClellan, AL

1. PURPOSE: The information in this memorandum is designed to provide an annual summary of Community Mental Health Activity (CMHA) support provided US Army Military Police School/Training Center and Fort McClellan. It is intended as input to installation Director of Health Services for advising Post Commander in matters pertaining to mental health of personnel and pertaining to mental health services and psychiatric casualty trends.

2. DISCUSSION:


   (1) Active duty category made up 67%; dependents of active duty, 18%; retired personnel, 7%; dependents of retired/deceased, 8%.

   (2) The busiest CY quarter was the 1st (Jan - Mar) with 34.1%; the least busy quarter was the 4th (Oct - Dec) with 19.1%.

   (3) Recent trend analysis: From Nov 77 through Feb 78, shows proportional client/patient contacts to be Active duty, 80.9%, and dependents of active duty 17.9%.

   (4) During the CY periods 1970 - 1975, same mental health services averaged 4,286 yearly patient/client contacts. In CY 1976, 12,286 contacts were tallied. Yearly contacts have increased slightly over 2.6 times during past two years when compared to yearly average over previous six years.

   (5) Estimated "lost duty time" for active duty personnel is 10,500 man/hours in obtaining mental health services (1.5 hours x 7,013 Active duty client sessions).

   (6) Prevalence rate of CMHA contacts for post military population in CY77 has dropped compared to CY76. In CY77, CMHA obtained a rate of 9.72 monthly contacts per every 100 assigned military. (12.8 monthly contacts per 100 in CY76)
b. Referrals to Outpatient Mental Health Clinic of CMHA:

(1) General Trends:

(a) A total of 1,804 patients were provided direct care services through 5,247 appointments; an average of 2.9 visits per patient. (Each appointment lasts roughly 1 - 3 hours each).

(b) An average of 150 new patients were seen per month in CY77. This compares to 59 new patients per month in CY74.

(c) "No Show" (did not keep appointment) rates for CMHA Clinic appointments has gradually fallen to a 8.9% rate in CY77. In CY74 this rate was 10.8%.

(d) In CY77 about one and one-half per cent (actually 1.65%) of assigned monthly active duty military population were referred to CMHA Clinic. (1.1% in CY74).

(e) Two and one-half (21/2) times more patients were seen at CMHA Clinic in CY77 (1,804) than was the case in CY74 (705) by the same number of assigned mental health staff personnel.

(2) Referral Sources:

(a) Nearly half 9824 or 45.7%) of CMHA Clinic patients seen in CY77 were referred by unit commanders. One-third (34.3%) came from medical referral sources (387 or 21.5% from Noble Army Hospital Departments/Services; 155 or 8.6% from WAC Dispensary; 76 or 4.2% from MP Dispensary). One-sixth (288 or 16%) of the total input were self or family member referrals. A final four per cent (4% or 74) were referred from other elements/agencies (i.e., IG, SJA, Chaplains, COMPACT, civilian physicians, Department of Pension and Securities, schools).

(b) In comparison to CY74 data, a significant number of more referrals have been received from all referral categories in CY77 (3 times greater from Commanders; 4.5 times greater from other elements/agencies). The proportion of referrals from medical sources have remained relatively constant; that from Commanders and other elements/agencies have significantly increased. Proportion of self/family member referrals has decreased.

(3) Unit Affiliation of Patients: (See Appendix A):

(a) Basic and Advanced Training Companies:

1. Two-thirds (66.1%) of the patients seen at CMHA Clinic were affiliated with training companies.
On the average, 74 patients were seen in CY77 from each WAC Basic Training company's (1st Bn, 59 pts/company; 2nd Bn, 89 pts/company).

On the average, 35 patients were seen in CY77 from each MP training company (9th Bn, 31 pts/company; 10th Bn, 39 pts/company; 11th Bn, 37 pts/company; 12th Bn, 34 pts/company).

Across all training companies in CY77 an average of 48 patients per company were seen at CMHA Clinic.

Almost four per cent (actual 3.78%) of CY77 monthly assigned trainee population were referred monthly to CMHA Clinic.

(b) Other Commands:

One-third of the patients seen at CMHA Clinic were from elements/commands other than Basic/Advanced Training Companies.

One per cent (actual 1.1%) of CY77 monthly assigned military permanent party population were referred monthly to CMHA Clinic.

(4) Rank Structure of Patients (or of Sponsors):

(a) Enlisted:

Nearly all of the clientele (95.6%) of CMHA Clinic were from (or are sponsored by servicemembers from) the enlisted ranks.

Slightly less than one-third (31.9% or 576) of CMHA Clinic patient population were from enlisted ranks above E1 or E2.

More dependents of servicemembers in ranks E6 and E7 were seen than any other dependent rank group, including officer groups.

As enlisted groups increase in rank fewer servicemembers but more dependents were patient of CMHA Clinic.

Dependents of E5 and above comprised eleven per cent (11%) of the total clinic population.

(b) Officers:

Slightly less than four per cent (3.8% or 69) of the clinic patient population were from the officer ranks; 32 officers (including 11 field grade) and 37 dependents of officers.
SUBJECT: Trends in Mental Health Support during CY77 at US Army Medical Department Activity, Fort McClellan, AL

2 More dependents (22) of officers in field grade ranks (04 and 05) were seen than those sponsored by all company grade ranks combined.

(c) "Top Ten". Excluding E1/E2 rank groups, the ten most frequent rank categories of CMHA Clinic patients are as follows (percentages of total clinic population (n=1,804) in parentheses):

<table>
<thead>
<tr>
<th>Rank</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3</td>
<td>(6.37%)</td>
</tr>
<tr>
<td>E4</td>
<td>(5.21%)</td>
</tr>
<tr>
<td>E5</td>
<td>(3.77%)</td>
</tr>
<tr>
<td>E6 Dep</td>
<td>(3.71%)</td>
</tr>
<tr>
<td>E7 Dep</td>
<td>(3.31%)</td>
</tr>
<tr>
<td>E8 Dep</td>
<td>(1.44%)</td>
</tr>
<tr>
<td>E9</td>
<td>(1.50%)</td>
</tr>
<tr>
<td>E10</td>
<td>(0.94%)</td>
</tr>
</tbody>
</table>

(5) Psychiatric Casualties (Defined as Active Duty personnel requiring hospital admission to Psychiatric Section Services, Noble Army Hospital):

(a) General:

1 Psychiatric Casualty rates have significantly declined over the past three years from a high in CY75 of 120 to a recent low in CY77 of 82 (6.8 per month).

2 With an average monthly installation-wide military population of 9,099 in CY77, the overall Psychiatric Casualty rate is calculated to be 0.07%. This compares with a rate of 0.16% in CY75.

3 On the average during CY77, one out of every twenty new active duty patients referred to CMHA Clinic were evaluated as Psychiatric Casualties and hospitalized.

(b) Disposition of Psychiatric Casualties:

1 Only one-fifth (20.3%) of the Psychiatric Casualties over the CY76/77 period were evacuated (transferred) to Army Medical Center facilities for further care and disposition. This compares with a 31.4% transfer rate of Psychiatric Casualties during the CY74/75 period.

2 Four-fifths (79.7%) of the Psychiatric Casualties during CY76/77 were eventually managed by local mental health resources and/or command channels.

3 During CY77 each Psychiatric Casualty stayed, on the average, 4.4 days in Noble Army Hospital before disposition was effected. This is a thirty per cent (30%) reduction in hospital days before disposition of Psychiatric Casualties when compared to those hospitalized in CY76 (6.2 days).

(6) Case-oriented Consultation Services to Unit Commanders:
SUBJECT: Trends in Mental Health Support during CY77 at US Army Medical Department Activity, Fort McClellan, AL

(a) It is estimated that CMHA Clinic staff (with only two authorized phone extensions) made from 800 to 1,200 telephonic consultations with company level unit authorities regarding referred patients in CY77. This rate is at least three times greater than telephonic consultations accomplished in CY74.

(b) Written evaluative reports from CMHA to Unit Commanders have quadrupled in CY77 compared to the number rendered in CY75 (20.4 monthly in CY75; 80.1 monthly in CY77).

3. BRIEF RECAPITULATION:

a. In CY77 the Community Mental Health Activity (CMHA) provided direct services to more clients/patients from a wider range of referral sources and provided more indirect consultative services to units/agencies than ever before in its recorded history.

b. Twice as many referrals were received from Women Basic Training companies than were received from Military Police Training companies. On the average, roughly four out of every 100 monthly assigned trainees, and one out of every 100 monthly assigned permanent party personnel, were referred for CMHA Clinic services.

c. The enlisted segment of the military population received the majority of support from CMHA Clinic professionals. A trend toward increased support to officer clients is noted, particularly with increased referrals of field grade officers and their dependents. More dependents of servicemembers in ranks E6/E7 were seen than any other dependent rank group.

d. Fewer psychiatric casualties occurred and fewer of these were evacuated (transferred) to other medical treatment facilities in CY77 than have been the case in recent past years. Psychiatric Casualty Rate for CY77 was 0.07% of average monthly military population. This is a reduction from 0.16% in CY75.

1 Incl as

DAVID H. GILLOOLY
MAJ, MSC
Clinical Psychologist/Chief, Community Mental Health Activity
APPENDIX A

Community Mental Health Activity Outpatient Clinic
Unit Affiliation of Patients CY77
(n = 1804)

TRAINING BRIGADE

<table>
<thead>
<tr>
<th>Student Bn</th>
<th>1st Bn</th>
<th>2nd Bn*</th>
<th>9th Bn</th>
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<td>HHD</td>
<td>11</td>
<td>Co A</td>
<td>61</td>
<td>Co A</td>
</tr>
<tr>
<td>Co A (STC)</td>
<td>16</td>
<td>Co B</td>
<td>55</td>
<td>Co B</td>
</tr>
<tr>
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11th Bn

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<td>Co B</td>
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12th Bn**

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<td>Co C</td>
<td>35</td>
</tr>
<tr>
<td>Co D</td>
<td>37</td>
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</table>

* WAC BT Subtotal = 664. Avg/Co = 73.7.
** MP Subtotal = 530. Avg/Co = 35.3.

HEADQUARTERS COMMAND

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<th>548th S &amp; S Bn</th>
<th>US Army Rec Sta</th>
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<tbody>
<tr>
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<td>66</td>
<td>548th</td>
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<tr>
<td>111th MP</td>
<td>19</td>
<td>Co D/46 ENGR</td>
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<tr>
<td>14th Army Band</td>
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<td>613th FLD SRV</td>
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OTHER UNITS

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</tr>
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OTHER CATEGORIES

| Retired/Retd Dep | 147 |
| Dep of Deceased  | 16  |
In support of its seven goals, the Army is currently moving toward an "Army of Excellence" in which each individual and unit will reach the highest potential of performance. Commanders at all levels up through the Chief of Staff look to their management and Organizational Effectiveness Consultants (OECs) to facilitate transition management and the development and implementation of strategies for organization design or redesign.

Organizations are composed of people. Psychologists deal with people -- this is our area of expertise. The interface between AMEDD psychology and the leading-edge planners for the Army is currently a chance happening.

This paper presents an update on current planning for and activities in the development of the Army and the battlefield of the future. The roles of the OEC consultant and the psychologist are discussed in relation to:

(1) The increased need for complementary (OE-Psychology) consultation;

(2) The need for expert psychological input to issues involved with recruit selection, training and man/machine technology;

(3) The need for psychologists to take the initiative in establishing interactive relationships with OEC consultant and Army planning agencies.

INTRODUCTION

In support of its seven goals, the Army is currently moving toward an "Army of Excellence" in which each individual and unit will reach an extended potential of performance. Commanders at all levels up through the Chief of Staff look to their management and Organizational Effectiveness Consultants (OECs) to facilitate transition management and the development and implementation of strategies for organization design or redesign.
In a recent article Robert Dudney (1982) presents a succinct overview of the Army's new directions in relation to tactics, weapons, mobility, structure and personnel. Dudney's is not an all-inclusive statement about where the Army is in relation to its "cutting edge" philosophy, but it's good reading and encompasses some of the major trends and directions in Army thinking, planning and action. The "cutting edge" philosophy refers to the futuristic orientation of Army planners today. Those of you who attended the Behavioral Sciences Symposium in September of 1981 may recall hearing about Division 86 -- a date and an entity that are rapidly approaching. In the concept of Division 86, as well as in the orientation toward the AirLand Battle 2000, the Recruit 2000 and the Soldier 2000, there is more concern for the AMEDD psychologist than where our slots will fall in the TDA.

The "cutting edge" philosophy refers to the futuristic orientation of Army planners today. Those of you who attended the Behavioral Sciences Symposium in September of 1981 may recall hearing about Division 86 -- a date and an entity that are rapidly approaching. In the concept of Division 86, as well as in the orientation toward the AirLand Battle 2000, the Recruit 2000 and the Soldier 2000, there is more concern for the AMEDD psychologist than where our slots will fall in the TDA. While the OECs deal with transition management, especially in the face of Force Modernization, the psychologist may be called upon to develop strategies for facilitating psychological reconstitution under conditions of continuous operations, teach personnel how to deal with "walking dead", and (among other things) facilitate the selection and integration of "super fighters" into units that are undergoing immense individual and organizational stress as a result of Force Modernization and the introduction of High Technology materiel and individuals. If you are a clinician, you will see the results of this turbulence-in-the-service-of-the-future-force as reflected by strain in individuals, families and units. As psychologists, our concerns need to be focused on technology in order to anticipate and deal with what will happen to people because of that technology.

Since psychologists are concerned with people and organizations are composed of people, this paper presents information on new directions the Army is taking and some of the resulting problems that may arise, as well as some implications for the interface between psychologists and the OEC consultant within the context of the Army and the battlefield of the future.

The USAOECS
and
The New Direction, New Technology Army

To provide information and some perspective on current trends, a brief description of the Concepts Development Directorate of USAOECS will be given along with some discussion of current projects being conducted in that Directorate.

Concepts Development Directorate (CD) has the mission to explore, assess, and develop new OE concepts (AR 5-15; TRADOC Reg 600-1; OECs Reg 10-1). Derived from this mission, the Directorate has adopted a purpose of "Shaping tomorrow's Organizational Effectiveness today". In fulfilling this purpose, the Directorate has identified six major goals: 1) selectively provide OE-related consulting services to benefit the Army; 2) monitor OE-related research and development; 3) explore the future; 4) develop and refine OE methods and technologies; 5) process OE-related information; and 6) establish and maintain networks. Some of the major activities of CD are: providing consulting services to the Army; determining major issues and opportunities for OE in the future; influencing the direction and outcomes of OE-related research projects; generating and testing new OE methods; gathering and storing OE information; and
conducting liaison with relevant military, academic, industrial, governmental and futures groups and individuals. The Directorate acts as a "sensor" for the Army and is responsible for developing concepts and strategies for integrating trends into the Army's planning and actions. A few of the current activities of CD are described briefly in the following paragraphs.

**Force Modernization.** During the '80s and '90s the Army will be facing change at unprecedented rates, as exemplified by the fielding of more than 400 new or improved weapons systems. By 1990 Division 86, the High Technology Test Bed, Corps 86 and the COHORT studies will be having their impact. This means that there will be comprehensive and radical changes occurring in the Army's equipment and organizational structures. The study of large-scale, complex change at CD has led to the outlining of new procedures and technologies known as transition management -- techniques whereby a commander can institute a large amount of change and still maintain a high level of readiness.

**New Organization Training Teams (NOTTs).** As force modernization proceeds, NOTTs (relatives of the New Equipment Training Teams fielded during 1981 and 1982) will be formed to provide units with planning capabilities that will allow them to adapt successfully to the many changes they face. Combined with knowledge about transition management, the NOTT will provide the potential for uniformly successful transition throughout a command. The OEC will play a key role in the NOTT, as the facilitator to transition management.

**Battlefield OE.** Basic study of OE technologies and their application to units under stress has been ongoing since 1979 and has included the use of OD by the Israeli Army in the 1973 war and studies of the German Army in WWII by Janowitz (1971). One technique that has proven its effectiveness over time is the battlestaff effectiveness training the OECS has conducted since 1977. This training consists of observation of a battlestaff as it functions in a battle simulator and the furnishing of information to the commander and his staff about how well the staff is functioning. A second technique in battlefield OE is the problem-solution focus, aimed at helping members of the unit learn from their battle experiences. A third focus has been on the adaptation of various OE technologies that are aimed at building group cohesion. These technologies focus not only on the mission and planning of the unit but also on the levels of cohesion in groups of the unit, their morale, their interpersonal relationships and the levels of trust and the support the group provides to its members.

**Manning the Force: Recruit 2000 and Soldier 2000.** The AirLand Battle 2000 requires soldiers who can fight almost continuously using conventional and unconventional strategies and tactics to gain the initiative and defeat an enemy who may possess superior numbers and have technological parity with the United States. Because of the maximum physical and psychological stress that will be placed on these soldiers as a result of demanding day and night battles, the soldiers of AirLand Battle 2000 must possess the characteristics of "super fighters". Environmental and developmental impacts on the potential recruit pool between now and the year 2000 will have profound influence on those characteristics and the capabilities required to become warrior soldiers. Identification of environmental and developmental impacts on the currently 0 to 2 year old potential recruit pool is an ongoing project. Characteristics of the "ethical" warrior soldier are drawn largely from work previously accomplished by the Israeli Army (DA, 1976).
Networking. Trying to keep a "handle" on the immense amount of information available for sensing is a task that is nearly impossible. Electronic and face-to-face networking are two approaches commonly employed by the staff of OECS. These activities allow the staff to maintain contact with the past and present, and better sense the future for the Army. Currently, several OECS staff members are actively involved in the Army's Delta Force, which is headquartered at the Army War College and serves as the conceptualizing arm of the Army. Several electronic communications networks are active on a daily basis at OECS -- the Deltanet, OEnet, ForceMod net, CD net, and Deltateach to mention a few. Communication via these networks precludes the limitations of time differentials and the delays of written communications (not to mention the often inequate Autovon network, which is not -- as many presume -- cost free). Topics of broad scope and interest are discussed and, occasionally, in-depth reviews of new, pertinent literature are provided by a participant. The programs for these networks provide for public discussion as well as private communication and personal data files.

Preventive Management. With few exceptions, management tends to react to systems distress (problem symptoms) rather than attending to the use of primary prevention measures to insure maintenance of healthy systems operations. Methods and techniques are being explored currently at OECS to move the Army (the organization) from a model of crisis management to one of preventive management. The objective is to develop procedures for effecting primary prevention for organizations in the same way we practice primary prevention in medical and psychological areas. Of particular interest in this arena is the forecasting and forestalling of organizational stress (i.e., stress on the organization, as opposed to stress on the individual).

Human Dimension in the Battlefield. In response to concerns stated recently about the lack of emphasis in Army doctrine on the human dimension in battle, the OECS staff prepared a brief concept paper to guide Division and Corps commanders of the future (e.g., Command and General Staff College attendees) in the consideration and integration of needs on the human dimension in their staffing and planning. The need to address the human dimension at the individual, unit, organizational and system levels is discussed in this paper which was provided to the Combined Arms Center. In addition, leadership problems unique to the Corps and Division commander, consideration of the human dimension in combat planning, enhancing the organization, leadership and personal dimension in combat were addressed. Cited in this paper was the presentation of Lieutenant General Paul Gorman (July, 1982) in which he presents numerous ways in which the human dimension is being considered by and having impact on research and operations in the military setting. Of additional interest is a recent article (Hopkins and Barko, 1982) that addresses the integration of soldier potential, leadership potential and system potential.

The AMEDD Psychologist and The New Direction, New Technology Army

In the previous section several areas of involvement of the OECS with the new directions being taken by the U.S. Army were presented. By now, the
question may have arisen: “What does that have to do with Army Psychology?” Perhaps the answer to that lies in the psychologist’s particular orientation. Making this assumption, the following sections address the issues from different professional perspectives, albeit in broad categories.

Social. As the Army, or any complex organization, moves through a rapid succession of changes, it seems appropriate that social psychologists bring to bear their traditional expertise in the dynamics of the facilitation of change. This issue is related to the preventive management concept, in which middle management (in Army terms, senior NCOs and junior officers) holds the key to successful change operations. Under discussion are such relevant topics as clear and undistorted channels of communication, dissemination of information, trust and transition management. Participation of psychologists in the formulation of procedures to facilitate the process of change would have positive impact not only on the institution of change, but might lessen the strain experienced by the organization and by individuals during the process.

Child/Developmental. A critical area for developmental psychologists is the formulation of concepts about just what the Recruit 2000 will be like, given the runaway technological explosion and the projected social and psychological impacts. Envision, for example, the two-year old of today (who will be 20 in the year 2000 and, therefore, within the recruit pool). As he develops keen hand-eye coordination to beat Pac-Man, what other positive and negative effects might there be? One might imagine, for example, that these youngsters will develop a delicately tuned power of concentration which would be an enabling factor in their learning meditation and/or mind controlling techniques for the purpose of combating the effects of jet-lag or stress or fatigue. These are qualities required by the “super fighters”. What will be the long-term effects of social isolation caused by high technology impacts on the social and educational systems? What might we expect in terms of recruiting, training and sustaining the force when that force (or at least its entry-level personnel) has evolved from the “hi-tech” generation?

Clinical/Community. Of paramount importance seems to be the involvement of clinical/community psychologists in the area of preventive management. Taken literally, this concept encompasses the social, developmental, organizational and clinical factors that might cause strain on the organization and on individuals and groups within the organization. Preventive management, as a primary prevention, reaches beyond the active duty Army to the interface of family/community with the active duty population. Who better to develop methods of identifying or forecasting psychological effects of change and/or turbulence than the clinician? And, having forecast such effects, the clinician, in conjunction with multi-disciplinary teams is best prepared to develop the technology for forestalling anticipated problems or “systemic viruses”. A specific example of the need for the involvement of clinicians in current planning is evident in the integration of “Cohesion Technology” in the scenario of Division 86. Considerable energy has been invested in forming and tracking cohesive units. Little consideration has been given to the effects of fragmentation or termination of these units. Clearly, there is a need for input from the clinical community regarding the effects of separation and the resultant deterrents to re-integration.
Research and Organizational. These orientations are, perhaps, most closely in touch with the Army's new directions, having participated in the formulation and evaluation of many of the new concepts. With the sincere desire not to offend, the only disclaimer offered here to AMEDD psychologists in these orientations is that they focus on the applied and practical aspects rather than the esoteric and, perhaps, academic approaches. Rhetoric has no place on the battlefield. Current DOD guidelines orient behavioral and management science concepts toward improving productivity, motivation and the quality of work life throughout DOD. In viewing organizations as socio-technical systems, the field of organization design provides a balanced approach between social and technical aspects in the study of organizational issues.

DISCUSSION

The OE Consultant and The AMEDD Psychologist

This paper has attempted to specify some of the ways in which the OE consultant has access to information and action channels in areas of growth and evolution of the U.S. Army and some of the ways in which AMEDD psychologists might execute constructive input into these areas. With regret, we must acknowledge that some of these areas of growth and evolution are of little interest to some AMEDD psychologists. It is suggested here that if we are to succeed as a viable service, we must expand our horizons and recognize the fact that we are extant to serve an organization: that organization is the U.S. Army. To serve it well and appropriately, we must look to its developmental and mental health rather than addressing ourselves solely to the symptoms of individual or organizational disease which present themselves, for one reason or another, in the clinic. One way to do this is to "join the resistance".

If we look realistically and with considerable candor at the two specialties -- OE consultant and psychologist -- we must acknowledge the armed truce that has existed since the establishment of the OE Consultant Course in 1976. "They" mistrust us and we suspect "Them". As an individual who is "some of each", the author suggests that as two professions within the same organization, there is a need for alliance in the interactive mode (Ackoff, 1974). As we all know, at least intellectually, cooperation is the key to survival. As professions within the organization, we do share an important dimension -- we have been through the same uphill battle for survival. It is not suggested that two orphans make a scion. It is suggested that, because of our training as psychologists, we are able to deal with the challenges of cooperation whether we are rebuffed, ignored or accepted.

It is not entirely the domain of the psychologist to be proactive in the arena of cooperation. But, we must be responsive. Following this year's APA convention, it was brought to the attention of the Commandant, DECS, that Army OE was noticeably absent from the program. Next year there will be a discussion session, hospitality room and information center sponsored by the USA DECS. These activities will not be processed through Division 14, but through Division 19.
Within the past year a working agreement has been reached between the Director of the Community Psychology Fellowship and the USA OECS which will enable the fellow to be a participant-observer in some of the consulting operations of the External Operations Division of the Concepts Development Directorate of USA OECS.

The major point is that, in order to mobilize a cooperative, interactive effort, there must be contact and communication between the OEC and the psychologist. Different individuals in different locations might react/interact at different levels of cooperation. We must, however, keep sight of the fact that the local OE office has information and expertise to share with us. And we have expertise that is of tremendous importance to the effectiveness of our shared organization -- the U.S. Army. A suggested tactic is that psychologists consider the OEC in the same vein as the Chief of Family Practice in the hospital -- there is a need to establish contact, and then trust, and then ( with luck and success) a cooperative relationship.

If the OEC is at the cutting edge, then we must, as psychologists, establish a working relationship now that will empower preventive management -- if only so that we will not just be on the receiving end of the results of organizational turbulence and change. It is up to the psychologist to formulate and implement strategies for primary prevention in the organization as well as in the family or individual.

RECOMMENDATIONS

1. Psychnet. It is imperative that AMEDD establish and support an electronic communications network that will allow AMEDD psychologists and military and civilian participants with concerns related to the issues raised in this paper to communicate at little dollar cost but at large savings in time (which equals dollars). Electronic communication is one of the viable means for keeping up with the literature as well as maintaining a productive interaction with organizational and professional colleagues. The cost of establishing and maintaining one electronic communication capability for one year is likely, in most instances, to be about the same as the cost of the TDY to bring one participant to this symposium.

2. Interaction with OE Technology. AMEDD psychologists must take the initiative in establishing an interactive mode with OE consultants who are more in contact with the needs of the overall organization in its moves toward new, advanced technologies. At the same time, psychologists must be receptive to initiatives taken by the OEC, whether that initiative stems from a need for conceptual support or support in the execution of technology and/or doctrine.

3. Organizational Visioning. Along the lines of preventive management, psychologists are in a unique position to be aware of trends within the organization (Army) and the organizational needs. In the context of the current and futuristic thinking/planning in the Army, visions of what will or might be are well received. Psychologists are urged to join networks in which their visions might be expressed and translated into actions that will serve as primary prevention. (The lateral arabesque can be a beautiful move.)
REFERENCES


Department of the Army, Combat Arms Training Board, Letter ATTNG-TB-C, 1 November 1976, Subject: "Finding a Way in Which to Fight the First Battle of the Next War Outnumbered and Win."


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SCALE 4: EFFECTS OF AGE, IQ, AND PSYCHIATRIC DIAGNOSIS

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Scale 4 (Psychopathic Deviate) of the Minnesota Multiphasic Personality Inventory (MMPI) is regularly used clinically to assess the probability of a personality disorder (Dahlstrom, Welsh, & Dahlstrom, 1972; Lachar, 1974). Research with this scale has demonstrated its validity as a measure of social non-conformity, impulsiveness, occupational maladjustment, substance abuse, and chronic problems with authority (Gilberstadt & Duker, 1965; Lachar, 1974; MacAndrew, 1978).

The mounting evidence that age, intelligence, and/or psychological mindlessness (e.g., Bloom, 1975; Burkhart, Gynther, & Christian, 1972) may significantly affect MMPI scores (and therefore psychiatric diagnosis) prompted the present study. Scale 4, as a measure of social non-conformity or psychopathy may be spuriously elevated in the young and relatively unsophisticated Army recruit population. Research by Whitmyre and Cohen (1973) on a sample of VA hospital psychiatric patients indicated that Scale 4 scores were "perfectly related to age" with the young group (age 26 or below) scoring at a mean of 73T and the old group (age 50-60) scoring at a mean of 52T. Davis (1972) also reported age effects on Scale 4 in a psychiatric sample. These results were not replicated, however, in a study by Miller and Paciello (1980). Costello and Schoenfield (1981) also failed to find age effects on any MMPI scale in a sample of police academy recruits. Finally, King and Kelley (1977) reported that Scale 4 elevation in college students, despite its relative frequency, did in fact reflect significant psychopathology and was not a benign correlate of age or lifestyle.

This study was therefore designed to answer the following questions:
1. Do age and intelligence significantly affect Scale 4 scores? 2. Do psychiatric inpatients and patients diagnosed as having character disorders differ from normal controls on Scale 4?

METHOD

Subjects and Procedure

Ninety-eight volunteer active duty Army psychiatric inpatients on an acute care ward who were referred for MMPI's were recruited for the study. Each subject completed the MMPI, Shipley-Hartford Scale, and a Background Information
Questionnaire. Hospital narrative summaries were obtained and the DSM III diagnoses were recorded for each subject. Subjects scoring below an IQ of 75 were dropped from the study. MMPI's were screened for validity by eliminating profiles with F greater than 24 and a Carelessness score (Greene, 1978) greater than 5. These criteria reduced the inpatient sample size to 79. Each subject was matched on sex, age, education, IQ, and race with a normal subject from the larger normative study (Parkison, Waddell, & Fishburne, 1982, Note 1) resulting in a final sample size of 158. The mean age of the subjects was 25.3 years, mean educational level was 12.4 years, and the mean IQ was 102.8. Seventy-eight percent of the subjects were male and 22% female.

The data were analyzed by means of a two-way analysis of variance with age and IQ as independent variables and Scale 4 raw scores as the dependent variable. IQ was estimated from the individual's score on the Shipley-Hartford Scale. High IQ and low IQ groups were created by dichotomizing at an IQ score of 105. Young and old groups were created by dichotomizing at age 25.

RESULTS

An analysis of IQ and psychiatric status (normal vs. psychiatric inpatient) on Scale 4 revealed a significant effect for psychiatric status, $F(1, 154)=13.12, p=.0004$, and no effect for IQ. Similarly, no main age effect on Scale 4 was found. There were no interaction effects.

A two-way analysis of variance was performed separately on those subjects diagnosed as having Borderline or Mixed Personality Disorders and their matched controls. Subjects with these diagnoses were chosen because they most closely represent the psychopathology Scale 4 was designed to measure since there were no subjects with Antisocial Personality Disorder diagnoses in the sample. Again, highly significant effects of psychiatric status were found, $F(1, 38)=13.02, p=.0009$ and $F(1, 38)=13.51, p=.0007$, but no main IQ or age effects.

The mean MMPI profiles (all without K corrections) for male and female character disorders and their matched controls are shown in Figures 1 and 2. Character disordered males scored greater than a T-score of 70 on Scales 2, 4, and 8. Character disordered females showed an elevation above 70T solely on Scale 4. The mean profiles of the matched controls were below 70T on every scale.

DISCUSSION

The results of this study were in contrast to the findings of the larger normative MMPI study of active duty soldiers. That study found significant main effects of age and IQ on MMPI scores. In this study, using a mixed normal and psychiatric sample, it was psychiatric status that explained the major portion of the variance in Scale 4 and other MMPI scores. This conclusion naturally serves to establish the validity of the test and indicates that Scale 4 may be relied upon as a predictor of characterological symptomatology.
Nevertheless, it should be noted that the mean profile for the matched normals is well above the mean with an average T-score of 59 for males. This finding is expected since the normals were drawn from the larger sample of active duty soldiers which also has significantly elevated mean profiles. It does underscore again that adjustment of norms might be desirable to reduce the probability of false positives in the normal active duty population.
REFERENCE NOTE


REFERENCES


Figure 1.
Mean profiles for the Borderline/Mixed Personality Disorder group (---) and their matched controls (-----). N=13 each.
MULTIPLE CHALLENGES OF ARMY MEDICAL DEPARTMENT
PSYCHOLOGISTS: HEALTH SERVICES COMMAND
CONSULTANT APPRAISAL AND SUMMARY

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Opening addresses of the conference elaborated on significant accomplishments of, and future challenges facing, Psychologists in the Army Medical Department (AMEDD). Longstanding arduous and competent performances by predecessors in this career field display an acquired, adaptive trait among colleagues in the provisions of professional services and support. Fiscal constraints of our time demand that Psychologists now focus on and market the systemic advantages of their resources. Authorized strength and organizational structure of psychological assets and recent programs and missions development of the AMEDD in Health and Combat Psychology and "Total Fitness" are noted. Evidence, that care provided by Psychologists can substantially reduce overall medical services cost in civilian health care delivery systems, has not been fully recognized with the AMEDD. Skills unique to Psychologists in clinical care and investigation settings are numerous and now beg exposure as collectively meeting critical and practical concerns of troop deployment, management and health conservation. Future advances of AMEDD Psychology are contingent upon concerted, collaborative and coordinative efforts of Psychologists with local administrative and command elements, with Staff Judge Advocate Liaison, and with higher Command authorities. Functions of the Health Services Command Psychology Consultant are listed.

INTRODUCTION

The doubleheader, keynote presentations to this Psychology Conference on the contributions and challenges of Psychology in the Army Medical Department (AMEDD) by Doctors Thomas and DeLeon depicted a persistent and continual "deep freeze" that has required adaptation over past years. As elaborated, Army Psychology has made significant advances and will continue to make increasingly important contributions in "deep freeze," thawing or otherwise cold and at times seemingly unappreciative climates.

I'm not too certain if we, as a group of Psychologists, would know how to proceed, produce -- or even act, if we had to muster our collective professional strength in a tropical, warm or accommodating climate. The heritage of by-gone colleagues has engrained an adaptive trait among AMEDD Psychologists that has become, I believe, more acclimatized over generations. We are not yet immune to the "cold," but we have become increasingly habituated to the "freeze."
We have been and are now a more resilient group of truly professional men and women. I would like to add also, in the business at hand and in the language of Dr. Kowal's study, there are no doubts that women have the capacity to "lift and pull the load and carry the weight" of the professional performances required. Making reference to Dr. Shoberg's paper, we have developed and are producing significantly inspite of the perceived climates of mistrust, doubt, isolation and at times despair and role confusion. Individuals in our midst find a sense of fulfillment by industrious undertakings -- by taking the risk -- by taking the chance on focusing their concerns beyond the Self, with solid professional integrity.

As Dr. DeLeon posits, we have not known "how to Hype" or market our professionally unique selves and our highly marketable products. I suggest we have the beginnings of consumer awareness in the Army system at this time and we are faced now with a market packaging task.

Brigadier General Jordan, the Medical Service Corps Chief, and Lieutenant Colonel Hawkins, from MSC Career Activities Office, insist that the Army Medical Department must be responsive to the economic hard times and Zeitgeist. Why do we, as 68S specialists, need more authorized positions or slots as compared to the 67 series administrators, or perhaps even 60 series physicians, in 1983 and beyond? My answer is, because Department of Defense and AMEDD costs of health care provisions are "going out of sight." We must reduce the cost of medical care! That means, DOD and AMEDD have to continue to be serious in considerations of changing past ways of doing business in the delivery of health care and maintenance services without compromising, but enhancing, quality of care provisions. For example, do we have our Psychologist authorizations placed at locations where the greatest amount of dollars are being spent outside the AMEDD system, perhaps measured by CHAMPUS costs per locale? Are our authorizations tucked within organizational structures that allow Psychologists to exercise their full potential in impacting on the effort to reduce health costs?

Prevention, "Wellness and Total Fitness," and health enhancement and rehabilitative efforts have been in past years systemically relegated to "back burner" priority status and, in my opinion, only has been given "lip service," or given "air time," simple to filter through short-circuited, dead-ended, cognitive pathways of service delivery planners. The Surgeon General's recent initiatives in this area are reversing this trend (Wilson, 1982). We need to rally our professional, Health Psychology (know-how" to support the "Total F.: -ss" goals of Department of the Army.

Our professional, 67 series administrative colleague, contribute a great value to fiscal, logistical and operational management support to the overall mission .... and our continued teamwork with these specialty groups is vital. These managers do track system cost expenditures and resource utilization, and are available to support further efforts by Psychologists when presented with justifications that are unequivocal or even promising.

The actual doers or providers of effective services are needed! The least expensive quality resources, and the most long range cost effective service providing resources, are now more critically needed in 1983 and the near future.
There is a good deal of evidence that we, as Clinical and Counseling Psychologists, can substantially reduce medical service costs. We have not yet "risen to the occasion" of this era.

To do so requires concerted, organized efforts at all levels within our professional forces. We do not foresee "risk taking" in these efforts without the conviction and justification of our data and devised psychological principles and practices.

As an informational sideline, the big organizational staff level scheme involves the Office of The Surgeon General (OTSG), Major Commands (MACOMs like Health Services Command and 7th Medical Command) and the Academy of Health Sciences (AHS). What are the functions of these entities? You hear them talked about frequently. Very simply and in lay language terms, the OTSG is the policy making arm. The MACOMs are the effectors of the policy, giving guidance for implementing policy; the Academy trains the technical doers and providers concept development input to the system.

You should know that, at the present time, we do not have an authorization for a Psychology Consultant or Psychology Staff Officer at the Health Services Command level. The writer accomplishes what is needed in staff actions on an "as needed basis." You should realize too that this "need" is routinely defined by other permanent staff officers at HSC. It is advisable then, when your CONUS Commands send actions to HSC regarding Psychology matters, that you insure the action specifically requests "Staffing through the HSC Psychology Consultant." Otherwise, the HSC Consultant may not have a chance to provide concurrence or other supportive input recommendations.

In this vein HSC Psychology Consultant duty and functions should be brought to your attention. The primary duty of the position of the Psychology Staff Officer at HSC (presently assumed on a part-time basis) is to advise the Chief, Clinical Medical Division, who in turn advises the HSC Deputy Chief of Staff for Professional Activities. As such the HSC Psychology Consultant would have input in matters consistent with the defined functions of the Clinical Medical Division. Per HSC Memo 10-2 these functions include:

- Recommending use of health care facilities for HSC, insuring information of clinical specialty centers for therapy, research, and education, consistent with policies of OTSG.

- Developing, promulgating and supervising command-wide program for auditing professional services to insure and improve standards of care.

- Reviewing standards and status of accreditation, certification, licensure, and approval of health care facilities, services and programs. Providing assistance in the application of these standards.

- Disseminating guidance relative to approved techniques and methods of health care to facilities of the command.
- Evaluating advances in new techniques and methods for improved health care.

- Receiving, analyzing and evaluating reports from the command to identify areas requiring action.

- Providing technical professional guidance and recommendations on personnel actions, financial actions and problem situation as necessary.

- Assisting Regional Coordinators with establishing and monitoring responsive consultant programs.

- Approving appointments of military and civilian consultants for HSC medical treatment facilities.

- Monitoring and exercising staff supervision over the application of medical fitness standards and professional inquiries.

- Advising and recommending on the needs of post-graduate advanced technical training program.

- Providing technical guidance to DCSLOG (on purchase and use of medical equipment), to DCSPER (on assignment and use of professional personnel) and to DCSOPS (concerning professional support of projects).

- Maintaining continuous coordination and liaison with staff consultants of OTSG.

You should be aware also that the documents supporting local recommendations to hire applicants for DA Civilian Psychology positions (GS180 series) within HSC must be forwarded to HSC for qualification appraisal and appointment approval, prior to local Civilian Personnel Office hiring an individual. This appraisal and approval is accomplished by the HSC Psychology Consultant, having been delegated this responsibility by OTSG directive.

Returning again to some further conference topics, Dr. DeLeon advised that Psychologists formulate and establish advisorial contacts with the "Blue Card Holders," lawyers, within our system. His listing of the large, comprehensive and country-wide laws and pending legislature were enlightening with respect to the profession of Psychology. There are existing laws left unmentioned (especially related to federal employees compensation, Champus, and other DA and DOD health care regulatory guidance) that firmly establish the requirements for support uniquely falling within the technical domains of the profession of Psychology. Army Regulations, as we know them, often require elaboration and supplementation where permitted. Where guidance is general, specificity needs to be addressed. Our allies in the formulation of these improvements in regulatory clarity are the Staff Judge Advocate folks, our "Blue Card Holders." If change is predicated on existing laws or legal precedence, the SJA can be of great assistance to Psychology in policy amendments and operational compliance matters. It is fortuitous that our longstanding and highly favorable association with many facets of the legal system sets the stage for constructive advantages in this area.
In addressing Combat Psychology themes, the idea occurred to me during this conference that, if a sizeable percentage of troops became dysfunctional due to sleep loss on REFORGER maneuvers, maybe Psychology can impact on soldier effectiveness by studying whether intermittent self-hypnotic interventions can be trained and employed to reduce the cognitive and verbal sluggishness effects of sleep deprivation. Would these kinds of clinically derived techniques assist or inhibit the selective focusing needed to make battle scene command judgments? Has this been studied?

Also, we know in clinical settings that these selective focusing skills can alter temperature sensations and other involuntary somatic responses. Can these skills be employed to increase the tolerance of Military Operational Protective Posture (MOPP) gear apparel without jeopardizing the integrity of the body that requires heat expulsion? Has this been looked at? I'm sure other questions like these can be formulated with a little concerted thought.

We have been trained in a variety of skills (i.e., Individual and Group Evaluation and Treatment, Neuropsychology, Biofeedback, Family Support, Health Psychology, Combat Psychology, Community Mental Health) that have the potential for increased direct relevancy and ultimate impact on the combat mission of our forces. Our clinical and research expertise in these areas will have to become more visible than they have in the past. In point of fact, there are ongoing and already completed research projects by Psychologists that have been tucked away and that need to be resurrected now for the marketing "Hype." For example, we have studied cognitive deficit and personality change in soldiers encamped at high altitude environments (Gillooly, 1982). We have explored incidences of assaults on superior officers with explosive devises (Gillooly & Bond, 1976), a heinous crime that has been in existence through history as long as there have been armies with explosive hardware. Information from these studies and countless other studies by Psychologists are definitely of practical interest to "line" personnel and the effective deployment and management of troops.

We have been rising to many tasks. I feel, we need to do so with "more gusto." We are in the "process of becoming." We discover this daily on the local fronts of providing services. To be reminded of this, by the system within which we work, may shake us up a bit at first; but, for sure, this reminder fosters among us the "ties of bonding" and valuable common causes....to become consequently Psychologists, Soldiers and friends.

In years past, this cluster of model qualities has transcended perceived systemic adversity and accomplished vital objectives and missions. And yes, this can be done without risking or losing our personal sensitivities, professional convictions and integrity, and our pride of accomplishment. We extend our gratitude to Colonel and Doctor Bob Nichols (retiring OTSG Psychology Consultant) for providing us with a model that is apropos to today's needs. We also can afford to take the risk in future years.
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REPORT OF THE AD HOC COMMITTEE ON DIVISION PSYCHOLOGY

1. On November, 1982, at the Army Medical Department Psychology Symposium held in Augusta, Georgia, hosted by the Dwight David Eisenhower Medical Center, several task forces were developed, and among them was the Division Psychology Task Force. Furthermore, each of these was charged with an examination of a set of issues and areas of inquiry by the outgoing Psychology Consultant to the Army's Office of The Surgeon General. Those areas and issues for the Division Psychology Task Force, were as follows:

   a. What impact would the concepts and doctrine being developed with "Division 86" and "Air-Land Battle 2,000" have on the role and function of a division psychologist.

   b. In the Lebanon conflict of 1982, what new data or knowledge was learned by the Israel Defense Force (IDF) that would impact on the division psychologist's role.

   c. What might be the ideal interface with other members of the Division Mental Health Section.

   d. How might the division psychologist interface with other professionals assigned to a particular installation or unit.

   e. What might be some basic entry level qualifications for a division psychologist.

2. As the Task Force met, it soon became evident in the early phases that several assumptions weren't clear or apparent. Chiefly because the proposals underlying the "Division 86" concepts and doctrine were felt to have a direct impact on several of these five issues. It was decided, therefore, to assign these areas of inquiry to members of the Task Force, have them research in depth and evaluate their findings, recommendations, and conclusions etc., weighing them against the proposed and fluid concepts of Division 86.

3. Examining the "Division 86" specific issue were Majors Futterer and Laskow. MAJ Futterer obtained two documents from the Academy of Health Sciences that proved quite useful; although the content of these documents was chiefly for proposal only, and aren't doctrine as of yet, they do provide an excellent examination of the issues facing the members of the mental health team, giving the assumptions of combat scenarios. It is a useful guideline of what the mental health professionals ought to be concerned about, and a way of determining now where the priorities ought to be at the division and corps levels regarding mental health intervention. For example, training of 91Gs at the division level can and ought to include input from the division psychologist to extend the training of the 91Gs beyond that which takes place at the Division Mental Health Garrison level, etc.
4. CPT John Miller provides a superb synopsis of findings, impressions, and conclusions that have been developed as a result of the Lebanon conflict on June, 1982. A close look at John's findings and some of the charts provided in the Appendix can be an invaluable tool for members of the mental health team in seeing how the principles are applied and actually have worked.

5. As is the implicit statement from the documents acquired by MAJ Futterer, members of the mental health team quite probably are going to be functioning somewhat independent of each other in combat, unlike which occurs in a peacetime garrison posture. CPT Lewis' recommendations of the interface between all disciplines in mental health at the Division Mental Health Section level, once again, underscores the importance of the consultative role of these professions in prevention.

6. CPT Settles from the Ninth Infantry Division at Ft Lewis, Washington, and a CPT Gupton, from the National Training Center at Fort Irwin, California, have had an opportunity to experience, first hand, the changes that are being instituted in the Ninth Infantry Division, a la Division 86, and they provided a framework for interfacing with other professionals in a setting such as this. Their thoughts provided some real work data of the concepts of Division 86 as they directly effect the Division Mental Health Team.

7. Lastly, Majors Grill, and Adams, and Captain Luscomb provided some parameters of the ideal criteria for a successful tour as a division psychologist, addressing such issues as entry level rank, attitude, etc. In general, the recommendations accurately reflect the importance and prestige such a position manifests, and demands that the professional performing in this capacity be of extra ordinary calibre.

8. The recommendations and impressions forwarded are obviously not hard and fast, and probably have and will create some controversy and disagreement. Unquestionably, however, they do demonstrate how the position of the division psychologist has become an all important one over the past few years and how enormous amounts of energy is being directed at definition and description of function within this role. Again, with an eye towards effective behavioral science intervention in a combat environment, these principles require testing and retesting by those in the field in these positions.
RECOMMENDATIONS FOR DIVISION PSYCHOLOGIST INTERFACE WITH OTHER PROFESSIONALS

In November '82, during the AMEDD Psychology Conference, CPT Herb Gupton and I were charged with the responsibility of recommending the kind of interface Army division psychologists should have with other professionals on an installation. Discussion at the time centered on how psychologists have approached relating to and working with other mental health professionals up to now, as well as, how a series of TOE revisions for heavy, light and airborne/air assault divisions, popularly called Division '86, will effect that interface.

CPT Gupton felt strongly that it was important to document the kind of relations psychologist have currently established in division slots, while I felt that in order to recommend direction for interface, we need to establish conceptually what role the division psychologist should play. Consequently, we decided to:

1) survey division psychologists' interface with other professionals;
2) outline our perception of the role of a division psychologist; and
3) subsequently recommend the kind of interface Army division psychologists should have with other professionals on an installation.

(Insert Survey of Division Psychologists' data here)

Role of the Division Psychologist

AR 40-216, January 1980, proposed revision, states that the staff mental health professionals at all levels will:

1) Provide the highest standard of professional service in the prevention, diagnosis and treatment of mental, emotional and personality disorders.
2) Advise the Commander in mental health matters pertaining to the morale and psychological effectiveness of troops.
3) Devise and conduct a program to promote mental health.
4) Implement and supervise a combat mental health program that is tactically appropriate.
5) Conduct training of mental health team in the interest of current function and preparation for future combat.
6) Maintain liaison with unit commanders, personnel officers, classification and assignment officers, troop information and education officers, organizational effectiveness staff officers and other AMEDD officers, as well as, with superiors and associates in the mental health program.
7) Maintain clinical records in accordance with applicable AR's, good clinical practice and legal, ethical and accreditation standards.
In addition, Division psychologists are uniquely charged with:

1) the technical supervision and training of enlisted personnel engaged in providing psychological assessment and supportive counseling;

2) conducting behavioral science research in support of the division and mental health programming;

3) providing psychological assessment as indicated; and

4) maintaining technical communications with consultants at all levels.

Consequently, in theory, the basic thrust of the Division psychologist (in combat as well as garrison) has been to provide preventive programs which circumvent needless psychiatric casualties from occurring. When they do occur, our role has been to provide prompt evaluation and early treatment with simple methods within the duty environment. These procedures have been designed to minimize morbidity and insure early resumption of effective troop and/or unit performance. However, the typical practice among most Division Mental Health Teams (DMHT), has been to co-locate with the Community Mental Health Activity (CMHA) and provide traditional clinical treatment. Unit integrity is generally lost with their merger, with the psychologist and other DMHT members functioning in TDA slots for the CMHA. While some command consultation and training of staff does occur, it is, at best, a hit-or-miss affair resulting in role/mission ambiguity and minimal emphasis on command consultation and/or training toward preparation for war.

Recommendations for Interface

In order to rectify some of these problems, the following recommendations are offered for consideration:

1. Since the DMHT includes a psychiatrist, a social worker and a psychologist (mental health officers) and 6 to 8 91G (behavioral science specialists), recommend the DMHT be formally separated from CMHA and assigned directly to the DISCOM special staff. This arrangement would allow the team to be further subdivided into a Brigade Mental Health Team (BMHT), one mental health officer, two 91G's for each brigade. This smaller BMHT could then become more familiar with the psychological needs of the brigade and therefore structure preventive combat readiness programs uniquely designed for that fighting force. Troops and unit commanders would look to that team for preventive programs in combat stress management and refer more difficult management cases to the CMHA. The teams would live and train with the brigades they support and therefore become more familiar with these units' specialized missions. This kind of interface supports Division '86 concepts which emphasize greater control of forward support staff and resources at the brigade level.

2. Recommend that greater emphasis be placed on DMHT members' role as special staff officer. Division psychologists in their role would focus less on traditional clinical tasks, but more on industrial psychology principles.
Psychologists functioning in these roles would spend less time in the clinic and more time interacting with unit commanders and NCO's; anticipating possible psychological problems that would impede combat readiness and division field expedient methods for training and evaluating unit leaders in combat stress management principles.

3. Greater interface by Division psychologists with chaplains, organizational effectiveness officers, personnel officers, classification and assignment officers, troop information and education officers. These liaisons or relationships should be designed to decrease despair among individual soldiers and increase confidence and abilities among the troops to meet their assigned missions. Concern over personal problems, inability or lack of proper training and miscommunication are all problems which impede a soldier's ability to fight. Division psychologists should seek out ways to better work with other professionals concerned with these problems. Their united effort could possibly best be achieved at brigade level where the resources are readily available.

4. Establish command sponsored Morale Support Teams at the brigade level consisting of representatives from DMHT, chaplains, organizational effectiveness officers, personnel officers, etc., with the specific mission of minimizing people problems affecting combat readiness, unit morale and integrity.
ENTRY LEVEL QUALIFICATIONS FOR A DIVISION PSYCHOLOGIST

1. **Entry Level Rank:** Major or senior captain

   It is recommended that a division psychologist hold the rank of major or a senior captain. Three mental health professionals usually comprise the division mental hygiene consultation service, a psychiatrist, a psychologist, and a social worker. The rank of major would allow the division psychologist to achieve and maintain greater credibility within the division, especially with line officers. In addition, the higher rank would be indicative of a greater breadth of experience in and around the military.

2. **Military Schooling Completed:** AMEDD Officer Advanced Course

   Consistent with the rationale for the entry level rank of the division psychologist, it is further recommended that a division psychologist, prior to assignment to a division, complete the AMEDD Officer Advance Course. The knowledge obtained during the Advanced Course is invaluable to any officer functioning within the division structure.

3. **Prior Assignments:** MEDDAC or MEDCEN

   Following the internship, it is recommended that a psychologist be assigned to a large MEDDAC or MEDCEN in order to provide that new psychologist an opportunity for clinical supervision and proper orientation by an experienced military psychologist. The practice of assigning newly graduated psychology interns to small MEDDACs, where they are forced to function without the benefit of clinical supervision from another military psychologist, should be avoided.

4. **Attitude:** soldier/psychologist

   The professional identity of a division psychologist should be one of a "soldier/psychologist." Strong identification with the division through participation in its mission activities and social functions is necessary in order to build trusting relationships between the division psychologist and other members of the division. The division psychologist must prove himself as a soldier, an "active" member of the division, and as a psychologist.

5. **Tour Length:** three (3) year total tour

   It is recommended that the tour length for the division psychologist be three (3) years. However, each division psychologist should be given the option, midway through his tour with the division, of transferring out of the division. Those division psychologists who have become effective mental health consultants most probably will complete the three year tour in the division, but that will also be effective division psychologists who may wish to move to another assignment because the transfer is career enhancing. This point is especially valid for division assignments in Europe. The expectation should be built-in to the assignment process for a choice point to occur midway through the tour. This recommendation is based upon the initial recommendation of an entry level rank of major or senior captain.
1. **Problem.** There appears to be no clear guidelines detailing the role relationships among the Professional Staff - Psychologist, Psychiatrist, and Social Worker - of the Division Mental Health Section (DMHS). While traditional professional distinctions have served to provide this need in the past, it may be inappropriate to apply these standards in the military ambiance of the DMHS. The unique combat-oriented mission of the DMHS requires a redefining of the role relations found existing in the DMHS.

2. **Purpose of Paper.** This brief paper has been written in an effort to propose a few guidelines which will establish the special type of role relationships which should exist among the Division Psychologist, Psychiatrist and Social Worker.

3. **Proposals.** Following are a set of proposals which should better define the roles of the DMHS professional staff. As the role relations become understood, there hopefully will be an accompanying increase in the viability of the DMHS to perform its mission related activities.

   a. To begin, the DMHS should never be an initial assignment. The Staff of the DMHS should, at the minimum, all be senior captains with experiences as a mental health officer in a setting outside of a teaching program. Such experiences should provide the psychologist, psychiatrist and social worker with opportunities to become acquainted with the skills each others' discipline embodies. The end result of this should be an acceleration of the process whereby each DMHS staff forms and solidifies their role relationships.

   b. Next, in the DMHS, the professional staff should have mission-oriented cross training in one another's area of expertise so that each individual has basic:

   (1) clinical training
   (2) training in psychiatric medication.
   (3) training in family and community issues.
   (4) training in organizational effectiveness.
   (5) training in group processes.
   (6) training in psychological assessment devices found in the Division's Psychology Kit.

Various deployment scenarios may require each DMHS staff member to operate independent of one another. In order to do this effectively, it is necessary that there be a blurring of professionals distinctions between psychology, social work, and psychiatry.
c. With the merging of professional roles, the Chief of the DMHS should be the senior officer assigned - regardless of discipline. The DMHS Chief is more of an administrative rather than a traditional clinical role. Cross-training combined with each member's prior military experience, should result in all personnel being equally qualified to assume the position of chief.

4. Conclusion. Essentially, the traditional role relationships found in civilian settings and hospital environments are disruptive and counter productive to the DMHS achieving its mission. The Division Psychologist, Social Worker, and Psychiatrist should work as a team with each team member capable of performing relatively the same functions. Although the DMHS Garrison Mission might promote a "medical model" approach to treatment, it must be continually emphasized that the DMHS mission is primarily one of consultation and limited treatment - all designed to quickly return the soldier to the battlefield or to expeditiously evacuate him out of the area of operation.

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REPORT OF THE AD HOC COMMITTEE ON FITNESS

Questions

The general consensus was that many psychologists were working in the area that could be called wellness or fitness, but we were not sure. There appeared to be no clear-cut definition of the terms so that we could coherently discuss our concerns and involvement. So, the first question was: What is it?

The next realization was that many psychologists were active in efforts intended to reduce high risk factors and to improve the quality of life of the soldier. However, there appeared to be very little communication between psychologists. Psychologists at one location had little awareness of areas of focus, much less specific treatment plans or approaches at other facilities. So the next question was identified as: What's going on?

The realization that others were also interested in this field brought on the next obvious question. It is a response to do solid work in the field and to get new ideas together for old problems and find something that has impact. The next question: How can we find out what is going on?

Back to basics. Before we can talk about what is going on we have to be able to talk about terms and definitions so there is an understanding that we are sharing approaches to similar issues. The next question: How do we define the terms?

The next question is a result, again, of a real sense of caring about this area, but not wanting to waste our time or the Army's time. This is a result of knowing that we have to be established, probably with a chairman, to move forward in this area. So the obvious question that rose: How can we have impact on whatever it is?

The last question was a result of some pessimism and defeatist attitude that psychologists are unable to work together (or anyone else) and that no matter how we tried to pull together. It was easy to cop out and come up with: Do we care?

Other questions which emerged out of these questions were: How do we develop an active rather than reactive system. How can we translate psychological constructs into normal military language? How can we insure quality control in the programs that are ongoing?

The most pressing problems seemed to define the terms, find out who is active in these programs, and then establish a clearing house to share the information. It was also evident that psychologists in this group felt no central direction or coordination of their effort. Most feel that they are going it alone on their credentials from doctoral training. After that there were bi-annual meetings, but no real central, professional development program.
There was awareness that OE has a strong central tie and some believed that social work held together well. One issue was to try to tie in with OE who has the credit for getting the area attention at high level staff.

Needs:

1. Tie in and share among Army psychologists who are working in fitness, wellness, stress management.
2. Define terms.
3. Break out garrison, field, and combat components of wellness and fitness.
4. Be in a position to influence the action
   1) with ongoing programs out of DESPER
   2) with OE at local level
   3) with OE at high level (OE school)
5. Be in a position to pick up the pieces if fitness project crashes.
6. Develop an ability to work with individuals identified as high risk by wellness project.
7. Provide training for Army psychologists in relevant skills.
8. Be in a position to influence the development of doctrine in the area of fitness, wellness, stress, and/or soldier performance in training and combat.

Desired action

1. Establish a resource center through the soldier support center for stress management programs, FM's, TR's and materials.
2. Establish liaison with OE school for resource center/clearinghouse for stress management/wellness/fitness materials.
3. Establish a resource center for health psychology through William Beaumont AMC Fellowship.
4. Liaison through CPT Hungerland to determine feasibility of sharing resources with OE.
5. Effect liaison with OE at local level to determine area of involvement.
REPORT OF THE AD HOC COMMITTEE ON POLICY/PROFESSIONAL PRACTICE

1. Is the present policy to insist 68Ss be clinical or counseling psychologists, with clinical internships, wise? What are the pros and cons?

Recommendation:

a. Retain 68S designated psychologists trained in clinical and counseling psychology departments.

b. Require internship completion for 68S MOS.

c. Respect APA standards and state statutes whenever possible.

2. What are the most valuable services/programs 68S psychologists can provide as judged by:

a. the AMEDD

Response:

(1) psychodiagnostic assessment.

(2) behavioral interventions (biofeedback, behavior modification, etc.).

(3) psychotherapy.

(4) command consultation (within the AMEDD as well as throughout the Army).

(5) medical case consultation.

(6) neuropsychological assessment.

(7) health promotion/enhancement along the lines of the fitness/wellness concept.

(8) training of psychology interns, residents, and fellows.

(9) combat psychology.

(10) clinical research.

(11) leadership of mental health departments/activities.

(12) MACOM/DA staff.

b. the Army

Response:

(1) command consultation.

(2) forensic psychology.

(3) psychodiagnostic assessment (military policy and other personnel working in sensitive MOSs such as Nuclear Surety and classified positions).

(4) program development/management of drug/alcohol abuse treatment programs.

(5) psychotherapy.

(6) stress management and other primary prevention programs.

(7) MACOM/DA/DOD staff officers responsible for policy/program development in above areas.
c. Army families

Response:

(1) family therapy.
(2) marital therapy.
(3) child psychodiagnostic assessment and therapy.

3. What can be done to get more 68S authorizations?

Recommendation:

a. obtain positions in high visibility units, i.e., a sports psychology position at DCSPER; positions in Army schools (officer branch, West Point, Command and General Staff College, the War College, as well as other TRADOC and FORSCOM schools); TRI/BI/PENTATHLON units; special Army marksmanship units, such as exist at Fort Benning; and other identified high visibility units.

b. use CHAMPUS data on number of patients referred for costly psychological treatment to pressure local commands to increase authorizations for psychologists.

c. create local needs in such departments as Pediatrics, Surgery, Medicine, etc.

d. use manpower surveys to increase recognized requirements so that this data may be used by the Psychology Consultants at HSC and OTSG to increase authorizations.

e. identify demands created by PL 94-142.

4. What are the five most significant restrictions on AMEDD psychology?

Response:

a. limitations on ability to bring full psychological expertise to bear, imposed by being located within Departments of Psychiatry.

b. a general lack of power in the AMEDD.

c. too many work requirements. Often this results in less than the highest quality service delivery.

d. lack of regulatory authority to conduct security clearance evaluations and to diagnose personality disorders (AR 635-200, p. 1-34f).

e. lack of admitting privileges to medical care facilities. A model is suggested in which, in accordance with JCAH guidelines, psychologists are permitted to admit patients for residential treatment. California and other states have statutes permitting this and could provide guidelines for the AMEDD. In general, physical examination and medication requirements would be physician responsibility while the overall management and therapy of the patient would remain the responsibility of the psychologist.

5. Should licensure be mandatory?

Yes, all 68S psychologists in the AMEDD should be licensed. This should occur not later than after 3 years of eligibility subject to mission demands and other operational requirements which might delay this process.
6. Are the present 9A, 9B, 9C, 9D criteria adequate?

Response:

Yes, with a modification to the current 9B criteria. A number of psychologists currently are in the process of receiving certification through several different specialization boards. One example is the American Board of Family Psychology. Since COL Harris, in his role as Psychology Consultant, strongly encouraged AMEDD psychologists to become certified without specifying any particular board, it is recommended that specialty boards be acceptable criteria to meet the stipulation for the 9B ASI. It is further recommended that the Psychology Consultant evaluate the merit of these specialty boards and designate an approved list. The ABPP will continue to be the principal board meeting the stipulation for the 9B ASI but additional boards as approved by the Psychology Consultant will be acceptable. Further, it is recommended that specialty boards be acceptable so long as the psychologist has initiated the application process for a particular board prior to 1 July 1984. After 1 July 1984 only boards so designated by the OTSG Psychology Consultant will be acceptable.

7. What should be the policy on psychologists concerning:

a. hospital admissions.

Response:

Psychologists should be granted admitting privileges, when their duty requires dispositions involving hospitalization, in accordance with JCAH standards using California and other state statutes as guidelines. Internship sites should be required to train interns in working in an emergency room and in admitting patients to a medical treatment facility. In reality, psychologists are admitting patients to medical treatment facilities throughout AMEDD and this should be institutionalized in Army regulations to protect the AMEDD. Psychologists should not be required to write prescriptions for medication or be required to direct nurses to do this.

b. credentialing.

Recommendation:

Psychologists should be credentialed along with other health care professionals. This should be done individually to insure quality of care. The credentialing process is one way in which a psychologist may be protected against being forced to engage in practices in which he is not qualified, i.e., conducting a Rorschach evaluation when he has not been trained to administer or interpret the Rorschach.

c. security clearance roles.

Response:

At the present time only a psychiatrist is authorized by Army Regulations, i.e., "competent medical authority," to evaluate a mental disorder involving a
security clearance situation. Psychologists are well trained to conduct psycho-
diagnostic evaluations and should be permitted to serve the Army in this capa-
city. It is recommended that Army regulations be re-written so that psycholo-
gists have an appropriate evaluation role in accordance with our training and
expertise.

8. Where and how should 68Us be assigned? Should we have spaces specifically
identified for 68Us? If so, with what controls?

Recommendation:

It is recommended that the current policy be continued, i.e., students be
required to have all dissertation data collected and analyzed prior to beginning
the internship. Internship directors and training directors should make comple-
tion to the dissertation an important requirement of the internship. Officers
who fail to meet the requirement should be given the 68U MOS and be pressured by
OTSG to complete the dissertation as quickly as possible.

9. How can we supervise psychologists in isolated locations, especially for
licensure/ABPP National Register purposes?

Recommendation:

a. civilian consultants.
b. regional consultants.

Report submitted by:

LTC Timothy B. Jeffrey
LTC James E. McCarroll
LTC Frank H. Rath, Jr.
REPORT OF THE AD HOC COMMITTEE ON RESERVE and NATIONAL GUARD COMPONENTS

I. The Committee was convened in Room 706 of the Augusta Hilton on November 16 and 17, 1982. Committee Members were:

a. Colonel Michael C. Magee (Co-Chairman)
b. Major David Mangelsdorff (Co-Chairman)
c. Colonel Owen Fonkalsrad
d. Colonel Jim Bengal
e. Colonel William Deering
f. Major Gregg Guenzel
g. Major Jim Livingood
h. Captain Frank Port

II. Recommendations in response to questions Number 1 and 2.

Question #1: Do reserve psychologists meet the same training/qualification standards as active duty?

Question #2: How can we fairly but accurately review credentials of reservists?

a. All newly assigned psychologists in the reserves/national guard as of December 1, 1982 should be required to meet the same qualifications and training standards required of active duty psychologists.

b. A Credentials Committee should initially be convened to review the credentials of current reserve psychologists who do not meet the qualifications for 68S; for the purpose of "grandfathering" those whose records clearly indicated a history of and a future potential for beneficial service to Army psychology.

c. Subsequently, the committee should meet as needed to review the credentials of new applicants for reserve/national guard psychologist's positions.

d. Consideration should be given to having reserve psychology representation on the committee.

e. A minority position of the committee recommended that the Credential Review Committee be allowed to waive the requirements for former active duty 68U's who demonstrated a successful extended duty tour as a psychologist.

f. It was strongly felt by the majority of the committee that it was vital for reserve psychologists to meet the same qualifications and training requirements as active duty psychologists in order for the reserve psychologists to have credibility with the active Army.

III. Recommendations in response to questions Number 3 and 6.

Question #3: Is the Reserve obtaining adequate active duty experience and professional training? What changes are needed?
Question #6: What needs to be done to make service in the Reserves more attractive?

With the goal in mind of making Reserve and National Guard psychology a more effective part of the total Army concept, the following recommendations are made:

a. Increase the opportunities for non-unit assigned reserve psychologists to obtain paid drills and retirement points.

b. Increase the opportunities for all Reservists to engage in the Continuing Health Education (CHE) Program by more attendance to Army psychology conferences and workshops; and to short-term civilian training programs, conferences and conventions. The ideal would be funding insured for one such experience per reservist per year. Priority of training should go towards preparing the reservist for combat psychology duties and other duties he can expect to perform upon mobilization.

c. Establish a funding mechanism to allow the Psychology Consultant to bring selected reserve psychologists on active duty for brief periods to accomplish specific projects of need to Army psychology.

d. Consider periodic selection of a reservist for one of the psychology fellowship positions with appropriate pay back requirements.

e. Encourage reserve psychologists' presentations at Army psychology conferences and workshops.

IV. Recommendations in response to question Number 4.

Question #4: What is the role of the reserve psychologist prior to mobilization? How should they be used after mobilization?

a. The role of the reserve/national guard psychologist prior to mobilization is primarily twofold:

1) Insure current familiarity with an understanding of military psychology and other relevant military issues, and

2) Provide an additional resource for the active Army to enhance accomplishment of the mission of Army psychology.

b. It must be appreciated that the reservist or national guardman assigned to a unit must also meet the requirements and needs of that unit and that these may sometimes take priority over 1 and 2 above.

c. The role of the individual reserve psychologist after mobilization can be best defined by his active duty supervisor in consultation with the reservist.
V. Recommendations in response to question Number 5.

Question #5: Is the MOBDES Program adequate?

a. It is strongly felt that the MOBDES Program offers the best opportunity for the reserves to immediately and directly support the active Army's psychology program. The MOBDES Program should be viewed as an additional manpower pool to supplement active duty manpower.

b. There is first the need to sell the program to potential reserve psychologists. Secondly, the MOBDES Program for reserve psychologists needs to be strengthened by;

1) Creating more MOBDES Psychologist positions that will directly support the active Army's psychology program.

2) The Psychology Consultant actively supporting the concept of paid drills and/or additional active duty for MOBDES positions.

a. This would allow the active duty supervisor in conjunction with the MOBDES psychologist to design a method to utilize the reservist's special skills on a regular basis to immediately support and increase the supervisor's ability to accomplish his agency's mission.

b. Examples -

1. Adding a skill to his staff he doesn’t have (neuropsychologist, child or pediatric psychologist, drug and alcohol specialist, biofeedback, hypnosis, etc.)

2. Supervision of technicians and interns.

3. In-service training of staff and interns.

4. Working on the backlog of intakes and psychological testing. With the projected decline in Champus availability, the active Army can expect an increasing demand for and over taxing of local psychology and psychiatric services by military dependents and retirees.

c. This use of specialty skills of reservists through the MOBDES Program is consistent with other Army health care services use of their reservists.

VI. Recommendations in response to question Number 7.

Question #7: Who should be responsible for the reserve psychology program? How should it operate?

a. An Army Reserve and National Guard Psychology Program should be established under the direction of the Psychology Consultant in the Office of the Surgeon General.
b. Several mechanisms for coordinating the program were discussed and are provided here for consideration:

1) A NODDES slot (Reserve Psychology Consultant) in the Psychology Consultant's office with responsibility for conducting the program.

2) The selection of Regional Senior Reserve Psychologists to assist the Reserve Psychology Consultant with the program in their geographic areas.

3) Making the program part of the responsibility of a civilian position in the Office of the Psychology Consultant or the Office of the Surgeon General.

4) Contracting of a consultant (psychologist) by the Psychology Consultant or the Health Services Command to conduct the program.

c. Aspects of the program should include:

1) Maintenance of a current list of reserve and national guard positions, reserve and national guard psychologists and prior active psychologists not in the reserves or national guard.

2) Recruitment of personnel for the reserve psychology positions through contacting: a) psychologists leaving the active Army, b) former Army psychologists not in the reserves, and c) civilian psychologists interested in joining the Army reserve.

3) Establish a communication system between the Psychology Consultant's office and the reserve and national guard psychologists. Several mechanisms were discussed including the following:

   a) Annual or semi-annual letter of information to reserve psychologists.

   b) Distribution of relevant military psychology information to reservists, either directly from the Psychology Consultant's office or through a number of already established reserve communication channels. Also to be considered is putting psychologists on the distribution list for various existing publications on Army psychology from the Health Services Command.

   c) Some of the existing communications channels to be studied are the Special Officer Division (AMEDD Branch) Information Letter and reserve magazines such as The Reservist, The Officer, and The Army.

   d) Establish a data bank of reserve psychologists' skill levels for use in selecting reservists for: a) active duty for special projects, b) reserve assignments, and c) consultation as civilian psychologists to local Army psychology agencies.

   e) Convene the Reserve Credentials Review Committee as needed.
COURSE CRITIQUE
AMEDD Psychology Symposium
15-19 November 1982

The following items have been designed to help us improve future courses. Your thoughtful consideration to each item will be appreciated.

Using the following numbered categories, give a global rating of the major presentations and workshops you attended.

4 = Superior  3 = Excellent  2 = Good  1 = Fair  0 = Poor

<table>
<thead>
<tr>
<th>Presentation</th>
<th>Rating Number</th>
<th>N</th>
<th>MEAN</th>
<th>SD</th>
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<tr>
<td>1. Status of AMEDD Psychology (Nichols)</td>
<td></td>
<td>42</td>
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<td>2. Contributions and Challenges Faced by AMEDD Psychology 1950's - 1970's (Thomas)</td>
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<td>3. American Health Psychology: Contributions and Challenges (DeLeon)</td>
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<td>4. AMEDD Psychology: Future Functions (Nichols)</td>
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<td>5. Psychological Service Delivery to Vietnam Veterans with Stress Disorders (Rath et al)</td>
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<td>6. Tri-Modal Treatment Based Stress Management Programs (Rosenheim)</td>
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<td>7. Psychological Effects of Soldier Acute High Altitude Exposure (Gillooly)</td>
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<td>9. Family Needs and Programs (Siebold)</td>
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<td>10. Rationale for Family Therapy (Stave)</td>
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<td>11. New Mission for Psychology: Screening Children for Disabilities (Zold &amp; Blum)</td>
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<td>13. Division and Community Psychology in Europe (Lenz, Luscombe and Walker)</td>
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<td>14. Women in the Army Study (Kowal)</td>
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<td>34</td>
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<td>.7</td>
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<tr>
<td>15. Behavior Science Specialists (91G) Training &amp; Utilization (Chermol)</td>
<td></td>
<td>37</td>
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<tr>
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<td>MSC Career Activities Office Overview (Hawkins)</td>
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<td>Rapid Evaluation &amp; Intervention with Families (Shoberg)</td>
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<td>18</td>
<td>What Parents Can Do to Help Their Child with Educational Disabilities (Blum &amp; Zold)</td>
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<td>Serial Neuropsychological Evaluation of A Case of Reversible Encephalopathy in Electrical Injury (Hopewell)</td>
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<td>Case Example of Organic Brain Disorder On and Off Medications (Fishburne)</td>
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<td>21</td>
<td>The Halstead-Reitan and Standardized Luria Batteries: When to Use Which? (Cripe)</td>
<td>15</td>
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<td>22</td>
<td>Health Psychology: An Overview and Selected Applications (Jeffrey &amp; Boudewyns)</td>
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<td>The Role of Clinical Psychologists in Neuropsychology (Cripe et al)</td>
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<td>Biofeedback Workshop (Bruno &amp; Sherman)</td>
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<td>3.2</td>
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<tr>
<td>25</td>
<td>Group Psychotherapy Workshop (McCormack)</td>
<td>11</td>
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<td>26</td>
<td>The Army Psychologist As A Manager (Worthington)</td>
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<td>27</td>
<td>A Survey of Division Psychologists Experiences (Rollins &amp; Laskow)</td>
<td>14</td>
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<td>Application of Group Dynamics to Preventive Dentistry (Smith)</td>
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<td>Food &amp; Chemical Sensitivities &amp; Emotional Balance. (Thompson)</td>
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<td>Computer Applications in Clinical Psychology (Hendricks)</td>
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<td>31</td>
<td>Infant Recognition of Father's Voice (Hulsebus)</td>
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<td>32</td>
<td>Korean-American Marriages (Zitomer)</td>
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<td>33</td>
<td>Anatomy of A Neuropsychology Fellowship (Parker)</td>
<td>Not Presented</td>
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*Ratings were split on numerous critique sheets; for purpose of summarization, these ratings were average.*
34. The MSC Officer of the 80's (BG Jordan)  
N 44  MEAN 2.6  SD .9

35. Psychological Research in Support of Combat Effectiveness (Sodetz)  
N 42  MEAN 3.3  SD .9

36. Combat Psychology (Greenfield et al)  
N 35  MEAN 3.1  SD .9

37. Community Mental Health Activity in a MEDDAC (Gillooly)  
N 23  MEAN 2.8  SD .9

38. Combat Psychology Skills Training Workshop (Mangelsdorf et al)  
N 14  MEAN 3.2  SD .9

39. Army 2000 - Implications for Consultations (Hungerland)  
Not Presented

40. Crisis Intervention in Military Unit Settings - A Developmental Approach (Shoberg)  
N 9  MEAN 3.3  SD .7

41. Recent Policy Developments in Army Child Psychology and Required Professional Support from Clinical Psychology (Zold)  
N 35  MEAN 3.1  SD .9

42. Use of the MMPI with an Active Duty Military Population (Fishburne et al)  
N 34  MEAN 3.6  SD .6

I would have preferred:

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<td>b. Paper Sessions</td>
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<td>12%</td>
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<td>c. Symposia</td>
<td>42</td>
<td>17%</td>
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<td>71%</td>
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<td>d. Invited Addresses</td>
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<td>38%</td>
<td>0%</td>
<td>62%</td>
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<td>e. Task Groups</td>
<td>40</td>
<td>15%</td>
<td>23%</td>
<td>62%</td>
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<tr>
<td>f. Slides</td>
<td>39</td>
<td>28%</td>
<td>5%</td>
<td>67%</td>
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<tr>
<td>g. Films</td>
<td>36</td>
<td>56%</td>
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<td>42%</td>
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<tr>
<td>h. Demonstrations</td>
<td>39</td>
<td>53%</td>
<td>3%</td>
<td>45%</td>
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</tbody>
</table>
A. How would you rate the overall quality of this Symposium compared with similar Symposia? (Check) N=42 Mn=3.0 SD=.9

4 □ Superior 3 □ Excellent 2 □ Good 1 □ Fair 0 □ Poor

B. This Symposium was well worth the cost in time and money. (Check) N=44 Mn=3.5 SD=.8

4 □ Strongly Agree 3 □ Agree 2 □ Neutral 1 □ Disagree 0 □ Strongly Disagree

C. How satisfied were you with opportunities for collegiality and social contacts? (Check) N=44 Mn=3.3 SD=.7

4 □ Superior 3 □ Excellent 2 □ Good 1 □ Fair 0 □ Poor

D. In your opinion, how was the administrative processing handled? (Check) N=44 Mn=3.3 SD=.7

4 □ Superior 3 □ Excellent 2 □ Good 1 □ Fair 0 □ Poor

E. What did you think of the facilities? (Check) N=44 Mn=2.6 SD=1.1

4 □ Superior 3 □ Excellent 2 □ Good 1 □ Fair 0 □ Poor

Give a brief comment on the subject and/or lecturer that was most interesting.

See page 6
Comment on any lecturer you found boring, uninteresting, not well prepared, and/or on a level below, or above your professional background.

See Page 7

What alternate/additional subjects would you suggest?

See Page 7/8/9

Your category (Check as many as apply)

☐ a. Active Duty (Service)

☐ b. Reservist (Service)

☐ c. Retired (Service)

☐ d. Other Government Service (Specify)

☐ e. Civilian

☐ f. Other (Specify)
TOPICS & PRESENTERS MOST LIKED, MOST STIMULATING, MOST INFORMATIVE:

1. Dr. DeLeon's presentation elicited the most frequent positive comments with twelve respondents reporting: "Excellent speaker. Interesting but pessimistic." "Good emphasis on political thrusts we must make." "Good presentation of the national climate for psychology." "It had impact upon my apparently naive believe system." Two respondents complained that his presentation was "boring" and wished he would have focused "more specifically with respect to military issues."

2. The Women in the Army Study (Kowal) received eight positive comments: "impressive presentation, relevant, and an important contribution by psychologists." "An important work of potentially major impact."

3. Six respondents praised Dr. Sodetz as a "Good Speaker," "valuable perspective on both DeLeon's and General Jordan's talk." "Like to hear more from him next time."

4. Five respondents praised the emphasis on combat psychology, with three singling out Dr. Mangelsdorf and Dr. Tamayo's presentation as "interesting, involving and informative."

5. Four persons identified Dr. McCormack's Group Therapy Workshop with such phrases as "the only presentation that left me feeling I had gained something clinically which will be immediately useful."

6. Three respondents identified LTC Wilson's presentation as "important work of major impact."

7. Three respondents felt that LTC Chermol's presentation addressed a critical issue.

8. The biofeedback workshops by CPT's Bruno and Sherman were seen as "organized, well presented," "informed and informative."

9. Two respondents felt that the broad higher level topics presented by General Jordan, COL Nichols, LTC Chermol, LTC Fishburne, etc., provided "thoughtful perspectives."

10. LTC Jeffrey was praised for his presentation.

11. Dr. Gillooly's presentation was praised as "an excellent piece of research" although there was some dismay over emphasizing methodology with no presentation of results.

12. LTC Fishburne, et al received praise "as exemplary clinical research."

13. Dr. Zold's presentation on child assessment was seen by one as "timely and important," but another respondent suggested that his presentation be "offered only once, to the general assembly."
14. Dr. Cripe's presentation was seen as "scholarly, organized, relevant and concise" by one, and resented by another as "patronizing and serving to unduely restrict the role of the clinical psychologist."

15. Dr. Stave's presentation was seen as "well prepared but his attitude of absolute authority was hard to take."

16. LTC Hawkins was appreciated with a recommendation that he or his successor be invited to the next Symposium; however, one respondent recommended "formal group therapy to deal with the depression following his presentation."

MOST BORING, UNINTERESTING, ETC.

1. One civilian (non-funded) received 12 rather sharp comments for using several slides of attractive, unclothed women in his introduction, e.g., "The slide show was inappropriate, unprofessional, sexist, insulting."

NOTE: The local project officer assumes responsibility for failing to prepare THIS speaker about the nature of the audience, as he apparently had expectations of addressing an all male group, with some expectation that we would be similar to 1960's male groups. The man is an excellent psychologist and fine person and apologized for his introductory format.

ALTERNATE/ADDITIONAL COMMENTS.

1. Nine people reported that they would like more emphasis on research and workshops in clinical skills such as hypnosis, therapy strategies, and assessment-intervention interface.

2. Four people suggested a focus on administrative skills for psychologists such as "practical management of a psychology service", "recording workload to reflect the contributions of psychologists", a workshop on "how to establish and maintain psychology positions."


4. Increase use of speakers outside military who are leading experts to highlight two days of the conference, and to augment areas where military psychologists lack expertise.

5. Set aside time within the conference for Task Groups to meet.

6. Seek input from our Israeli colleagues.

7. Certificates of attendance would be helpful to document continuing education.
8. Published proceedings should be sent to all medical centers so data will be available. Perhaps via microfiche and send to all libraries too.

GENERAL COMMENTS:

1. Several respondents expressed dissatisfaction with the facility to include:
   "access to a coffee shop would help"
   "breakfast at the hotel (suffered because) not enough staff to serve"
   "facilities poor to --poor"

2. Another individual complained of an administrative problem:
   "access to money for people in Europe"

3. A respondent complained that the schedule was too tight and wished that the afternoons would have allowed touring.

4. A respondent recommended to curtail the reading of papers.

5. On the positive side, one respondent reported this as "the best Symposium organized since their entering the service". Two others felt the Symposium allowed a mixture of ranks and perspectives to socialize and build cohesion.

6. Two interns expressed appreciation for the opportunity to meet colleagues and obtain an overview of military psychology.

7. Two reservists reported the Symposium as a good orientation to reservists about what military psychology is doing.
SUBJECT: After-Action Report: AMEDD Psychology Symposium

Commander
USAMEDDPERSAA
ATTN: SGPE-EDT
1900 Half Street, SW
Washington, DC 20324

1. All actions pertaining to the conduct of the AMEDD Psychology Symposium at the Augusta Hilton, Augusta, Georgia, during the period 15-19 November 1982 have been completed. This report constitutes a summary and critique of the course, to include a summarization of critiques of individual attendees.

2. Course Overview: The overall objective for the course was for each attending psychologist to gain knowledge of selected new clinical developments and to improve on procedures for supporting the Army in training and in the combat environment. Course objectives and content can be grouped in four major areas:
   a. Ability to organize and manage mental health resources to meet the needs of the Army in training and in combat.
   b. Knowledge of special populations, their needs and current Army policies in management of same.
   c. Knowledge of new developments in clinical treatments, assessment and consultation.
   d. Knowledge of policies, opportunities and requirements effecting military career planning.

3. Course Content:
   a. The course was structured to group content areas in half day segments. The mornings were set aside for plenary sessions on topics in which all attendees should be involved, and the afternoon sessions were structured to allow for selection among several workshops, as follows. (See also Symposium Program, page 1)
      (1) History, current status and future functions of AMEDD Psychology (Monday AM).
      (2) Psychological assessment and treatment workshop (Monday PM).
      (3) Workshop in Child & Family (Monday PM & Tuesday PM).
      (4) Supporting the Soldier in Garrison, to include presentation on Stress and Fitness Programs (by LTC Wilson, replacing COL Prince on the Schedule) (Tuesday AM).

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SUBJECT: After-Action Report: AMEDD Psychology Symposium

(1) History, current status and future functions of AMEDD Psychology (Monday AM).

(2) Psychological assessment and treatment workshop (Monday PM).

(3) Workshop in Child & Family (Monday PM & Tuesday PM).

(4) Supporting the Soldier in Garrison, to include presentation on Stress and Fitness Programs (by LTC Wilson, replacing COL Prince on the Schedule) (Tuesday AM).

(5) Advanced Neuropsychology (Tuesday PM)

(6) Health Psychology (Wednesday AM)

(7) Biofeedback Workshop (Wednesday PM)

(8) Group Psychotherapy Workshop (Wednesday PM)

(9) Open University (Wednesday PM)

(10) Psychological Support in Combat (Thursday AM)

(11) Combat Psychology Skills Training Workshop (Thursday PM)

(12) Consultation Considerations (Thursday PM)

(13) Planning for future functions and challenges of AMEDD psychologists. Six Ad Hoc Committees met at lunch hours, evenings and in lieu of attendance at scheduled sessions. The Committees are:

   (a) Plans, Policies and Professional Affairs

   (b) Division Psychology

   (c) Education and Training

   (d) Fitness Programs

   (e) Recruitment and Retention

   (f) Reserve Affairs

Ad Hoc Committee Presentations and Consultant Summaries (Friday AM).

(14) Career Planning. Presentations by Chief, MSC; Psychology Consultant, OTSG; and Career Manager, CAO. Individual sessions with Psychology Consultant, OTSG, and Career Manager, CAO, which were scheduled at 20 minute intervals Tuesday - Thursday; six individual sessions with Chief, MSC.
After-Action Report: AMEDD Psychology Symposium

Half-day meeting of Internship Training Chiefs and Directors of Training to discuss and plan training priorities, processes and needed changes.

b. Course objectives, as presented in course overview, were generally met. All speakers were requested to address the highest level of professional psychology and to focus on military specific issues; in fact, more than half the presentations/workshops were military unique to start with and with one or two exceptions, the speakers did present at the appropriate advanced level and address the military unique/specific issues.

4. Faculty/Guest Speakers: The use of AMEDD psychology officers was maximized, both to take advantage of uniformed expertise and to insure that professional psychological knowledge was brought to bear in relevant military specific/unique ways. List of Speakers is attached (p.viii). Five psychologists were funded as guest speakers, two being active Army (LTC Sodetz and MAJ Zold), one DA civil service psychologist (Dr. Mangelsdorff) and two civilian psychologists (Doctors Thomas and DeLeon); COL Prince had been scheduled as a guest speaker but had to cancel. Six civilian psychologists presented, at no cost; five local psychologists and one professor funded by his university. The guest (and non-funded) speakers contributed significantly to the program, providing a diversity of experience and expertise. Unfortunately, one speaker used an attention getting technique not appropriate to the audience (see attendee critiques) and the symposium project officer accepts responsibility for not adequately briefing the speaker.

BG Cutting's opening remarks were very effective in helping set the focus of the conference, by reflecting on several aspects of professional psychology and continuing needs of the military in combat.

5. Course Attendance: Numbers of attendees registered by component were as follows:

<table>
<thead>
<tr>
<th>Active Duty</th>
<th>Reserve</th>
<th>National Guard</th>
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<tr>
<td>Officer 61</td>
<td>6</td>
<td>1</td>
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<tr>
<td>Enlisted 1</td>
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List of attendees by name, rank, corps, service component and source of funding is attached (page v).

6. Attendee Critiques: Attendee critiques were made on a course specific form, which included the major elements of the AMEDD Professional Graduate Short Course Critique (Test), as well as presentation specific ratings.

a. The tabulated critiques are presented on a copy of the critique form (Incl 4) to include number responding, mean rating and standard deviation.
b. Comments on the critique sheets have been reviewed and a representative composite presented on the critique form (page 401).

c. Critiques were generally favorable, with individual/group presentations averaging ratings of excellent. Criticisms generally addressed the issue of putting too much into four and one-half days, with some attendees wanting more clinical skill workshops, some attendees wanting more invited addresses and others more scheduled time in the conference for AMEDD psychology planning purposes (i.e., the Ad Hoc Committees). For a course held only once every two years, there is no possible way to accommodate all the needs of attendees, the OTSG Psychology Consultant and the Teaching Chiefs in four and one-half days. The general high interest level and intensity of involvement suggests the balance of content was about appropriate. Format might have been better with more papers in a "poster session", allowing for timely distribution of written papers and freeing up time on the schedule for Ad Hoc Committees, additional invited speakers and/or expanded workshops.

7. Administration: Early agreement (March 1982) between the OTSG Psychology Consultant and the local project officer about the course objectives and general areas of course content, and delegation to the local project officer of responsibility for putting the course together (speakers, schedule, etc.) facilitated the course development. Letters went out in May 1982 soliciting presentations from AMEDD psychologists, with a 31 July 1982 suspense date; several exceptions to the suspense date were allowed, but it worked well to generally insist on the deadline, which at three and one half months pre-conference was barely adequate to complete scheduling, program printing, etc. It was necessary for the project officer to solicit presentations from known experts in AMEDD psychology and this worked well to structure the program along course objectives, rather than having the programs structured on the basis of what was volunteered. Co-program directors were designated (LTC Rath and CPT Bruno) and responsibility split, with CPT Bruno responsible for the general solicitation of presentations and corresponding with prospective presenters, as well as organizing proposals into topic areas, and LTC Rath was responsible for overall organization, liaison with hotel, etc. This splitting of responsibility worked well and allowed each officer to maintain clinical responsibilities.

The Fort Gordon Billeting Office could not guarantee enough (any) on-post quarters with any adequate lead time (would not discuss it more than three months before the conference) requiring the Symposium be held in a civilian facility. That turned out to be fortunate, as it eliminated transportation time between quarters and conference and facilitated informal and social contacts out of scheduled conference time. No certificates of non-availability were required as TDY orders instructions were to Augusta, Georgia (and not to Fort Gordon).

The DDEAMC command and staff provided all support requested. Medical Illustration did a superb job on developing an attractive, thought provoking and useful program. POAT provided two each overhead and slide projectors. Briefings to
SUBJECT: After-Action Report: AMEDD Psychology Symposium

command (XO & CG) were timely, concise and helpful to the project officer, in that useful suggestions resulted. The Commander, BG Cutting, made his time available for both written and in person briefings, which were reflected in his meaningful opening remarks.

The social activities (no-host social on Monday evening and no-host social/dinner Wednesday evening) were well subscribed (90%), positively received and appeared to contribute significantly to the success of the Symposium. There had been concern by the hosting project officer that due to cost ($4.00 for no-host social and $12.50 for dinner) subscription for the social events would be low and leave the hosting officer "holding the financial bag"; but this concern turned out to be ill-founded.

8. Recommendations:

a. The Symposium be held annually, even if it means reducing the number of funded spaces for each Symposium. This would allow for continuity of military unique information sharing in psychology and of planning actions to improve provision of services.

b. In alternate years the Symposium for clinical/counseling psychologists (68S) be held conjointly with that for research psychologists (68T) to enhance sharing of information and collaboration on projects; i.e., in FY 84 a joint 68S/68T Symposium, in FY 85 separation 68S and 68T Symposia, etc. LTC Sodetz, OTSG 68T Consultant indicated interest in this idea.

c. Continue and increase Reserve/National Guard participation. This is an excellent two way educational vehicle.

d. Schedule meeting times during the day for the Ad Hoc Committees which serve the very important function of acting as the ex-officio staff for the OTSG Consultant. Make time for the Ad Hoc Committees by putting some of the more specialized paper presentations into a poster session.

e. Hold the Symposium off post or at a post where conference and billeting facilities are contiguous. This fosters productive informal contacts and eliminates lost time due to transportation.

f. Continued support for guest speakers is important and will probably be utilized to a greater extent in future Symposia.

FRANK H. RATH, JR., PH.D.
LTC, MSC
Local Project Officer
DIVISION PSYCHOLOGY CONTRIBUTIONS

A collection of articles designed to help prepare psychologists for assignments to combat divisions.
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**ALSO:**

Division Psychology in Europe - CPT Richard L. Luscomb (pages 133 to 139)
The recent modification of Division TOE (Tables of Organization and Equipment) provides for assignment of a psychologist to the Division Mental Health Section of the Medical Battalion. The introduction of a psychologist at this "grass roots" level suggests an additional approach to the delivery of comprehensive community mental health. The division psychologist is, in reality, expected to fill a combination of three roles-special staff officer, clinician, and consultant. Since divisions average anywhere from 13,000-17,000 troops, the role of consultant is perhaps the most important one for a division psychologist. By utilizing the resources of the mental health section, an opportunity is provided for a relatively small number of consultants to exert a widespread effect in the division community through the intermediation of a large group of consultees.

In the 101st Airborne Division, we have attempted to apply Caplan's (1966) concepts of the types of mental health consultation in our day to day operation of the Division Mental Health Section. According to Caplan's well-known model, there are four types which have become known as (A1) Client-centered Case Consultation, (B1) Program-Centered Administrative Consultation, (A2) Consultee-Centered Case Consultation, and (B2) Consultee-Centered Administrative Consultation. We shall attempt to give brief examples of how we employ these types on a division wide scale.

1. Type A1 Client-Centered Case Consultation. Here the primary goal is to improve the client. An example of this would be the supervision of our Enlisted Social Work/Psychology Specialist in working with their clients. Often the consultant can help by clarifying issues and feelings, aiding in making the correct diagnosis and suggest effective treatment.

2. Type B1 Program-Centered Administrative Consultation. The division mental health section has been called upon to help with training problems, policies governing the recruitment of unit of choice enlistees and effective utilization of personnel.

One interesting request that we have been unable to respond to is the request to assess the operation of an entire battalion with the view of improving the operational efficiency. We feel that the mental health specialist may be able to help the Commander achieve his mission while also improving the mental health potential of his troops. We hope to be able to explore this interesting possibility in the near future.
3. Type A2 Consultee-Centered Case Consultation. In a division there are numerous "helpers" who deal directly with the troops for example the Division Military Police and the Chaplains. Often these "helpers" encounter difficulty that interferes with their ability to deal adequately with the mental health problems of this client. One approach to the problem has taken the form of an in-service training course in mental health and human relations for the Division Military Police. This course has been aimed at overcoming a lack of understanding and a lack of skill in dealing with clients. Some of the other difficulties we have touched upon have been lack of objectivity and lack of confidence and self-esteem due to inexperience and youth.

4. Type B2 Consultee-Centered Administrative Consultant. In the year that the 101st Airborne Division Mental Health Section has been in operation, we have had no occasion to offer this service. We feel, however, there is a great potential for a program of consultation to improve the interpersonal aspects of the operations of a small unit, especially at the squad or platoon level. We are considering training paraprofessionals to act as facilitors for such groups. They might facilitate the acquiring by small units of group dynamic skills, and also help them explore new patterns of action in dealing with the complexities of the military milieu.

This latter type of consultation would, in our opinion, represent the highest level of consultation in that it would represent a true "growth model" as opposed to the traditional medical model associated with the term mental health.

In this brief summary, we have tried to outline our concept of the role of the division psychologist. The consultative model discussed represents what we feel an ideal application for the skills of an Army Psychologist, especially for one who has an intimate knowledge of the military environment. Such an ideal application of course, must be tempered with reality. Due to the increased shortage of psychiatrists in the Army, the Division Psychologist could easily be side-tracked back into the traditional medical model.

REFERENCE

"I'll Never Call You Doctor"

An Exercise in Cognitive Dissonance

Gregory B. Laskow, Ph.D.
In his closing comments on solving community entry problems by the mental health clinician, Nottingham (1975) states: "You could have been a steeplejack or a chiropodist, but you chose community psychology. So, having made your bed, rest ye well! The nightmare and the morning, cometh" (p. 309). Similar choices are not foreign to those mental health clinicians who have ventured into non-traditional areas for delivery of services in the United States Army. This is logical and appears quite simplistic on the cognitive level. Yet, the "nightmare" appears as a more pressing issue for those mental health clinicians in the United States Army who sometimes venture, sometimes fall into and, yes, sometimes choose nontraditional settings for the delivery of services. As an example, I refer to the Division Mental Health Consultation Service, specifically, of the 82d Airborne Division located at Ft. Bragg, North Carolina.

The author of this paper was originally requested to present an overview of the problems of such an organization—this request implying that the problems would be different and unique—a seemingly logical statement. The everyday, ever-present and visible testimony of the preparedness to go to war at a moment's notice alone creates differences along physical, intellectual and emotional dimensions for the members of this unit. But it too, like a MEDCEN or MEDDAC, has an organization and a structure with some policy, standards and principles to achieve outcomes and missions. And, as Nottingham suggests, a clinical psychologist, having made the choice to work in this Divisional setting, should live with it and make the organization or structure work for him/her. Quite logical again—until the "nightmare" suddenly evolves and then the challenges begins.

The focus of this presentation therefore will not be a challenge of or a presentation of alternatives to the existing system of MHS within the Division. Rather, the challenge consists of more basic issues of survival and belongingness with consequential attitude changes and problem-solving strategies.

The creature comforts of a MEDCEN were my initial experience base as a new clinician in the field of psychology. Yet, I was continually aware of other places less attractive which I actively sought as part of an overall career progression plan (or as some say, to pay my dues). Therefore, the choice! The "bed" began to be made in jump school with the intent of becoming the new Division Psychologist for the 82d. Bald-headed and bare-lipped, I attempted to do what some say is intended only for birds and fools. Sustaining an injury, I was relieved to be sent to Ft. Bragg where I later might become jump qualified but could immediately get down to the business of psychology. The "nightmare" was interrupted...I thought!

A look at my new work environment—huge, active, bustling, and noisy, with maroon berets everywhere...sounds of combat boots uniformly striking the hard asphalt in a four-mile run to the cadence of a deep-throated sergeant gruffly chanting "If my main don't open wide"...the interruption of at least six C-130 troop transport aircraft at 500 foot altitude and several volleys of artillery fire nearby prevented me from taking this chant too seriously. Eventually...on to meet what I later came to realize was the first in a long line of "bosses" I was to have in the Medical Battalion—the XO (others were the Division Psychiatrist, the Battalion Commander, the Division Surgeon and, to a lesser extent, the Company Commander of the Headquarters and Support Company).
When I walked into his office, little did I know that this interaction with the XO would be the start of a cognitive dissonance for me. His words were, "I just want you to know, Captain, that I run the staff here and you are part of the staff... Also, I'll never call you 'doctor'". My gosh! I was aware that a unit of this sort would have different perceptions of mental health professionals but had expected a bit more subtlety and hoped to be diplomatically able to further define and delimit my role and position as a professional clinician. However, this statement from the XO was quick, blunt and admittedly somewhat offensive... my first challenge to professional integrity... or so it seemed. Seconds later I responded with "All the way, Sir!"—considering the possibility that this statement may have had as its basis an unfruitful experience with a member of the mental health profession or might be a test to see how easily I would be unnerved. Regardless, this was the beginning! What was to follow, as seen by my experiences and actions as a mental health professional in this Division, was in principle a multiplicity of this interchange with the XO.

With this brief entry description, I would like to focus and highlight certain impacts on the delivery of mental health services within the 82d Airborne Division followed by quite tentative prescriptions for those who might enter such a system in the future.

Organizations are comprised of basic common elements of people, resources, purpose, and structure. What seems to differ from organization to organization is the degree of overlap among these categories. Certainly, some degree of category interchange is necessary for the organization to function effectively with more complexity in the system creating greater likelihood of overlap. Additionally, these elements themselves do not exist in a vacuum; they too are a part of a larger microsystem which impacts on it. Therefore, overlap is crucial.

Consider the 82d Airborne Division to be a complex microsystem. It has its structure (the traditional wire diagrams), people (airborne-qualified personnel across a wide range of MOSs), resources (weaponry, machines, paper, etc.) and mission. The latter warrants further detail. Simply stated, the mission is to be prepared to go anywhere in the world at a moment's notice, capable of responding in a combat environment with the maximum amount of power. Implicit therefore in a non-combat posture is the notion of constant preparedness and readiness... not testable once or twice a year (as in the usual ARTEPs) but every hour of every day. Now, let us deal with the MHCS mission in this system.

THE MISSION. The MHCS of any Division has two kinds of missions... that for peacetime and that for wartime or combat. To accomplish the latter, the guiding principles for MHCS are and would be akin to those of other medical operations during war, i.e., immediacy, proximity and expectancy, or to treat as soon as it happens, where it happens and with the notion of returning personnel to the mission, if possible. In combat, the Medical Battalion of the Division, with its Clearing and Ambulance platoons and supporting elements, is one of the earliest echelons of medical treatment and disposition. MHCS, as part of the Medical Battalion, becomes involved in a triage process where, depending on the Commander's evacuation policy and guided by the three above principles, patients are given an expedient disposition. For MHCS, some dispositions may involve bed rest and food for 24 hours for combat fatigue, injections of thorazine with...
possible evacuation to the rear, ventilation of depressed feelings, etc. Fast and furious is the name of the game! Other activities of the Medical Battalion also affect the wartime operation of MHCS. The 91-G Behavioral Science Specialist may be utilized as a 91-B medic in the case of a mass casualty or as permanent or temporary perimeter guards in foxholes. A remote possibility is that the Division Psychiatrist, Psychologist or Social Work Officer might consult with other elements in the chain of command if there is time and accessibility to these individuals and units.

The peacetime/garrison mission of the MHCS provides an opportunity for slightly more definitive treatment to take place. Yet, oftentimes I have heard the Division Psychiatrist refer to our mission in garrison as "wartime psychiatry" and state that we are doing very closely in peacetime what we would be doing combat. In most instances, this is accurate. The majority of our patient activity ranges from the toxic psychosis resulting from drug ingestion (e.g., PCP) to the depressed person who makes a suicidal attempt or gesture to the angry, passive-aggressive young trooper who has a long history of problems with authority figures. (A true neurotic rarely presents for treatment.) A soldier in garrison with the 82nd is continually engaged in mission readiness and, therefore, long-term treatment could mean a loss of badly needed mission resources. If a patient is seen more than 4 or 5 times, something in the MHCS system may not be functioning properly, primarily due to the emphasis placed on a crisis intervention model aligned with the aforementioned principles.

As in combat, there is an overlap with the other peacetime missions of MHCS and those of the Medical Battalion. To cite a few examples:

(1) ARTEPs and field exercises both local and extended geographical
(2) IGs
(3) Motor pool activity
(4) NBC proficiency and training
*(5) Airborne operations
(6) Weapons qualification
(7) Daily physical training
(8) Officer and enlisted staff duty
(9) Continuous updating of personnel forms
(10) Human relations training

*On the average, at least one member of the MHCS staff or personnel is on an airborne operation once a week which means the loss of one complete day.
Lastly, consultation is designed to be an integral part of the mission of any MHCS. The 82d MHCS staff is continually aware of the need to perform in a consultative capacity as well as in the traditional patient-care modes. Of necessity, the former has been restricted to case- or consultee-centered types of consultation interactions, with Organizational Effectiveness folks absorbing more of the complex interventions at the organizational level.

THE STRUCTURE. The structure of the MHCS within the Medical Battalion is simple and is designed keeping in mind the three basic principles of patient care as well as insuring that all aspects of medical care are mobile and self-supporting as much as possible.* This simple structure in actual function, however, displays a high degree of overlap with other functions or missions. Examples are:

(a) Physically, the Division Surgeon is located in the Medical Battalion although he is actually on the Division Special Staff. He is responsible for the professional aspects of medical care throughout the Division as well as the Medical Battalion. As part of this activity, therefore, he is interested in the professionals who are rendering services to the Division. Input to the Division Surgeon by these professionals is crucial. However, the Medical Service Corps officers and some of the Medical Corps officers are also considered to be part of the staff of the Medical Battalion and come under the responsibility of the Battalion XO.

(b) The 91-G Behavioral Science Specialists are assigned to the Medical and Support companies within the Battalion. The same 91-Gs are also receiving supervision from the Division Psychiatrist who also may be a part of the rating scheme of these individuals.

(c) The Division Psychiatrist position concerns itself with yet another dimension of influence from the hospital commander of the local MEDDAC who also happens to be the Corps Surgeon who has professional input and influence of the Division Surgeon.

*There are those that would advocate co-locating the Division MHCS with the Department of Psychiatry and Neurology of a MEDCEN or MEDDAC during peacetime. Although several advantages might be raised for this decision, doing so might remove MHCS too far from the actual activities of the division and therefore reduce an awareness of a sometimes austere environment that approximates combat.
Given these examples of the overlap in the structural elements between the MHCS and the Medical Battalion, it is clearly evident that a professional clinician's activity structurally is scrutinized by several persons/positions.

PERSONNEL. As indicated, all personnel of MHCS in theory belong to someone else in the Battalion. Control of professional issues concerning mental health are chiefly the responsibility of the Division Psychiatrist. Yet, reflecting on the multiplicity of the Medical Battalion's missions, a high degree of overlap exists between the professional activities that a member of the mental health team is responsible for and those activities that are initiated by the Battalion which also are the responsibility of the member. For example, we are all well aware of the necessity for grooming 91-Gs after they have been assigned to us on completion of the course at Ft. Sam Houston. A lot of effort and planning is constantly taking place to develop his/her skills to a level of minimum clinical expertise. Yet, the 91-G of the Division MHCS (especially in the lower ranks) is keenly aware and constantly reminded by his Company Commander of the need for promotion points or readiness requirements that are usually acquired through additional schooling or training in the Medical Battalion or at other locations throughout the Division. Therefore, there can be a reduction of time available for the 91-G to provide services and certainly a degree of difficulty in planning ahead for the same over a long period of time. If the Medical Company to which the 91-G belongs is preparing to go to the field, usually a 90% accountability of personnel within that company is required for the mission. The 91-G might be strongly encouraged by the Commander to fulfill this mission requirement, again creating difficulty in patient-services planning.

Such a duality of missions for the 91-G creates not only potential problems in patient care but ultimately engenders a duality of perceptions as to the primary role of the 91-G, i.e., soldier/therapist. The staff of the MHCS contend that the 91-G functions quite differently than a 91-C or a 91-B in their respective settings. The latter two will treat patients as a part of a triage system and deal with the preliminary work and data gathering for the PA or physician. The 91-G, with supervision, is responsible for a specified number of intakes, diagnostics, dispositions and treatments for the patients. For the 91-G, unlike the 91-B/91-C, these activities necessitate advanced scheduling. A more crucial distinction is the fact that the primary treatment vehicle in the MHCS is the interpersonal relationship between the therapist and the patient; this is not easily altered or transferred when other missions of the Medical Battalion are to be met. As a result, it is sometimes difficult to keep Company Commanders informed and, more so, sensitive to the differences in patient care provided by the 91-G versus the 91-B or 91-C.

RESOURCES. The primary source of logistical and supply support for MHCS is the S-4 and the DMSO (Division Medical Supply Officer) of the Medical Battalion. The problems generated in this category are not so much a function of overlap with other categories within the system but rather a problem of priorities. When MHCS requests stationery supplies, there does not seem to be any major delay. Yet, when it is a question of obtaining certain diagnostic instruments or resupplying forms for these, a continual "squeaky wheel" principle needs to be enforced.
Support becomes even more elusive when considering subtle issues which impact on the effectiveness of patient care (e.g., the comfort of patients in the waiting room and in the therapy rooms; the environmental setting of the building itself; appropriate temperature control*; freedom from noise interference and distraction**). One aspect of the problem is that MHCS is now the only occupant of an entire TMC building, which, for many issues of control and accountability, is under the local MEDDAC. Yet, there is a grey area where the MEDDAC and the Medical Battalion overlap in responsibility for the MHCS operations (e.g., for some of the furniture, the MEDDAC is responsible; for IG inspections, the Medical Battalion is responsible; and, as of yet, no one knows or will admit who is responsible for the physical plant itself). The conclusion at times is confusion.

For MHCS there are endless issues generated by overlap of the categories of mission, structure, personnel and resources. At times, they seem as plentiful and new as days in a year and what becomes certain is change itself. What has been related is but a sample of what can ultimately develop into frustration, if not blatant anger at times, for the mental health professional despite an expectation that things will get better. Frequently, piecemeal reconciliation is the mode.

Developmentally, for the newly arriving mental health professional coping with the perceived frustration, there is generated an intellectual organization of categories in an attempt to rationally conceptualize and hopefully understand a system that on occasion seems largely irrational. Furthermore, these conceptualizations are prone to be simplistic in design in order to arrive at a sense of quasi-control of matters. The following is such a conceptualization which I am certain is simplistic, reductionistic and affords little assistance in preparing for the "nightmare". But it was the beginning of the resolution of the dissonance.

Using the traditional ven diagram approach, a system with the basic elements of mission (purpose), structure (organization alignment), people (manpower) and resources (materials) with some necessary degree of overlap for minimum functionality, might be portrayed as such:

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* This Fall, the DAFE thought that the MHCS building had been abandoned and therefore did not turn on the heat when all other buildings were serviced.

** E.g., tree-top C-130's and C-141's, helicopters, heavy machinery.
Assuming that the basic principles of permeability of or fluidity between boundaries are not necessarily fixed for each of the elements, and assuming that the size of the circle representing each dimension may, in reality, be different for each (depending on the idiosyncratic style of the organization's priorities), overlap does occur across all combinations. The amount of overlap "A" is an area for potential "loss of identity" of an original dimension (M,P,R, or S) which may be attributable to a decrease in the level of effective communication or interchange. Similar overlap might occur between all combinations of the dimensions with the more combinations generating greater probability of confused messages.

A more complex organization (complex in one or all of its elements) might be pictured as such:
With the same assumptions, "B" compared to "A" would have an increased probability of confusion, frustration and more specifically "lost" or partially altered identity of a category that may or may not be detrimental.

If the entire ven diagram were to represent the Medical Battalion of the 82d, and if the MHCS were considered to be a part of each of the four categories of the system, and if the structure is assumed to be complex (as in the description of "B" relative to "A"), then some intellectual, cognitive grasp of the aforementioned issues facing the present MHCS begins. For the mental health professional recently assigned to an organization of this type, such an approach might be viewed as the primitive beginnings attempting to resolve or reduce cognitive dissonance, i.e., beginnings of an attitude change.

This simplified systems viewpoint facilitating an understanding of a highly active and complex organization such as the Medical Battalion of the 82d can provide the mental health professional with a framework in order to maintain (or attempt to) a sense of professional identity. Yet, in the developmental sequence, the utility of this perception, although necessary, is passive and limited. Activating the framework necessitates behavioral guidelines that I have labeled as prescriptions for survival expediting the resolution of the cognitive dissonance and attempting to hasten the end of the "nightmare".

**PRESCRIPTIONS:**

1. **Resolve issues of integrity based on labels or positions as soon as possible.** Mental health professionals assigned to a new organization that drastically departs from more traditional settings might be inclined to prematurely delimit the range of professional activity that may be based more on past needs, experiences, etc., rather than on newer demands of the situation.

2. **Be visible but cautiously so.** The caution specifically refers to one's efforts to define or redefine the professional role. Herein lies an inherent danger of wanting to become like "them" based on a questionable premise of "if I am like them, the better I can render the services that I have to offer". Observe and be visible from a distance and appreciate the difference.

3. **Be informed to inform.** The resultant overlap of elements within the organization creates a high probability that decisions made elsewhere within the Medical Battalion will have an impact on MHCS. A periodic phone call to the S-1 or the Headquarters and Support Company Commander might be revealing; attendance at Commanders' meetings might be useful. Designating a representative from the enlisted ranks of MHCS to attend the First Sergeant's meeting is necessary to keep in touch with policies and missions that affect your GSs. Be aware of the doctrine that affects the functioning of those that work with you. Interact frequently in person with the Division Surgeon, the S-1, the XO, and the Company Commanders of the Medical Battalion.
(4) Be prepared to set limits and to provide the rationale for such. Adopting a crisis intervention model creates a vulnerability to excessive and ineffective "extinguishing of fires," a percentage of which might not be in the best interests of the patient, a company commander, an organization or the mental health professional. The ability to tactfully say "no" to inappropriate requests is crucial.

(5) Differentiate between nice-to-have (or do) and need-to-have. In a peacetime posture, there is an increased opportunity to expand services which may be of the nice-to-do or -have variety but which may cloud the ultimate combat mission of MHCS.

(6) Closely monitor your own physical, emotional and educational health. Typically, the day is long and hectic. Over a long period of time, a decrease in functionality and effectiveness of the mental health professional may become apparent and may affect home life. Your professional colleagues are an invaluable source of data feedback.

Some other general guidelines might be:

(1) Make input for change in the combat posture of MHCS and what it might do during wartime conditions. Field exercises of different types of units within the Division provide opportunities to test new concepts, especially as they may relate to readiness, organizational role and function of MHCS in such an environment.

(2) Establish a relationship with those who logistically support you, e.g., the S-4, DMSO.

(3) Create a bond with the Headquarters and Support Company Commander as he is one of the "bosses" of a majority of the MHCS staff.

(4) Be sensitive to, and prepared to respond to, the demands placed on the GSs from outside of MHCS but not to the detriment of patient care.

Probably, the merger of all these prescriptions and guidelines is based on higher-order combinations reflected in the principles of tolerance for uncertainty paired with the inevitable conclusion that what is certain in an organization such as this is change. If the mental health professional discovers himself/herself being less agitated, upset, and intimidated by formerly perceived potential "losses" of professional integrity, then this might be an indication that the resolution is moving forward at a steady pace. To be able to say "It's only a dream" and "I'm not going to be hurt professionally in this organization" and then to continue to experience the "nightmare" generates a sense of comfort because now one begins to detect a control of the situation.

"...the morning cometh" ...MAYBE.
REFERENCE

The role of the division psychologist has been discussed as that of a consultant. Historically, most psychologists enter a division immediately after their internship, at a time when their self-concept as soldiers, officers, and psychologists is still forming. Due to the low retention rate for AMEDD psychologists, many interns are unable to discuss division psychology with an experienced colleague. Survey results from experienced psychologists were solicited in an attempt to provide pragmatic advice and guidance to anyone entering a division job. The contents of this report highlight some of the problems and potential benefits in a tour as a division psychologist.

PROCEDURES

During the 1980 psychology symposium at Walter Reed the need for guidelines for division psychologists was voiced. Many interns have reported feeling unprepared for life in a division. This was seen as a potentially negative factor in the duty performance and retention rate for division psychologists. This survey was designed as a vehicle for experienced division psychologists to communicate their ideas to interns. No claims for survey instrument validity, sampling accuracy, or theoretical consistency are implied. This paper is a sample reporting of experience.

A total of 83 open-ended questionnaires were mailed out. An attempt to locate every senior psychologist was made. Eighteen responses from current or former division psychologists were received. The exact number of former division psychologists on active duty is not known. The authors estimate that 40 or 50% of the target population responded. Five psychologists with no division experience responded to the survey. Their responses were not numerically tabulated although some of their comments were included in the narrative. The 18 responses were analyzed and tabulated with as little editing as possible.

1. Which division did you serve in? When?

Throughout this report frequencies are reported in parentheses. The following divisions were represented:

**CONUS**

- 82nd Airborne (2)
- 7th Inf
- 1st Inf
- 4th Inf (2)
- 101st Air Assault (2)
- 9th Inf
- 1st Cav (2)

**EUROPE**

- 3rd Inf (2)
- 8th Inf
- 1st Armor (2)
- 3rd Armor

**HAWAII**

- 25th Inf

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Comment: Not every CONUS division is represented, nor is the 2nd Inf (Korea). Six of the divisions were reported by two different officers. One psychologist reported his experiences in two separate divisions.

The responses cover assignments from 1973 to October 1982. Many of the officers were in their division jobs at the time they responded.

The specific division to which you are assigned does make a difference in your job. In Europe the respondents frequently reported being attached to a medical clinic or military community. They often report little contact with the medical battalion. In Europe professional isolation is a common problem. Most of the psychologists reported little involvement in the daily training activities of the division.

CONUS divisions offer much more varied experiences. Each division has its own expectations and demands for the mental health team. For instance, the 7th Inf has traditionally exempted the psychologist from most of the battalion training activities. In other divisions much more active participation in division training is required.

The precise duties of a CONUS division psychologist can only be defined in relation to the specific division at that specific time. The duties may change with mission demands, commanders' preferences, and local policies.

Suggestion: Talk to as many people as you can find who have been assigned to your division. Make a special effort to locate former division psychologists, social workers, psychiatrists, or behavioral science specialists.

2. What were your primary duties as the division psychologist?

Therapy/treatment (14)
Command consultation (14)
Diagnosis/testing/assessment (13)
Train/supervise 91Gs (10)
Clinic administration (5)
Combat psychiatric training (5)
Field training (4)
Process administrative separations (3)
Drug/alcohol treatment (1)
Child abuse program (2)
In-patient treatment (1)
Community life council (1)
Spouse abuse program (1)

Comment: Obviously, everyone reported more than one duty. The usual clinical trio of treatment, testing, and consultation was dominant. Other significant duties seem to be related to the peculiar circumstances of a given location. Complex treatment techniques such as biofeedback and hypnotherapy may be difficult to use due to mission demands and lack of resources. The amount of training and supervision required by 91Gs is a surprise to many psychologists.
3. What non-clinical activities does the medical battalion require you and your officer colleagues to engage in?

None (6)
Staff duty officer (5)
Officer calls (5)
Alerts (4)
Pay day formations (3)
Battalion staff meetings (2)
Narcotics inventory (2)
Airborne operations (2)
Reports of survey (2)
ARTEP evaluator (2)
Unit historian (1)
Precious metal inventory (1)
Drug/alcohol officer (1)
Line of duty investigator (1)
Social activity coordinator (1)
Motor pool supervision (1)

Comment: This list is not exhaustive. The frequency with which each duty is performed varies. There is more to do in a division than just be a clinician.

4. What non-clinical activities does the MED BN require your enlisted personnel to engage in?

Daily details (7)
Inspections (6)
CO (6)
SQT (4)
NCO development courses (4)
Formations (4)
Social events (3)
Alerts (2)
Parades (2)
Airborne operations (2)
Dining hall headcount (2)
Monthly training day (2)
IG assistance (1)
TOE equipment maintenance (1)

Comment: Several respondents noted that these duties tend to occur in an unscheduled, crisis management format. This makes normal clinical scheduling quite difficult. It would probably be wise to have a backup system for the 91Gs who are likely to be called to perform these duties on little or no advance notice. It is obvious that a division assignment is challenging for the 91G and demands more than just clinical duties.
5. What sort of social functions are mandatory for you to attend in the division or MED BN?

- Battalion parties (8)
- Formals (6)
- Socials not mandatory but strongly encouraged (6)
- Command ceremonies (1)

Comment: The division psychologist can usually assume that social activities are required or encouraged. Some respondents indicated that social functions were a prime way to develop consultation relationships and be seen as a part of the unit.

6. What training is required of you and your officer colleagues on a regular basis?

- PT (8)
- Field exercises (7)
- Weapons (6)
- NBC (5)
- Airborne (1)
- Human relations (1)

Comment: Many psychologists reported that they are required to participate in regular battalion PT. Others voluntarily participate to increase their unit identity. Regular training activities increase visibility and credibility. Required PT is several times per week. Other types of training (NBC, weapons, field) may occur annually, semi-annually, quarterly, or on an irregular basis. This is one area where local policy is the key.

7. What training is required of your technicians on a regular basis?

- PT (9)
- Field exercises (9)
- Clinic in-service (8)
- NBC (6)
- SQT (6)
- Weapons (6)
- Motor pool (2)
- ARTEP (1)
- Driving (1)

8. What other personnel in the MED BN or the division have proven to be useful affiliations and points of contact?

- Division (8)
- BN PAC/S-1 (5)
- MED BN XO (4)
- MED BN s-2 (4)
- MED BN s-3 (4)
- Social worker (4)
- MED BN s-4 (4)
- Chaplains (3)
- MED BN CDR (3)
- MED BN CO CDRs (3)
- HQ CO supply Sqt (2)
- DISCOM CDR (2)
- IG (2)

- JAG (2)
- Psychiatrist (1)
- Div chief of staff (1)
- Dentists (1)
- ACS (1)
- Ed. center (1)
- ADAPCP staff (1)
- Community CDR (1)
- DIV G-3 (1)
- DIV G-1 (1)
- Div DESC (1)
- DMSO (1)
Comment: A lot of support is available from a wide range of sources. Helpful relationships can be cultivated in high and low places.

9. What duties do you feel the 91G ideally ought to perform within the clinic?

Intake interviews (11)
Limited testing (11)
Counseling (8)
Unit Consultation (6)
Administrative tasks (4)
Education (1)
Based solely on individual ability (1)
All tasks specifically taught at the academy (1)

Comment: This question evoked many comments. Some said that the 91G is not effective as a primary case manager and counselor. They believe that the 91G needs a limited role and abundant supervision. Others believe that the 91G must carry the full range of clinical responsibility. The need for 91Gs to operate without supervision in many locations in Europe was seen as a significant problem. Perhaps the psychologist going to Europe should plan to help those "autonomous" 91Gs develop support networks.

10. What is your rating scheme? What would it be during mobilization?

PEACETIME SCHEMES
Div psychiatrist--MED BN CDR (6)
Div psychiatrist--Div surgeon (2)
I don't know (2)
C, Psychology SVC--C, Psychiatry (1)
MED BN CDR--DISCOM CDR (1)
MED BN XO--MED BN CDR (1)
DIV Psychiatrist--MED BN CDR--Community CDR (1)
MED BN CDR--C, CMHA (1)
DIV Psychiatrist--Div Surgeon--MED BN CDR (1)
MED BN CDR--Deputy Community CDR--Div Surgeon (1)
DIV Psychiatrist--MED BN CDR--MEDDAC CDR (1)

MOBILIZATION
Div Psychiatrist--MED BN CDR (7)
Div Psychiatrist--Div surgeon (1)
Not sure (6)
MED BN XO--MED BN CDR (1)
MED BN XO--Div surgeon--Discom CDR (1)
DIV Psychiatrist--MED BN CDR--Div surgeon (1)

Comment: During mobilization the MED BN CDR may be the division surgeon. The OER is too important to take for granted. A newly assigned officer should make sure who his rating officers are and consult them about his job requirements. There is no standard rating scheme. Establishing and maintaining a favorable rating scheme may involve extensive negotiation. Implementation of Division 86 may change these schemes dramatically.
11. What problems have you encountered in the role of the division psychologist?

Lack of control of 91G's time and duties (8)
No guidelines about my role (7)
Too much work to do (4)
Limited funds/support (3)
Unscheduled duties (2)
Professional isolation (2)
Lack of clear field mission (1)
Conflicts with psychiatrist or social worker (1)
Learning Army language and regulations (1)
Establishing my rating scheme (1)
Conflicts between MED BN and Div surgeon about my role (1)
Being assigned to do MEDDAC functions (1)

Comments: These problems were described in the following ways:

- Learning the meanings of the various acronyms and accepting my role as a soldier first.
- Inherent MED BN versus CMHA versus division surgeon disagreements about my role.
- MED BN CDR places a low priority on mental health and patient care; his priorities are maintenance of unit equipment and training.
- Long hours, division psychologist is more of a lifestyle than a job.
- Not enough professional staff to complete the mission of caring for the active duty patients resulting in overdependence of paraprofessionals.
- The lack of set guidelines has been both an advantage and a disadvantage.
- Competition for the use of 91Gs.
- Lack of coordination between the hospital and the division about my mission.

12. What important information or advice would you give to those psychologists going into a division?

Seek high visibility with commanders (9)
Cooperate with commanders (7)
Enhance your military skills (6)
Don't condescend (5)
Learn how to be a consultant (3)
Look sharp and fit (3)
Train and educate your 91Gs (2)
Cooperate with the psychiatrist and social worker (2)
Learn the regulations AR 40-501, AR 635-200 etc. (2)
Respect NCOs (2)
Learn clinic administration (2)
Resign (1)
Specific comments advising high visibility include the following:

- Attempt to involve yourself in as much of the battalion training activities as possible but be careful of the "becoming-like-them-syndrome" for which they will surely put you in your place. It is a fine line distinction.
- To be successful in a division, you need to be identified as an active, day-to-day participant in the division's activities.
- Sell yourself or you will be ignored.
- Especially if your unit doesn't require much of you, try to keep a high profile with the CO and the company CDRs to ensure that you are perceived as a "member of the team."
- Be an active member of the community.
- Get to know the commanders on your installation.
- Don't hide in the dispensary or CMHA. Be visible.
- Invite yourself to change-of-command ceremonies and meet the commanders.

Specific comments about enhancing military skills include the following:

- Obtain your Expert Field Medical Badge.
- Go to the long MSC basic course. It may seem unrelated but it will save your life out in the trenches.
- Be prepared to be a soldier first and a psychologist second.
- Learn all you can about the division and the Army. A brief history of every division can be found in your post library. Johnson, D.M. The Total Army. Army, October 1982, 236-244.
- Attend Air Assault School, Jump School, or other military training.

Other notable comments include the following:

- Be single, or have an understanding wife.
- Be flexible and willing to expand to non-traditional roles.
- Dispense with the guildish issues between psychiatry, social work, and psychology. It is impossible to work together otherwise.
- Respect all military officers as professionals and part of a team which he too belongs; it must never be a case of me versus them.
- Maintain excellent physical condition.
- Learn clinical administration skills, you will need them.
- To a great extent you will be functioning as an independent practitioner.
- Be prepared to perform many non-clinical duties.
- Do not assume that paraprofessionals know how to counsel, supervise and train them carefully.
- Accept every case. If you live through the tour you will be able to handle any psychological problem.
- If you don't have a healthy respect for commanders and NCOs, learn to fake it.
- A sharp appearance is more impressive to the infantry than the best Ph.D.
- Timely responses to consults are important and greatly appreciated.
- Ask for assistance if you are confused.
- There are no regulations to define your role or to insure that you and the 91Gs will be properly utilized.
CONCLUSION

The challenge for division psychologists can be described as translating the principles of immediacy, proximity, and expectancy into a daily routine. If a psychologist can learn to apply these principles in a garrison setting then he will be well prepared to conserve the fighting strength in combat. The way in which these principles are implemented does not come from a set guideline, it is developed from the personal competence of each psychologist who faces the challenge of a division assignment.
BECOMING A DIVISION PSYCHOLOGIST

Carl E. Settles, Ph.D.
CPT, MSC
Division Psychologist
9th Infantry Division
Fort Lewis, Washington

1. Introduction
   A. Four basic skills areas
      1. Know background information
      2. Develop effective assessment techniques
      3. Effective utilization of background information assessment skills
      4. Evaluate effectiveness
   B. Different in garrison vs combat situations
   C. Europe vs CONUS

II. Know background information
   A. Understand and internalize U.S. Army's mission in particular AMEDD personnel mission which is a supportive one designed solely to "preserve the fighting strength."

   1. Think of self as an industrial psychologist who works for the company on individual and group problems associated with the company's mission.
      a. As a company management consultant or division psychologist, you will be called upon to accomplish at least four tasks.
         (1) Disposing of problem persons: purging the system of deadwood or unproductive soldiers who interfere with the company's mission.
         (2) Treating of persons with problems: productive soldiers who with some assistance can remain contributors to the company's mission.
         (3) Helping management or Command in appropriate placement of personnel.
         (4) Systems interventions which involve programmatic design and preventive programs which circumvent anticipated problems for active duty troops or company employees.
2. By far the greatest portion of your time will be spent providing secondary and tertiary prevention. These tasks involve making dispositions on problem troops and troops with problems.

3. Although you will be charged with the mission of primary prevention, there will be very few opportunities for this kind of work unless you:

   a. Establish relationships and credibility with the chain of command-- more on that later.

   b. Can predict with some degree of accuracy interventions and/or programs that will work.

   c. Have a stabilized tour of about 3-4 years and have the General's or leadership's ear. You will find it difficult to do this unless you understand the Commander's mission, pressures and aspirations.

4. It is paramount that you know the military system and/or have access to senior psychologists who have served in similar situations.

5. Broad clinical skills are important: Not only knowledge of psychotherapy and treatment, but also teaching skills are important to influence the training programs for 91Gs, NCOs, and officers.

   B. Requires a team approach involving interaction between you, the division social worker, and psychiatrist as well as 91G Behavioral Science Specialists.

   1. You will need to clarify roles and/or areas of responsibility.

   2. Priorities for the unit must be articulated or at least understood. Generally these priorities should be based upon the:

      a. Unit mission

      b. Unit leadership

      c. Individual talents of team members

   3. Priorities should be continuously monitored to allow for changes.

      a. Change is often stressful and threatening-- can minimize effectiveness with team members if not monitored.

      b. Avoid making commitments of unit resources without discussing changes with unit staff. Establish management by consensus.
C. Know your resources and utilize them

1. Maintain contact with colleagues:
   a. Psychology consultant
   b. Regional consultant
   c. Peers

2. Don't hesitate to ask for advice and utilize their vast experiences.

3. Establish working relationships with G-1, G-2, and G-3 as well as Commanders-- one technique is to ask to visit the unit after making a successful consultation on an individual troop to the commander. Another technique is to volunteer to go with the unit to the field. However, be sure to have in mind what you would like to accomplish, otherwise the visit won't be as fruitful. Finally, try to make as many:
   a. Change of command ceremonies
   b. Dining-ins
   c. Hail and farewells as possible.

4. Remember, the more you're perceived as part of the team, the better chance you have of gaining credibility and acceptance.

5. Don't try to operate as a clinician in private practice coming to show the "dumb troopers" how to behave. This only alienates or turns off most of the chain of command.

III. Develop effective assessment techniques. Carkhuff talks about the following skills:

   A. Attending
   B. Observing
   C. Listening
   D. Responding

E. Developing action programs. Although these skills may appear fairly obvious, it has been my experience that many clinicians don't apply them before they recommend patient solutions. These skills are designed to help you get very familiar with and understand what your client's needs are; clarify alternate solutions and facilitate problem-solving by that commander and/or individual soldier.
IV. Effective utilization of background information - Assessment skills.

A. Planning - developing - implementing activities: Once one understands the problem situation, one must be capable of planning, developing, and implementing activities designed to solve practical problems.

1. Unit training programs - Lectures and demonstrations.
2. Training of 91Gs.
3. Assessment of battery for new elite unit.
4. Command consultation on individual and/or unit project etc.
5. Writing SOPs to insure quality.
6. Convincing unit leadership to purchase testing equipment or requesting further personnel slots.

B. Set practical and realistic goals. Know your limitations. Many mental health officer have lost their credibility by promising more than they can deliver. Conservative estimates are always more appreciated in the long run, than over ambitious disappointments.

C. When called upon, respond to reasonable request in a timely manner. Good information too late is often of little consequence.

D. Don't expect change overnight. Be patient and consistent. Do a creditable job on all tasks requested by units and always follow up and ask for feedback on your consultations.

E. Remember to support command and he or she has the right and the responsibility to accept or reject our advice. Therefore, the final disposition on most troops rests with the commander.

V. Evaluate effectiveness

A. Effect on units

1. Set up baseline data on units you are responsible for. This baseline data should be based on the units mission and priorities i.e., AWOLs, troops requesting consultation from service, number of troops at risk, etc.
2. Evaluate periodically effects.
3. Feedback to command and unit. Rethink actions.

B. Effect on individual troops.

1. Set up baseline data based upon mission, i.e., number returned to duty; incidence of suicide, etc.
2. Evaluate periodically.
EXPERIENCED DIVISION PSYCHOLOGISTS ON ACTIVE DUTY AS OF OCT 82

LTC William Wilson ........................................ 25th ID
LTC Ernest Lenz ........................................ 101st Airmobile
MAJ Michael Adams .......................................... 25th ID
MAJ David Bevett .......................................... 4th ID
MAJ Gregory Laskow ........................................ 82nd Airborne
MAJ Richard Neary .......................................... 7th ID
MAJ Frank Smith ........................................ 1st CAV
MAJ Frank Brooks .......................................... 1st CAV
MAJ Frederico Tomayo ......................................
CPT Kenneth Rollins ........................................ 25th ID
CPT Richard Luscomb ....................................... 3rd AD
CPT Fred Garland ........................................ 3rd ID
CPT Salvadore Zingale ..................................... 1st AD
CPT Maurice Ekstrom ...................................... 8th ID, 1st ID
CPT Thatcher Beaty ......................................... 2nd AD
CPT Carl Settles ........................................ 9th ID
CPT Larry Lewis ........................................ 82nd Airborne
CPT John Miller ........................................ 101st Airmobile
CPT James Goodwin ......................................... 24th ID
CPT William Armistead .................................... 2nd AD
CPT Jerry Melcher .......................................... 1st CAV
CPT Michael Hightower .................................... 5th ID
CPT James Ball ........................................ 1st ID
CPT John Powell ........................................ 4th ID
CPT Vladimir Nacev ........................................ 1st AD
CPT Lizzie Donald .......................................... 4th ID
CPT Mary Cragan ........................................ 7th ID
CPT Thomas Marra .......................................... 7th ID
CPT Lawrence Klusman .................................... 3rd AD

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COMBAT PSYCHIATRY AND MENTAL HEALTH SERVICES
MISSION AREA ANALYSIS

Report of an Ad Hoc Inter-disciplinary Working Group
Prepared by the Directorate of Combat Developments And Health Care Studies

COL James W. Stokes, M.C.
Dr. A. David Mangelsdorff
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COMBAT PSYCHIATRY AND MENTAL HEALTH SERVICES
MISSION AREA ANALYSIS

Introduction: Combat Psychiatry and Mental Health Services as a Major Medical Task.

1. This preliminary report is the product of an ad hoc working group within the context of the Combat Service Support Mission Area Analysis (CSSMAA) workshop conducted by the Directorate of Combat Developments and Health Care Studies, AHS, 1-5 March 1982. The SGO consultants for Psychiatry & Neurology, Psychology, and Social Work were unable to attend that workshop and therefore suggested that an interdisciplinary group be formed of mental health officers who were already at Fort Sam Houston. The purpose of this group, defined by the CSSMAA, was to evaluate deficiencies in the area of combat psychiatry and combat mental health services for the European Integrated Battle Scenario, 1990 timeframe.

A. The group was coordinated by COL Stokes, MC, and although it was not possible to assemble everyone at one time, input was obtained from the following:

   (2) A. David Mangelsdorff, Ph.D., (Health Care Studies Div, DCDHCS, AHS).
   (3) COL William Schultheis, MC, (Psychiatry Svc, BAMC).
   (4) COL Otto Schrieber, MC, (Cmd Psychiatrist, HQ, HSC).
   (5) COL David Garber, MSC, (Cmd Social Worker, HQ, HSC).
   (6) COL John Kisel, MSC, (Chief, Beh Sci Div).
   (7) LTC Jimmy Allen, NC, (P/MH Nursing Consultant to OTSG & HSC).
   (8) LTC Brian Chermol, MSC, (Chief, 91G Br, Beh Sci Div).

B. Review and comments have been provided by, and suggestions have been incorporated from:

   (11) MAJ Paul Furukawa, MSC, (Hlth Care Studies Div, DCDHCS).
   (12) MAJ Frank Brooks, MSC, (DOT, AHS).
   (13) COL Frank Jones, MC, (Combat Stress Study Group, WRAIR).
   (14) LTC William Cline, MC, (NP Consultant, USAEUR).
The analysis of medical tasks being used in the Mission Area Analysis (MAA) by Combat Developments at AHS was derived from FM 8-10, "Health Services in a Theater of Operations." FM 8-10 does not distinguish Combat Psychiatry and/or the Mental Health Services, and by omission leaves them included largely under the major task "Medical Treatment." The other eleven identified tasks are:

- Patient Evacuation/Regulation
- Preventive Medicine Services
- Dental Services
- Optometric/Optical Services
- Veterinary Services
- Clinical Laboratory Services
- Blood Bank Services
- Hospital Food Services
- Medical Maintenance and Logistics (Class VIII)
- Medical Intelligence
- Medical Command, Control, and Communications

Many factors support the recognition of Combat Psychiatry and Mental Health Services as a major medical task of equal significance to the others listed.

- The unique importance of Combat Psychiatry to combat effectiveness was recognized in WWI by the assignment of a psychiatrist to every division; this was the first recognition by the US Army of the need for any medical specialty in the field. The lesson was forgotten and relearned, painfully but conclusively, in WWII. The Division Psychiatrist is especially concerned with command consultation for preventive psychiatry, with statutory evaluations and clearances, and with "triage" of active duty soldiers, and is only marginally concerned with traditional "mental patient care" and "medical treatment."

- The modern Division Mental Health Section (DMHS) exists as a distinct AMEDD element within the TOE. The Social Work Officer (68R) and Clinical Psychologist (68S) are two distinct professional career disciplines within the Medical Service Corps, each with unique responsibilities in the combat division. The Behavioral Science Specialist (91G) is also a member of this team.

- The DMHS has its own chapter in the ARTEP which defines its primary responsibilities in combat as preventive consultation, triage, and the treatment of battle fatigue cases. These cases are explicitly not defined as "patients," and their successful treatment must be conducted in a "non-patient" environment. The small number of "true neuropsychiatric patients" are only to be identified and evacuated as soon as possible. To conduct the Mission Area Analysis of the management and return to duty of the "non-patient" battle fatigue cases within the Medical Treatment Mission area can only be a source of confusion.

- The unique role and importance of Combat Mental Health is further established by the allocation of two 91G Behavioral Science Specialists to each Division '86 Brigade Forward Medical Company for triage of battle fatigue cases. Even at the battalion level, the Battalion Surgeon (or the Physician Assistant) has a special responsibility to prepare and monitor a Battalion Preventive Psychiatry Plan (SOP) which is to be filed with the DMHS.
e. In peacetime, the DMHS operates a Mental Health Activity (MHA) whose functions should not be limited to "patient care." The MSC psychologist and MSC social worker, as well as the MC psychiatrist, should be deeply involved in command consultation at all levels within the division, and with field and deployment exercises. They should monitor, facilitate and (within limits) provide direct care to Division families in family advocacy, child abuse prevention, and Alcohol and Drug Prevention and Control Programs. However, the common tendency of Division MHA's to be absorbed into the MEDDAC and become preoccupied exclusively with patient or client care has been identified as a deficiency by the Ad Hoc Working Group.

f. Recognition of Combat Psychiatry and Mental Health Services as a major medical task does not imply that it should function separately from the medical treatment facilities in combat. On the contrary, this report has identified deficiencies in the current system (as institutionalized in the ARTEP) which indicate the need for closer cooperation, cross training and integration.

3. The first recommendation of the Ad Hoc Working Group is that Combat Psychiatry and Mental Health Services be recognized in doctrine as a distinct Major Medical Department Task for purposes of the Mission Area Analysis.
COMBAT PSYCHIATRY AND MENTAL HEALTH SERVICES
MISSION AREA ANALYSIS

1. Major Tasks: Prevention, Diagnostic and Treatment of Battle Stress Reactions and Neuropsychiatric Disorders.

A. Identify tasks for mission analysis.

(1) Analysis of Threat:

(a) Threat conventional doctrine of massed attack by successive echelons at multiple points explicitly aims to maximize "battle shock, uncertainty and fatigue in the defenders to render them psychologically incapable of resistance. Tactical air, rocket, airborne and airmobile attacks disrupt rear areas while major ground thrusts seek to break through, bypass and isolate the exhausted combat troops and spread havoc and panic among the vulnerable trains. Electronic warfare is used to maximize confusion and demoralization. As intensity escalates, persistent chemical agents are used selectively on critical facilities and routes in the rear and to suppress units being bypassed. Nonpersistent chemicals and nuclear strikes are directed against suitable targets. Biological (infectious) agents and microwave weapons (beyond the conventional laser rangefinders) which produce mental disturbance may be suspected but are not documented in this scenario.

(b) Definitions and Projected Incidences of Combat Psychiatry Caseloads.

1. "Battle Stress Reactions" (BSR) is the generic term used for the full range of psychological and psychosomatic reactions caused by the emotional and physical demands of combat (excluding only those due to specific brain-or-body-disrupting causes). The category includes many mental and physical symptoms which are not incapacitating and are truly "normal" in combat; if seen in a medical facility shortly before, during or soon after battle, such cases should be treated and released. Certain of these non-disabling symptoms should be used by Command as indicators of a need for brief respite to restore full effectiveness. Finally, BSRs may be so severe that the soldier cannot function and must be considered a "battle stress casualty" in one of the following categories.

2. "Battle Fatigue" (BF) is used here as the single term to cover a wide variety of BSR which render the soldier temporarily but grossly unable to function. It includes both acute "disaster shock reactions" (which are sometimes distinguished as "transient battle reactions") and "exhaustion" due to prolonged stress.

a. In WWII, approximately 80% of BF cases occurred within the individual soldier's first week of combat. Throughout WWII, the average rate of admission of BF cases into the medical system (for more than a 24-hour stay) was one BF for every three WIA. Experienced units with effective prevention programs had much lower baseline rates. Ratios of 1 BF: 2 WIA were encountered in severe fighting (e.g., the 6th Marine Division, Okinawa, 1945). High technology defensive conventional scenarios (1973 ME War, Golan Heights initial phase) may produce ratios of 1 BF: 1 WIA under unfavorable conditions.
(strategic and tactical surprise; sustained defense "in place"). Combat Service
Support troops tend to have higher ratios of BF to WIA than combat troops. The
threat of NBC may increase BF rates. First use of chemical and nuclear weapons
(or any "surprise" weapon or tactics) will temporarily increase BF.

b. BF and other BSR casualties were not assessed during war gaming of
the SCORES scenario, and post hoc estimates are necessarily imprecise. (For a
brief critique of SCORES methodology, see note to Table I). Table I** gives
daily incidences of BF for USAREUR’s two armored divisions and four mechanized
infantry divisions over the first twenty days of war. These estimates were
calculated on the basis of the conservative ratio of 1 BF per 3 conventional
WIA; chemical or nuclear casualties and their psychological repercussions are
not included in this statistic. In view of threat doctrine (para (1)(a) above)
and risk factors in the scenario, incidences two or three times greater (ratios
of 1:1.5 or 1:1) are possible unless active preventive measures (to be addressed
as current deficiencies) are pursued.

b. Most BF cases respond well to rest, replenishment, reassurance that
they will recover, strong expectation for return to duty, and interim light
duties in a relatively safe military (nonpatient) environment close to the
battle. 70 percent or greater can return to combat within 24-72 hours. A few
will have more bizarre or disruptive symptoms requiring longer treatment, but
most of these can be returned to combat or to limited duty in 1-2 weeks if kept
close to the front. Inappropriate evacuation of BF cases often results in
permanent disability.

3. Integrated Battle Fatigue (IBF). The estimate given for BF does not
include cases with psychogenic physical symptoms who believe themselves victims
of NBC weapons or lasers and suffer "hysterical" conversion reactions. These
are classified separately here as IBF. Treatment and prognosis is believed
similar to BF, although experience is limited. IBF includes:

a. Chemical IBF ("IBF(c)"): In WWI, "Gas Hysteria" was estimated to
have exceeded true gas exposure cases by 2:1 in relatively inexperienced troops.
The modern range of more insidious chemical and biological agents with diverse,
nonspecific early warning symptoms may temporarily increase this ratio until
troops become accustomed to the threat, and indeed may cause IBF even if active
agents are not used. Table I shows estimates for the six USAREUR divisions,
calculated on a 1:1 ratio of IBF(c) to chemical WIA. This assumes that forward
triage is able to reassure and release to duty an equal or larger number of mild
"hysterical" cases in the midst of such mass casualty/MOPP situations. Table I
does not include any estimates of IBF(c) occurring far from actual CW attacks or
later in contaminated areas. Note: Many cases of "Chemical Hysteria" may take
antidotes, and thus risk being converted into one subcategory of the Acute
Organic Mental Disorders discussed below.

b. IBF (Nuclear) or "Nuclear Hysteria": No data are available to
predict personnel with persistent (hysterical) flash blindness or with nausea,
vomiting, other symptoms and the incorrect belief that they have been
irradiated, perhaps terminally. Table I includes estimates for "IBF(n)"
calculated at 1 per 2 actual nuclear casualties.

** Classified FCJO
c. Hysterical blindness in one or both eyes or other visual "conversion reaction" symptoms attributed to retinal damage from enemy (or friendly) laser rangefinder/designators. No statistics on true laser eye injuries or on possible ratios of hysterical to actual injury are available. However, many features in the situation suggest "laser hysteria" could reach epidemic proportions unless the troops are psychologically prepared.

4. Acute Organic Mental Disorders (AOMD): Several features of the modern integrated battlefield will increase the number of troops showing mental symptoms due to temporary (or permanent) brain disruption. Many acute cases may be returned to duty within days, depending on type and severity. This category includes:

   a. Post-concussion states due to head injury or blast overpressures.

   b. Toxic delirium due to inappropriate atropine (Army) or TAB (USAF/USN/USMC) administration or exposure to incapacitant agents (BZ). Duration of incapacity is 24-72 hours; recovery should be complete.

   c. Sub-lethal nerve gas poisoning (like insecticide poisoning) can produce toxic delirium and is likely to leave chronic irritability, depression and insomnia with bad dreams (symptoms similar to BF) following "successful" treatment. Prognosis is uncertain.

   d. Substance abuse: Drug or alcohol intoxication or withdrawal states. Prognosis for RTD depends on type, individual, and treatment available.

   e. Environmental illness: Heat stroke may be common due to working in MOPP, and/or after taking atropine. This will be difficult to diagnose in MOPP. Hypothermia is also always possible in cold-wet weather. These conditions will be a diagnostic problem only for the first echelons of care since, if not immediately treated, they are likely to die during evacuation. Possibility of RTD depends on type and severity of illness.

   f. Other febrile deliria due to infectious (biological warfare?) diseases. Prognosis depends on type.

5. Psychologically Disturbed Wounded, Ill and Injured (PDWI) are cases treated in the medical facilities who have significant psychological reactions which interfere with their return to duty or further treatment. The types and numbers of such cases have not been projected for the scenario, either within a division or in the Corps medical support facilities. Mental health assets will be needed to evaluate such cases and may provide the best available treatment/transition setting for returning some to duty.

   a. Some will be malingerers or have self-inflicted or negligent minor wounds, injuries or environmental/hygienic illness.

   b. Some will have disorders of psychosomatic type which release them from hazardous duties (so-called "evacuation syndromes").

   c. Many with legitimate combat wounds or Disease and Nonbattle Injuries (DNBI) may suffer excessive pain or disability, or will develop battle-fatigue-like anxiety or depression when faced with return to duty.
d. Nuclear and chemical casualties may pose special problems of psychological management. Those with sublethal cumulative exposure may fear return to duty on the correct assumption that their risk of fatal complication from further wounds in increased. Those with presumably lethal radiation exposure but no other disabling wounds may need special support, especially if they are to return to duty during the latency period before disabling terminal symptoms recur. Similar concerns about RTD may trouble those who have suffered "nondisabling" monocular or partial loss or vision due to laser damage to the retina (which in many cases may be painless, nonprogressive and, with current means, untreatable).

6. Neuropsychiatric (NP) disorders such as the schizophrenias and severe character disorders, which are present at a low baseline rate in the military population. Most cases in this category cannot be returned to duty in the combat theater, but differential diagnosis from florid types of BF or AOMD may be difficult.

(c) Conclusions:

1. The magnitude and potential impact of BF and IBF were not modeled in the SCORES European scenario, but can be estimated roughly from the scenario and WIA. Unless rigorous preventive measures are applied in peace-time and during the initial shock phase of combat, the total of BF and IBF cases seen in the medical treatment and evacuation system will exceed all other categories of WIA. Medical personnel may themselves be incapacitated by BF and IBF. If these cases are not treated correctly (but are instead shot "to set an example," abandoned or evacuated to the rear) they will be permanently lost to the war; furthermore, the rate (ratio) and/or severity of BF and IBF will increase. On the other hand, if secondary prevention and treatment principles are correctly applied, most of these cases will recover their full efficiency and be the best source of "replacements" to the forward units in the initial days. Their return to duty, while not solely the responsibility of the medical support system, may be the most significant and cost effective contribution that system makes.

2. AOMD and PDWI will constitute a larger number and more difficult differential diagnostic problem than in recent U.S. wars. Vigorous psychiatric/mental health intervention will be required to return many to duty.

(2) Analyses of Operational Concepts:

(a) Primary responsibility for unit mental health in and out of combat is a command function. To the extent that cases of BF and IBF do not have medical/surgical conditions requiring treatment, they should not be considered "patients." Provision for the resting, nutrition, hygiene and return to duty of "emotionally-fatigued" soldiers as well as "physically-fatigued" soldiers must be provided directly by the S4/G4 elements of the unit unless the case's symptoms make this impossible.

(b) The operational concept for AMEDD management for BF, IBF, AOMD, PDWI, and NP, as for all conditions, consists of a series of echelons from the individual soldier (self aid/buddy aid) rearward. Only cases which cannot be managed and returned to duty within existing tactical and resource constraints should be evacuated to the next echelon (or directly to the echelon where they can receive definitive or life saving treatment).
1. In view of the large number of cases projected, AMEDD support for BF and IBF must be limited to: a) command consultation services for prevention; b) differential diagnosis; c) the treatment by the Division Mental Health Section and Corps Mental Health Facilities (collocated with medical treatment facilities) of those cases who require special monitoring or assistance to get rest and symptom relief, and d) the control and evacuation of unmanageable and unsalvageable cases from the combat zone.

2. Differential diagnosis of AOMD and of actual CBR/laser injury is necessary as early as possible to permit the most effective treatment of serious cases in medical/surgical facilities. Ruling out serious organic factors is equally important for treatment of BF, IBF, and mild (self-limiting) AOMD and PDWI cases in "nonmedical" settings by the line units and by the Division Mental Health Section and Corps assets. Much of this triage and differential diagnosis must be done by paramedical (91B and PA) and nonpsychiatric medical personnel at the various echelons. Ultimate decisions about problem cases will require the combined medical and psychological expertise of the psychiatrist (60W), aided by the psychologist (685).

3. All Medical/Mental Health elements must conform to the tactical posture and mobility requirements appropriate to the units they accompany and to the level of threat. All echelons must be ready to defend against chemical and nuclear attack and to continue to function adequately in contaminated areas for periods of some hours.

(c) Analysis of Tasks and Missions at each echelon:

1. The individual soldier, his buddies, and the immediate, small-unit NCOs and officers exercise primary prevention (e.g., sleep discipline, task distribution, effective leadership), early recognition of BSR, and provide support within the unit.

2. The medical aidmen (91B and perhaps 91A) operates with the platoon, company HQ section or at a casualty collection point. Resources of the aidmen depend on the type of unit and the tactical situation, but in general they move frequently and have severe limitations on the bulk and weight they can transport. Their role in the management of BF, IBF, AOMD, PDWI and NP will be preventive counseling, early detection, and sorting of cases (in conjunction with unit command) into: those who can be rested and restored to effectiveness within the unit; those who cannot be kept with the unit but can be rested and restored in the unit's trains without medical expertise; those who may require medical and/or mental health evaluation and treatment. The latter group will be evacuated to the BAS after any necessary stabilization of acute organic threats to life or agitated states.

3. The battalion aid station (BAS) of the maneuver battalion (TOE series J) will have a medical officer, a physician assistant, 91C and 91B's, administrative personnel, and two treatment vehicles. The BAS will be highly mobile, able to move when necessary by alternate bounds, but very limited in its holding capacity. Combat Support and Combat Service Support Battalions have only one treatment vehicle and either the MC or the PA. In heavy combat or mass casualty situations, the BAS will be preoccupied with giving life-saving stabilization to WIA prior to evacuation. Its psychiatric triage would then be similar to that of the forward aidmen, except for greater expertise in the
differential diagnosis and treatment of AOMD, true CBR/laser injury, psychosomatic disorders, etc. Some BAS cases will be returned to their units after reassurance, counseling and perhaps a few hours rest and replenishment. Others with mild BF, IBF and AOMD will be sent to the battalion or brigade trains for longer rest and recuperation in nonmedical settings. The success of the BAS in preventing medical evacuation of such cases will depend on command support, the personal trust of the line personnel in the BAS staff, and especially on the SOPs for use of unit resources which must be embodied in the formal Battalion Preventive Psychiatry Plan (SOP) which the Battalion Surgeon is responsible for preparing. Only those cases who require further diagnosis, medical or psychiatric treatment or special observation and control will be sent to the Brigade Medical Company (Forward) or Division Medical Support Company, presumably by ground ambulance.

4. The Brigade Medical Company (Forward) (J-series TOE) has two Behavioral Science Technicians (91G, E6 & E5). This is an increase from the E5 & E4 provided by TOE "H", in recognition of the experience required to perform consultation and triage functions as well as brief outpatient treatment. Caseloads will include those relatively serious cases evacuated from the battalions plus the diverse clinical types generated in the brigade trains. Differential diagnosis of AOMD and actual CBR/laser injury will continue important, with the company's medical staff (internist, emergency physician, general medical officer and physician assistant) providing limited diagnostic and treatment capability. The Brigade Med Co (FWD) will be located with the Brigade Support Battalion; it lacks holding capacity unless augmented by part of the Medical Support Company from the Division rear. Therefore, rest and restoration of cases who do not require medical/mental health management will still need to be arranged within the brigade logistical trains. Under exceptional circumstances (e.g., mass casualty situations, bottlenecks in evacuation, or when the brigade finds itself in reserve for rest and reconstitution), a mental health officer from the Division Mental Health Section might come forward to assist in running a temporary treatment facility. Normally, all BF, IBF, AOMD and suspected NP cases (as well as minor WIA and DNB1) who require further evaluation or treatment will be sent by ground or air evacuation to the division's Medical Support Company rather than being evacuated to Corps medical/surgical or psychiatric facilities.

5. The Division Mental Health Section (J-series TOE) consists of the Division Psychiatrist (60W), psychologist (68S), social worker (68R) and two Beh Sci Specialists (91G, E5 & E4), and is in the Medical Support Company. In addition to their staff, command consultation, medico-legal and mental health maintenance roles, the DMHS provides support to the medical/surgical sections in differential diagnosis and in evaluating and perhaps treating the PDWI. They will also maintain a separate but adjacent rest and replenishment facility, utilizing holding platoon resources or local expedients, with the required military, nonmedical-care atmosphere, for restoration to duty within 72 hours of BF, IBF and recovering AOMD and PDWI cases. Caseloads will include the selected, relatively serious cases evacuated from the brigades plus the diverse, acute cases generated in the division rear. Those who do not need special treatment or supervision (or who have partially recovered to this stage) but who need further rest and restoration will be sent to the division or brigade logistical trains. Cases who are likely to take longer than 72 hours for recovery or who are in excess of holding capacity will be sent to the supporting Medical Clearing Company (Separate) in the Corps area. Only those cases who are
determined to have NP, AOMD or other disorders with poor prognosis for timely recovery will be sent to the Evacuation Hospital in Corps, after individual evaluation by the Division Psychiatrist.

6. The Medical Clearing Company (Separate) in the Corps area (proposed TOE 8.12SJ) is allocated one per division. These will normally be collocated with Combat Support Hospitals or other medical facilities to augment their holding capacity with its 240 cots, but may also send one or more 80 cot treatment sections forward to augment or reconstitute a division medical facility. Each TOE J treatment section has two Beh Sci Specialists (91G, E5, E4) in addition to two physicians (internist and ER physician), a PA and other paramedical personnel. The Company also has a Mental Health Section consisting of a Psychiatrist (60W, O4) and two Beh Sci Specialists (91G, E5, E4). In addition to receiving overflow BF, IBF and moderately severe AOMD and PDWI cases from the division, these will presumably evaluate, treat and return to duty or evacuate diverse acute cases generated in nearby corps units.

7. The Evacuation Hospital (TOE 8-581H) in the corps area will have a psychiatrist (60W) in the Medical Service and a psych nurse (66C), and two psychiatry specialists (91F, E4 & E3) in the intermediate/minimal care ward. This is a reduction from TOE "H", which provided two more 91F in the Internal Medicine Section. The primary function of the remaining assets is to hold and treat the disabled NP and other mental disorders who have poor prognosis for prompt recovery until they can be evacuated to the COMMZ or CONUS. Note: A proposal which is currently being staffed at DCDHCS, AHS would merge the EVAC hospital and Combat Support Hospital resources into a "Mission Adaptable Hospital" (MAH) or "Medical Support Group" configuration. In its present form, the psychiatric personnel who were in the EVAC have been deleted from the MAH.

8. The Team, OM, Psychiatric Service (TOE 8-620H) may provide psychiatric augmentation in the corps area as well as in the COMMZ. Official allocation is one per 140,000 troops without other psychiatric support. Two OM Teams are programmed to be assembled from personnel in Europe, so it would be possible to begin the European Scenario with one per corps (but none in COMMZ). There is one OM team in CONUS comprised of active duty personnel, plus six terms in the Reserves; these will not arrive in theater until many days/weeks into the mobilization under current schedules. Doctrine for the OM Team is undefined (unlike the KO Team which it replaced). Each OM Team has "100% mobility", but depends on being attached to a medical facility for logistical support. At full strength each consists of:

a A headquarters detachment of a psychiatrist (60W, O5), a psychologist (68S, O4) and a psychiatric wardmaster (91F, E7), plus four administrative personnel and a 1/4 ton truck with trailer.

b A 25 bed inpatient treatment section with a psychiatrist (60W, O3), a psychiatric nurse (66C, O3), a psychiatric wardmaster (91F, E5), two E5, two E4 and five E3 psychiatry specialists (91F), and one behavioral science specialist (91G, E5), and two 2 1/2 ton and one 1 1/2 ton trucks.

c Three Mental Hygiene Sections ("area consultation teams"), each consisting of one psychiatrist (60W, O5) two social workers (68R, O3), a behavioral science NCO (91G, E7), and one E6, two E5, one E4 and one E3.
behavioral science specialists (91G), a 1 1/4 ton truck with trailer and a 1/4 ton jeep.

9. The Combat Support Hospital (CSH, TOE 8-123H) has no intrinsic psychiatric expertise, and would be dependent on a collocated Med Clr Co (Separate) or element of an OM Team for assistance with PDWI, severe AOMD or undiagnosed IBF or BF (conversion reactions) sent to it from divisions.

10. Mobile Army Surgical Hospitals (MASH) will not normally receive non-surgical cases and have no intrinsic psychiatric expertise. They would evacuate their presumably severely injured PDWI directly to the EVAC Hospital which has a psychiatric capability.

11. Field hospitals (TOE 8-510H), which might be in the Corps area or COMMZ to provide area support, have no psychiatric service and would be dependent on a collocated element of an OM Team or Med Clr Co (Separate) to provide inpatient consultation or outpatient treatment. Because field hospitals are less of a logistics burden than CSHs, they may be used further forward and also receive combat casualties from divisions.

12. Independent dispensaries (TOE 8-620H) which provide area support within the corps area have no specialized psychiatric or mental health expertise. Team OA (1 physician, 9EM) is allocated one per 1000 troops without organic medical support and is 100% mobile in two 1 1/4 ton and a 1/4 ton truck.

13. Convalescent centers (TOE 08-590H) may arrive in the corps area or COMMZ after many weeks to return to duty patients who require convalescent care/rehabilitation. Emphasis is on physical reconditioning, but the staff includes a psychiatrist (60W, 05), psychologist (68S, 04), social worker (68R, 03), one (augmentable to three) Beh Sci Specialist (91G, E5), and three psychiatric specialists (91F, E4). No occupational therapy officers or specialists are currently assigned.

14. The 1000-bed general hospital (TOE 8-566G) in the COMMZ normally receives its patients from the combat zone. It has a neuropsychiatric service with a psychiatrist (60W, 05), neurologist (60V, 04), social worker (68S, 03), psychologist (68R), NCOIC (91G30, E6), and four 91G's (2xE5, E4, E3). There are no Psychiatric Nurses (66C) or Psychiatry Specialists (91F) assigned. Doctrine calls for augmentation with an OM Team 25-bed treatment section.

15. Station hospitals (TOE 8-566G) provide area support in the COMMZ. The 200-, 300- and 500-bed versions each have a psychiatrist (60W, 04) and a Beh Sci Specialist (91G, E5). The dispensaries in the COMMZ (Team OB for 1000-5000 troops, Team OC for 5000-10,000 troops) are fixed facilities with no mental health personnel. Med Clr Co (Sep)'s may also be set up temporarily in COMMZ areas.

b. Evaluation of Task Performance - Three major subtask areas have been distinguished, each comprised of additional subtasks.

(1) Primary and Secondary Prevention of BF, IBF and AOMD

(a) Army-wide programs to increase unit cohesion, esprit and realistic training.
(b) Education of troops, NCO's and commanders through resident, non-
resident and on-the-job training programs.

(c) Input into unit SOPs.

(d) Command consultation in peace-time and combat.

(e) Monitoring effectiveness of preventive programs.

(f) Early recognition and prompt, correct management of cases.

(2) Differential Diagnosis/Triage:

(a) Distinguish organic (physical) from functional (mental) cases early
and far forward using clinical, laboratory, and psychological tests.

(b) Assess prognosis, likelihood of timely RTD, for organic and
functional cases.

(c) Assess manageability of case at that echelon, give local
constraints and resources.

(d) Make appropriate disposition.

(3) Management and Treatment.

(a) Control disruptive behavior as necessary.

(b) Provide rest, physical replenishment and restorative brief
psychotherapy and military environment to BF, IBF, and mild AOND and PDWI cases.

(c) Evacuate nonresponsive cases or those requiring more sophisticated
care.

c. Determination of Deficiencies: Deficiencies in task performance at
each echelon from the line company through corps will be analyzed under the
three major subtask areas, each in its own Annex.

(1) Deficiency #1: In primary and secondary prevention of Battle
Stress Reactions and Neuropsychiatric Disorders.

(2) Deficiency #2: In differential diagnosis and triage of Battle Stress
Reactions and Neuropsychiatric Disorders.

(3) Deficiency #3: In management and treatment of Battle Stress
Reactions and Neuropsychiatric Disorders.
COMBAT PSYCHIATRY AND MENTAL HEALTH SERVICES
MISSION AREA ANALYSIS

1. Deficiency #1: In Primary and Secondary Prevention of Battle Stress Reactions and Neuropsychiatric Disorders.

2. Description: AMEDD personnel, including some mental health team personnel, are not adequately prepared to perform their command consultation and mental health maintenance roles. This results in uninformed line and support unit commanders and NCOs, and inadequate command policies and unit SOPs (a) for the prevention of Battle Fatigue (BF)*, Integrated Battle Fatigue (IBF)*, and Acute Organic Mental Disorders (AOMD)* and (b) for the prompt restoration and return to duty of cases which occur.

3. Nature and Impact of the Deficiency:

   a. Battalion physicians (MC, and physician assistants (PAs) are not adequately trained for their prescribed role in preparing and monitoring the Battalion Preventive Psychiatry Plan. Aidmen (91B), Behavioral Science Specialists (91G) and mental health officers (60W, 6SR, 68S) are not adequately trained to act as consultants to commanders or as teachers of combat stress management to others. The 91Gs in the brigades lack sufficient autonomy and authority. The common garrison practice of absorbing a division's Mental Health resources into the MEDDAC prevents establishment of relationships within the division which are essential to the functioning of the mental health sections of the Brigade and Division Medical Companies in combat. Combat stress management and prevention services to Corps units (including AMEDD facilities) are inadequate for the threat in their area.

   b. Impact: Combat stress casualties should be highly preventable. Failure of line and support unit leaders in combat to appreciate the need for stress management, including sleep discipline, will increase the incidence of BF and IBF and some preventable forms of AOMD. Lack of preparedness to provide rest, replenishment and light duties in the nonmedical supporting trains for the large majority of BF, IBF and mild AOMD cases will (a) overload the medical system, (b) prevent prompt return to duty, and (c) waste essential combat power, perhaps exceeding all other WIA. Inability to accomplish peace-time policies which promote unit cohesion and esprit de corps, control alcohol and drug abuse, and minimize domestic instability among division families, increases the risk of psychological breakdown in combat.

4. Constraints: Current developmental initiatives at AHS and elsewhere to improve AMEDD training in combat stress management have not been presumed in this analysis. They are listed among the corrective actions.

*Definitions and projected caseloads are included in the Analysis of Threat, paragraph 1.A. (1)(b).

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5. Corrective Actions:
   
a. Training and Procedure:

   (1) Clarify and publish doctrine.

   (2) Continue to increase training of mental health professionals and specialists at AHS, at MEDDAC's and MEDCEN's and in TOE units.

   (3) Develop additional mandatory training of nonbehavioral science AMEDD personnel at AHS, USUHS, in residency programs, correspondence courses, Combat Casualty Care Course (C4), Combat Environment Tactical Training, etc. Identify some personnel for additional (elective?) training leading to a new secondary skill identifier.

   (4) Develop and export training packages for all branches' NCOES, Officers' Basic and Advanced Courses, ROTC, Reserve and National Guard courses, and CAS3.

   (5) Provide ongoing realistic training and evaluation linked with the ARTEP, National Training Center, etc.

   (6) Garrison Division MHSS must be fully committed to command consultation and support of division personnel and to maintain their practice in the field at every opportunity.

   (7) Continue to incorporate behavioral science input into Army-wide policies to: (a) decrease unit turbulence and increase cohesion; promote individual identification and pride with larger units, branches, and "Army ("esprit de corps"); (b) reduce and control alcohol and drug abuse; (c) promote stable, secure domestic (family) "home fronts;" (d) achieve realistic training for conventional and integrated (CBR) combat.

   (8) Identify the 91Gs in the Med Co (Forward) as the Brigade's Mental Health Section and the E6 91G as Brigade Mental Health NCOIC, with defined roles in unit NCO and command consultation and troop instruction, under general supervision of the DMHS.

   (9) Insure adequate peace-time and wartime mental health services and command consultation/training to Corps-level units by pre-designating responsible units and individuals (OM Teams?).

   (10) Promote team cohesion among AMEDD "filler" personnel and the field units they will join by (a) selecting mobilization designees for a unit who are collocated, notifying them, and conducting "team building" activities; (b) requiring MOBDES teams to exercise in the field with their units.

b. Force Structure and Personnel:

   (1) Increase the grade of the Brigade MHNCOIC to E7, with additional duties and educational and experiential prerequisites.
(2) If battalions are organized under the regimental system, provide each with a battalion 91G (E4) who will become closely identified within the battalion during peace-time deployment (under supervision of the Bde MH COIC). In combat, the Bn 91G will either function in the Bde CLR Co as one especially familiar with and to his battalion's officers and men, or he may facilitate triage and provision of rest and replenishment at the Bn Aid Sta and Bn field trains.

(3) Establish a position of Division Mental Health NCO at the DMHS, (ideally for an E8 91G, as this would provide a career culmination for 91Gs of proven excellence and dedication in TOE field & combat mental health). Duties include NCO & command consultation in the DISCOM and Division HQ, supervision of Bde 91Gs, troop teaching, being NCO of DMHS and advisor/counselor to the Div psychiatrist, social worker and psychologist.

c. Research, Development and Materiel Acquisition:

(1) Conduct basic and applied research on psychosocial and other factors which influence or reduce combat stress.

(2) Conduct basic and applied research on the interactions of combat stress, sleep deprivation, physical fitness and fatigue, environmental stressors, antidote pharmacology and CBR agent exposure, to improve preventive doctrine.

(3) Provide Brigade MH sections and DMHS with a vehicle (1/4-ton truck) and radio for field consultation/coordination duties.

6. Prioritization of Corrective Actions: To be determined in further staffing
1. **Deficiency #2: In differential diagnosis and triage of Battle Stress Reactions and Neuropsychiatric Disorders.**

2. **Description:** In the initial conventional and CBR scenario, soldiers disabled by battle stress and "neuropsychiatric disorders" may exceed total WIA.* These disorders include Battle Fatigue (BF)*, Integrated Battle Fatigue (IBF)*, Acute Organic Mental Disorders (AOMD)*, Psychologically Disturbed Wounded, Ill and Injured (PDWI)* and other Neuropsychiatric Disorders (NP)*. Current deficiencies exist in the ability of forward and rear medical and mental health elements to quickly rule out or quantify actual CBR injury and to identify specific types of AOMD. General triage capability in the Corps area is inadequate.

3. **Nature and Impact of Deficiency**

   a. Diagnostic criteria for establishing the presence and severity of CBR injury and of various causes AOMD are not well specified, training in them is inadequate at all levels, and laboratory tests or instrumentation to support diagnosis are not available at forward elements and are inadequate in the rear. The problems of differential diagnosis are severely compounded if patient and/or examiner are in MOPP. Triage at the brigade clearing company is critical; the E6 (or E7) 91G and the medical officers each have special skills but do not combine in one examiner the expertise to distinguish functional from organic disability and effectively "reassure" the doubting functional soldier. Triage staffing in the division Med Spt Co appears adequate for all but mass casualty overloads. Staffing in the Corps is poorly distributed and perhaps inadequate in number for the potential caseload on the extended battlefield. The proposed TOE "J" Med Ctr Co (Sep)'s psychiatrist (60W), supported by 91Gs, is minimally adequate for wherever they are attached, but cannot be everywhere; in the critical first weeks there will be one such per division "corps slice." Otherwise, the OA dispensaries, field hospitals, MASHs and combat support hospitals have no organic psychiatric triage expertise to evaluate and manage locally-generated BF and IBF caseloads or psychiatric symptoms in AOMD or in referred medical/surgical patients (PDWI). At the Evac Hospital the single psychiatrist, psych nurse and two 91F psych specialists may be overloaded for 24-hour ward operation and are likely to lack the training and field Army experience to triage BF and IBF cases and return them to their units for care. The OM teams lack doctrine and training for functioning on the integrated extended battlefield, and most will arrive weeks too late.

   b. Impact. Failure to return 70-90% of BF and IBF cases to duty within 1-3 days will seriously impair combat power and will overload treatment facilities. Failure to discriminate early the BF and IBF from longer-term disabilities will seriously retard their return to duty and produce some permanent disability. Failure to correctly identify true CBR injury and AOMD will result in incorrect or no treatment, delayed return to duty, and perhaps disability or death.

*Definitions and projected caseloads are included in the Analysis of Threat (para 1. A. (1)(B)
4. Constraints: Hot or cold-wet weather will increase the incidence of AOMD due to heat stroke or hypothermia. Current developmental initiatives to increase training in combat mental health to AMEDD personnel at AHS have not been assumed in this analysis. They are included as corrective actions.

5. Corrective Actions:
   a. Training and Procedure:
      (1) Train all AMEDD personnel who may be in the triage chain or who manage "neuropsychiatric" cases regarding BF, IBF, PDWI and AOMD, to include discriminating features. (See Deficiency #1, para 5. a. (1) & (2)).
      (2) Increase training in MOPP, to include medical tasks.
      (3) Develop simplified "decision trees" or algorithms for diagnosing the major classes of CBR, laser, antidote, and environmentally-induced conditions in MOPP 0 through MOPP 4.
      (4) Incorporate evaluation of these skills into ARTEP and other exercises.
   b. Force Structure and Personnel:
      (1) Assign a psychiatrist (60W) as one of the physicians in each Bde Med Co (Fwd) (presumably as a mobilization designee, in place of having a GMO or second internist or emergency room physician in the TOE). 60W will function as GMO as well as specialist in the neurologic/mental status exam and in discriminating organic from functional disabilities.
      (2) Increasing grade of Bde Mental Health NCO (91G) to E7 includes requirement for 91B30 skill in physical examination plus additional special training to improve diagnostic capabilities.
      (3) Med Clr Co (Sep) in Corps area: Approve the proposed TOE "J" psychiatrist and beh sci specialists. Add a clinical psychologist (68S) with psychological test kit.
      (4) Evac Hospital: Add a senior 91G to assist the psychiatrist and psych nurse in basic outpatient triage and to advise regarding field Army conditions. (Any "Med Spt Grp/Mission Adaptable Hospital" concept must incorporate the Evac Hospital's 60W, 66C & 91F's at a minimum. The added 91G is also still desirable.)
      (5) MASH and Combat Support Hospitals: a) Assure assignment of at least one psychiatric nurse to each as MOBDES with primary duties as a med/surg nurse, b) Add one 91G.
      (6) Field Hospitals: Add a Mental Health Section, a) Minimum two senior 91G Beh Sci, b) Preferably also a psychiatrist 60W or psychologist (68S), to perform basic triage and consultation.
      (7) OA Teams: Add one 91C for basic triage.
(G) OM Team: Predesignate one of the mobilizable teams in Europe to each corps and specify the commanders as "Corps Psychiatrist." Develop detailed plan for employment (see Defic #3, para 5. a. (5)). Advance deployment schedule of CONUS OM Teams.

c. Research, Development and Materiel Acquisition:

(1) Continue research into CBR agent, antidote and environmental effects to sharpen diagnostic criteria.

(2) Develop and field (as far forward as possible) simple, portable diagnostic lab tests and instrumentation to assess CBR exposure, residual and cumulative effects, and extent of disability.

6. Prioritization of Corrective Actions: To be determined by further staffing.
1. **Deficiency #3**: In Management and Treatment of Battle Stress Reactions and Neuropsychiatric Disorders.

2. **Description**: Optimal management for Battle Fatigue (BF)*, Integrated Battle Fatigue (IBF)* and many mild Acute Organic Mental Disorders (AOMD)* is best provided in the soldier's own unit or its closest nonmedical supporting trains. However, the subject's anxiety, insomnia and perhaps other disabling or disruptive symptoms make many of the combat stress cases unable to sleep or an unacceptable burden on the unit. Other AOMD, plus many Psychologically Distressed Wounded, Ill & Injured (PDWI)* will require combined psychological and medical/surgical attention to return them promptly to duty. Treatment resources in the division are inadequate to handle the large numbers they could receive, especially in a mass casualty situation. The Corps and medical facilities are unprepared to handle the overload from divisions or even those generated in their own area of the extended battlefield. Other neuropsychiatric (NP)* cases who should be evacuated from the combat zone may interfere with restoring the salvageable to duty.

3. **Nature and Impact of Deficiency:**

   a. Unit aid men lack any quick, safe, effective means to reduce anxiety, to promote sleep or to control disruptive behavior. Pharmacologic agents currently available from the Battalion Aid Station rearward may produce unacceptable residual performance decrements or interact adversely in combination with other biochemical hazards. Ability to provide rest, replenishment and any specific therapy is seriously complicated in MOPP or under intense threat at any echelon. Inability of the Med Company (Forward) to provide rest, replenishment and restorative psychotherapy to cases who need specialized supervision is clearly a deficiency (in view of the value of treating close to the unit of origin); such a service may well be impractical under fluid battlefield conditions, but the problem could become critical if ground evacuation to the Division rear is delayed. For cases sent to the rear, the Division Mental Health Section has only two 91G Beh Sci Specialists to support the division psychiatrist, psychologist and social worker (who have additional responsibilities) in managing perhaps hundreds of cases 24 hours a day, (mostly BF and IBF, but also some disturbed AOMD and NP who may be difficult to evacuate). In Corps, the TOE "H" Med Ctr Co (Sep) has no mental health assets. The proposed TOE "J" is better but still cannot provide a Mental Health Officer with each holding platoon if the company is divided to augment or replace division facilities or to supplement hospitals in the corps area. It also lacks special rehabilitation assets. At Evac Hospital, (1 per corps at the outset) the one psychiatrist, psych nurse and two 91F psych specialists (decreased from 4 91Fs in TOE H) may be inadequate for 24 hour/day inpatient operation, especially if evacuation of disturbed patients is deferred in favor of the severely injured. (The Med Spt Grp/Mission Adaptable Hospital concept (if adopted without incorporating at least the Evac Hospital's psychiatric team) would lack any organic mental health treatment capability). In the Corps area, Team OA dispensaries are not staffed to provide outpatient treatment of combat stress cases for their areas. The field hospitals have no organic/mental health expertise for outpatient or inpatient management of cases generated in their areas of support or for
division overflow. The MASH's and Combat Spt Hospitals have no formal responsibility for receiving combat stress or psychiatric patients, but may lack sufficient psychiatric expertise to manage locally generated stress casualties, WIA who are also psychotic, or other types of PDWI. The two OM Teams which are to be assembled in Europe could provide a significant (although still insufficient) psychiatric capability to each corps, but are grossly deficient in doctrine and training; their personnel and transportation assets are inadequate to handle the large combat areas and projected overflows of BF, IBF, AOMD, PDWI and NP from all divisions. The CONUS active duty and Reserve OM Teams arrive far too late to influence the war. The convalescent centers also arrive long after they are needed to rehabilitate the initial surge of BF, IBF, AOMD and PDWI. If it were present, additional behaviorally-oriented resources could improve the convalescent center's ability to return the emotionally-disabled as well as physically disabled to duty quickly, and to reconstitute all its patients into cohesive groups which would be more resistant to subsequent battle stress. In the COMZ, the psychiatrist and 91G in each station hospital appear adequate to manage local caseloads provided there is not massive local battle fatigue (or disaster shock among civilians who must be supported). The NP Services of the general hospitals are strong for ward consultation, out-patient care and perhaps a mobile field consultation role, but the lack of psychiatric nurses (66C) and Specialists (91F) would hamper their running an inpatient psych ward for the psychotic NP and AOMD cases who will be the principle categories sent to them from the Evac Hospitals.

b. Impact: Since none of these battle-stress casualties were assessed during the initial SCORES wargaming (except for that percentage of WIA who became PDWI), it is obvious that unless most of this large number of troops can be returned to effective duty quickly, the first battle will degenerate into a blitzkrieg and a rout in the first few days. Overload of division and corps medical/mental health facilities (due to mass casualties, inability of line and supporting logistical units to manage and restore the majority of battle stressed soldiers, and/or inability of MTF's to evacuate unsalvageable NP cases) will degrade the facilities' ability to return any to duty within 24 to 72 hours.

4. Constraints: Adverse weather, (especially cold or wet, which promote hypothermia) will seriously complicate management of cases at all levels even if they have not become separated from their packs, sleeping bags and shelter halves; additional shelters or use of pre-existing buildings would be necessary. Ample water (and shade) for the possible large numbers of cases must be provided in hot conditions.

5. Corrective Actions:

a. Training and Procedure:

(1) Clarify and publish doctrine.
(2) Augment training and cross-training of mental health personnel.
(3) Augment training of non-behavioral science AMEDD personnel.
(4) Augment training of selected non-AMEDD personnel.
(5) Battalion Surgeons (PAs), Brigade Mental Health Sections and Division Mental Health Sections should develop contingency plans, SOPs and practical training for incorporating expedient resources to assist in maintaining a therapeutic milieu for large numbers of battle stress casualties under adverse conditions. Examples of these resources are line junior officers and NCOs admitted as patients to the Med Spt Co with minor wounds which preclude their prompt return to combat duties.

(6) Prepare doctrine for the GM Team, specifically:

(a) Notify all personnel slotted for the two teams in Europe; identify which corps each team supports; Identify the GM Team commander (60W, 05) as "Corps Psychiatrist" and familiarize him with the Corps surgeon, line chain of command and medical support plan; conduct "team-building" within GM Team and with other supported medical facilities.

(b) Specify mobilized roles of the Corps GM team sections on mobilization/war, e.g., Corps Psychiatrist functions with Corps surgeon; psychologist acts as Deputy team commander; treatment section augments Corps' Evac hospital; one MH section (or 2) augments Med Clr Co (Sep) to establish restoration/reconstitution center (which may augment Div Med Spt Co's); one MH section (or 2) augments corps' Field Hosp and provides area support to dispensaries and units.

(c) Advance the Time Phased Force Deployment priority and time of arrival of CONUS Reserve GM Teams (which may change place with other medical units of lower priority) and establish doctrine for their use in the corps area (under control of the corps psychiatrist) and COMMZ.

(d) Similarly identify, notify and integrate the active duty GM Team to provide support for the XVIII A&H Corps (Rapid Deployment Force); assure its early deployment, with prompt back-up by Reserve GM Teams.

(e) Augmentation of GM Team personnel is addressed under Force Structure and Personnel Actions (below).

(7) Advance the Time Phased Force Deployment priority and time of arrival of the convalescent centers (in place of other lower priority medical units), and develop doctrine for their augmentation and use in combat stress reconditioning.

(8) Review and update doctrine for general hospital and station hospital psychiatric/mental health assets in the COMMZ on the extended (NBC) battlefield.

b. Force Stucture and Personnel:

(1) Assignment of 60W's and 91G E7's to Bde Clearing Companies (and perhaps of 91G's to "regimental" battalions), as recommended under Deficiencies 1 & 2, would also substantially increase Bde capability to treat and return to duty moderately severe BF and IBF if the tactical situation allows, or to manage severely disturbed cases if evacuation is delayed.
(2) Addition of an E8 Div Mental Health NCO (91G) to the DMHS, as recommended for Deficiency #1, also improves treatment capability in the Med Spt Co.

(3) Augment the DMHS in wartime with an additional Mental Health Officer (60W, 68R, 68S). This would increase capability in the Division rear or permit one MHO to go forward to brigade with a holding platoon during lulls in battle without depleting special skills at the DMHS.

(4) Augment the DMHS in wartime with one or two psychiatric specialists (91F, E6 or E5), trained to manage group activities as well as severely disturbed cases.

(5) Augment the DMHS in wartime with an occupational therapist officer (65A) trained to evaluate and direct individual and group activities to promote group cohesion and prompt RTD.

(6) Augment the OM Team with a Reconditioning Section including occupational therapist officers (65A) and specialists (91L) and physical therapist officer (65B) and specialists (91J). This can be attached to a Med Cr Co (Sep) or other facility.

(7) Augment OM Team by attachment of additional Mental Health Sections if personnel and vehicles are available. Preferred staffing is one psychiatrist (60W), one psychologist (68S), one social worker (68R) and several 91G's; however, variations on the officer disciplines are acceptable.

(8) Add to the Med Ctr Co (Sep) TOE two mental health officers, preferably one psychologist (68S) and one social worker (68R), to provide a complete MH team when together and to permit one MHO to accompany each treatment platoon if it is detached.

(9) At the Evac Hospital: a) Add a senior 91G (E6 or E7) to the TOE, to advise the psychiatrist of field Army conditions and assist in outpatient management of locally generated combat stress cases and b) Increase 91F's to three to allow 2 on duty 24 hrs/day.

(10) Field Hospitals: add a psychiatric service to the TOE to provide area psychiatrist consultation outpatient and inpatient support to include: a) psychiatrist, 91Fs and 91Gs, b) psychologist and social worker.

(11) At the MASHs and Combat Support Hospitals: a) Assure assignment of at least one psychiatric nurse (66C) to each (with primary duties as medical/surgical nurse), b) Add 1 or 2 91Fs to the Combat Support Hospital TOE.

(12) At the Convalescent Center, add occupational therapy officers (65A) and specialists (91L).

(13) At the General Hospitals, add a) two or more psychiatry specialists (91F) to assist in inpatient care b) a psychiatric nurse (66C), if available.

c. Materiel, Research and Development
(1) Reevaluate the "tranquillizer" and "sedative" drugs currently in the kits plus others now commercially available; develop doctrine for best use at each echelon (simple guidelines); update kits and retrain all relevant personnel.

(2) Develop quicker, safer, less abusable drugs, (or other modes) which impair necessary performance less than current drugs to a) Promote brief restorative sleep; b) Maintain alertness and counter fatigue; c) Reduce disabling anxiety; d) Control agitated behavior; e) Reduce psychosomatic or conversion symptoms; f) Relieve depression, including that which may be a residual of nerve gas poisoning; g) Improve mental functioning and memory deficits which may be residuals of nerve gas poisoning.

6. Prioritization of Corrective Actions: To be determined after further staffing.
### Table 1

**BF + IBF (c&n)**

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**BF** = conventional casualties × 0.69 (conventional WIA) × 0.33

**Chemical IBF** ("c") = chem casualties × 0.69 (=chem WIA) × 1.0

**Nuclear IBF** ("n") = nuc casualties × 0.69 (=nuc WIA) × 0.5
MISSION AREA ANALYSIS: RECOMMENDATIONS TO CORRECT DEFICIENCIES IN COMBAT PSYCHIATRY & MENTAL HEALTH SERVICES

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Efforts are underway to reorganize the Army to meet new threats and to make best use of new equipment. Field Medical Support and Combat Mental Health Services are a part of this effort.

"Division 86" (actually a series of TOE revisions for the heavy, light and airborne/air assault divisions), "Corps 86" and "Army 86" are continuously-evolving projects which should begin to be implemented by 1986-87. These changes are required by a belated appreciation of Threat capabilities, and by delivery of new weapons systems whose development was driven by high-technology without a full appreciation of how they should be integrated into the entire force structure. To get ahead of the problem next time, TRADOC is instituting a program to identify needs, deficiencies and potential breakthroughs well in advance. In the long term, this is called "Air Land Battle 2000;" in the mid term, "Mission Area Analysis (MAA)."

MAA is an Army-wide program which involves all the branch schools' Combat Development staffs, plus the Research and Development community. Using the Scenario Oriented Recurring Evaluation System (SCORES) wargames as data, it pits our 1987 Force Structure (i.e., the Div 86 promises) against the 1990 NBC Threat in Central Europe and the Mid-East. The objective is to identify all deficiencies, analyze them in detail, prioritize them, and recommend corrective actions. The prioritized list will then be used to determine where training, personnel, materiel and research resources get allocated.

The MAA list will be updated periodically, but if some proposed change is not on that list, it cannot expect to be funded. This is a "zero-sum game" being played with limited budgets. The "best" solutions will be those which involve cheap improvements in doctrine and procedure or inexpensive improvements in training. Only if those do not suffice can requests for additional personnel or materiel be justified. Personnel additions, in particular, are likely to come out of a Branch's own hide; no other branches think they have too many slots, and both the Army as a whole and specific units such as the division have congressional or DA ceilings on personnel strengths.

Within the MAA, the Medical Department has only a small place. There are twelve major Army Mission Areas, such as "Close Combat," "Fire Support," and "Intelligence." All of "Combat Service Support" is just one area, coordinated by the Army Logistics Center (Ft Lee). The "CSSMAA" contains nine sub-areas, of which "Medical Support" is only one. The Directorate of Combat Developments and Health Care Studies at the Academy of Health Sciences is responsible for that sub-area.
Where do "Combat Mental Health Services" stand in this? Virtually forgotten, due to the passage of time since WWII and Korea, our "success" during Vietnam in reducing traditional combat exhaustion, perhaps some guilt by association for "failing" to solve drug and behavior problems, and our preoccupation with clinic, hospital and garrison problems through the 1970's. When the Academy's Combat Developments Directorate defined the major medical sub-tasks for MAA, they used as their reference FM 8-10 "Health Services in the Theater of Operations;" FM 8-10 does not mention the Mental Health Services at all and acknowledges psychiatric augmentation teams (the OM Team) only in a table.

The twelve major medical subtasks which have been defined for MAA are:

Medical Treatment; Patient Evacuation and Regulation; Preventive Medicine Services; Clinical Lab Services; Blood Banking Services; Optometric/Optical Services; Dental Services; Medical Supply and Maintenance; Hospital Food Services; Medical Intelligence; Medical Command/Control and Communication. Although Mental Health Services (even more than some of those listed) exist as distinct entities within the garrison community and division medical TOE, involve several unique professional and specialist disciplines, and serve a variety of non-patient care functions, they are by omission subsumed in the vast subarea of Medical Treatment for the MAA. To change this as Doctrine will require a long and laborious process. However, Combat Developments Directorate is willing to let an Ad Hoc Combat Psychiatry and Mental Health Services Working Group proceed with the MAA process as if it were a separate area, the results to be submitted with the Medical Treatment deficiencies.

The groundwork for the MAA has been well-laid by a 1981 concept paper entitled "Theater of Operations Psychiatry Support System (TOPPS)." This paper grew out of a historical review by Gregory, Brooks and Lawson which documented the baseline 1:3 ratio of battle fatigue to WIA and projected that rate onto modern high-tech. conventional scenarios (1). Schultheis, Furukawa, Mangelsdorff, OTSG consultants, et al then wrote the TOPPS paper to sound the alarm about the Army's doctrinal unpreparedness, stress the need to prevent excessive evacuation of combat stress casualties, and recommend changes in organization to put mental health expertise at more forward echelons in the Divisions and Corps 86's.

TOPPS limited its concern to current deficiencies for conventional war, and explicitly did not address problems which might be generated by CBR use (or by women in the combat zone, drug abuse, etc.). The concept paper is still being staffed in the Academy, although steps have already been initiated to implement its training implications for the Academy curriculum.

The Combat Psychiatry and Mental Health Services Mission Area Analysis ad hoc interdisciplinary working group has picked up where TOPPS left off - addressing as MAA requires, the added threats of the 1990 integrated (NBC) battlefield. We have broadly categorized the major tasks of the Combat Mental Health Services into three functions: 1) prevention through education, command consultation and early intervention, 2) differential diagnosis and triage, 3) management of casualties. The latter subdivides into: a) treatment of salvageable cases, primarily with reassurance, rest, replenishment of physiologic reserves, and restoration of self-confidence by supportive psychotherapy and appropriate duties, b) control of disruptive behavior and evacuation of unresolvable cases. The caseloads for combat psychiatry and mental health services
will certainly increase in absolute number and diagnostic complexity on the NBC Battlefield, and perhaps even in relative proportion to WIA. A number of clinical entities must be considered, as follows:

1. *"Normal" non-incapacitating battle stress reactions.*

2. Conventional battle stress casualties, which can be sub-divided clinically into: a) *transient battle reactions* (disaster shock syndromes); b) *battle fatigue* from sustained operations (with a strong component of fatigue); c) *survivor burn out* (the "old sergeant syndrome" of WWII, which may appear much sooner in high intensity war). Whether these should be given different labels in the field or be lumped under one non-descriptive label like "battle fatigue" (which implies only that it is transitory and gets better with rest) must still be resolved at a tri-service level.

3. CBR Conversion Reactions (or "Integrated Battle Fatigue") are defined here separately as "hysterical?" symptoms which mimic true chemical, biological, nuclear, and laser injuries (in practice, these too should probably be labeled "battle fatigue"). During WWI, "Gas mania" was estimated to outnumber true gas exposure 2:1 in relatively inexperienced troops, and could lead to permanent "gas neurosis" and disability unless early diagnosis, reassurance and immediate return to duty was practiced.

4. *Acute Organic Mental Disorders* may be more common than in past wars due to concussion from massive artillery bombardments, low doses of CW agents, incapacitant agents, inappropriate use of atropine antidote, other substance abuse (intoxication and withdrawal), and heat stroke brought on by CW protective measures.

5. Psychologically distressed wounded, ill and injured are a potentially large group. These include conventional injuries with excessive disability, pain or battle fatigue symptoms when faced with return to combat. Others may have had real chemical or radiation exposure and be justifiably concerned about their life expectancy, especially if expected to return to duty.

6. The endemic neuropsychiatric disorders such as the schizophrenias and personality disorders.

It is clear that on the NBC battlefield, differential diagnosis of functional from physiological disorders will be even more difficult than in the past, and may have to be done in mass casualty settings. Many more physical and psychological casualties may occur in the Corps areas and COMMZ than ever before. Yet successful return to duty of salvageable functional cases (or of nondisabling or treatable organic ones) requires that they be recognized close to their units and receive reassurance, rest and restorative support rather than further evacuation. What does Division and Corps 86 provide to accomplish this, and what does TOPPS plus CPMHSMAA recommend be added?

At the most basic level, much must be done to educate the troops and small unit leaders during basic training, Officers Basic and Advanced Courses, the staff schools and OJT. What is taught must be carefully chosen, as a little knowledge can be worse than none, especially about a disorder which is as subject to suggestion as battle fatigue.
Unit aidmen will still be the first level of medical intervention. The more junior of these may be "91 A's" who have had a shorter Academy course than the 91 B's; in any case, postgraduate and field training from the Division Mental Health Section will be essential to teach aidmen what they need to know about prevention, diagnosis, triage, and basic management. Research might provide a safe, non-abusable sleep aid (perhaps L-tryptophan) or behavioral stress reduction techniques which could enable the "medic" to restore more soldiers at his unit. A safe drug for quickly controlling psychological or toxic agitation could also be useful.

At the Maneuver Battalion Aid Station, Div 86 proposes to have both a physician and a physician assistant, with two treatment vehicles so they can move by alternate bounds, but with very limited holding capability. (Support units will still have one vehicle, one "doc.") Additional training is needed at the BAS, plus improved diagnostic criteria (and technology?) to identify the organic disorders and determine actual severity of CBR insults. In addition to a benign sleep aid and "super tranquilizer," the BAS could also use better drugs than Valium to reduce anxiety; these would allow many soldiers with battle fatigue to get rested and reintegrated in the battalion, brigade, DISCOM or COSCOM logistical trains instead of having to be kept under medical/mental health supervision.

At the Brigade level, Division 86 has streamlined The Brigade Clearing Station into the "Medical Company (Forward)" by pulling its 40-cot holding platoon back to the division rear. The Med Co (Fwd) will still have two 91G Behavioral Science Specialists, and the rank of these is to be increased to E6 and E5 in view of the importance of triage at this level. However, our MAA working group is arguing that this is not enough. The key problems in differential diagnosis will require the integration of medical and psychological examining skills and authority - for example, to distinguish the functional CBR conversion reactions from the true CBR injuries; the heroine overdose from nerve gas poisoning; the atropine psychosis from alcoholic DT's, etc. We are recommending that one of the four physicians in the Med Co (Fwd) in combat be a psychiatrist (60W) rather than a GMO or a second surgeon, internist or emergency physician. The 60W would, of course, also function as a general medical officer. The 91G's should also be recognized in the TOE as the Mental Health Section and the senior 91G as the Brigade Mental Health NCO; ideally, he should be an E7, to give him even greater clinical experience, plus the stature to get the attention and cooperation of the brigades' senior NCOs.

At the Division Medical Support Company (now with 160 cots), the Division Mental Health Section has its psychiatrist (60W), psychologist (68S), social worker (68R), and E4 and E5 91Gs. These would be stretched very thin by the several hundred to a thousand cases they might be resting and replenishing at one time in the mass casualty NBC scenario. We are recommending addition of a full-time Division Mental Health NCOIC (91G E8) whose administrative skills could help organize expedient helpers and coordinate DISCOM R&R resources (as well as enhance training in peacetime). Augmentation in wartime should include at least one more mental health officer (60W, 68R, or 68S), perhaps one or two 91F Psychiatry Specialist (to manage psychotic cases whose evacuations may well be delayed), and perhaps an Occupational Therapy Officer. But the real overload situations are more than a division can cope with logistically, and it will either need substantial reinforcement from Corps or have to send its overflow back to Corps facilities.
The Medical Clearing Company (Separate) in the Corps area may provide this back-up. Corps 86 proposes it is to have a psychiatrist and eight 91Gs in addition to its three general medical officers and three 80 cot holding platoons. Holding platoons can be detached to augment divisions or corps hospitals; alternatively, the entire company could form one big rest and replenishment center. This facility is a good start, but we are recommending it be augmented with a psychologist and social worker so that a mental health officer could accompany each detached platoon. Some Occupational Therapy and Physical Therapy officers and enlisted specialists would also be useful additions to the Med Clr Co (Sep).

Neuropsychiatric cases with poor chance for rapid recovery should be evacuated out of the theater by way of the Evacuation Hospitals, but evacuation may be deferred in favor of severely wounded patients. The EVAC has a psychiatrist, psychiatric nurse (66C) and two 91Fs (decreased from four in the previous TOE). We recommend three 91Fs (allowing two on shift around the clock), plus a senior 91G to assist with triage and treatment of walk-in battle fatigue cases.

The Combat Support Hospitals, MASHs, Field Hospitals, and Team OA dispensaries in the Corps are have no mental health personnel. At the least, a psychiatric nurse (66C) should be assigned to each CSH and MASH with primary duties as a med/surg nurse. The Field hospitals which provide area support for high risk Corps support units and may receive overflow from divisions would benefit from a psychiatrist and some 91Gs; a full NP/mental health service with 68S and 68R would be better. Training in combat stress management must also reach to the Corps support units.

The Big Question in these scenarios is the role of the OM Team (Psychiatric Service). This is a hefty organization on paper, with an O6 psychiatrist commander, an O4 psychologist and E7 91F in its HQ section; a 25-bed treatment team with psychiatrist, two psychiatric nurses and 11 91Fs; and three Mental Hygiene Consultation teams, each with a psychiatrist, two social workers, and six 91Gs. However, it seems to lack any doctrine for the extended, high-intensity battlefield. We recommend that the two OM teams which could be mobilized in Europe be fully designated and informed, the MOBDES 60W commanders be "double-hatted" as "Corps Psychiatrist" for the two corps, the psychologists be assigned as full-time deputy commanders, and detailed plans for the teams' use be prepared. The OM teams could also be augmented with Occupational Therapist and Physical Therapist officers and enlisted personnel to team up with the Med Clr Co (Sep) in the Corps area.

There are also one active duty and six reserve OM Teams "on paper" in CONUS. These should be mobilized and sent over to Europe (or elsewhere) much earlier in the Time Phased Force Deployment to reinforce the Corps and to improve area coverage in the COMMZ.

In the European scenario, it must be recognized that the distinction between "Combat Zone" and "Communications Zone" may be purely administrative. The COMMZ's Station Hospitals (200, 300, and 500 bed) have a psychiatrist and a 91G (probably sufficient for limited consultation to local dispensaries, triage and brief walk-in treatment). The 1000-bed General Hospitals have an NP service with a psychiatrist, neurologist, psychologist, social worker, and four 91Gs. These appear well-suited to back up the Station Hospitals in the area support role. However, their primary doctrinal mission is to receive evacuees from the combat zone, most of whom will be the severely distressed cases who could not be sent directly to CONUS because wounded patients had priority. Several 91Fs (and ideally a 66C
psychiatric nurse) would improve the General Hospital's ability to provide inpatient care for these psychotic patients until after an OM Team's treatment section arrives to augment it.

Another unit which would be of more value earlier in the deployment than currently scheduled is the Convalescent Center, which includes a psychiatrist, social worker, psychologist, 91G, and three 91Fs. These also should be given some Occupational Therapists.

It is obvious that much needs to be done to improve our capacity to return Battle Stress Casualties, Acute Organic Mental Disorders, and Psychologically Distressed Wounded, Ill and Injured soldiers to duty to win the critical first battles of a high-tech war. Much can be done just by improving training (at all levels), by providing doctrine for existing entities like the OM Team, by augmenting TOE units with available TDA personnel in wartime, and by delivering back-up or reserve elements to the battlefield earlier in the deployment (when they are most needed). Some additional mental health personnel slots do appear necessary, and improved materiel (especially in diagnostic and pharmacologic areas) would also help a lot.

The first step for all of these corrective actions (training, doctrine, personnel, and materiel) must be to gain a high enough priority within the total Mission Area Analysis. If we can make clear the extent to which the AMEDD's Combat Psychiatry and Mental Health Services are essential to prevent an unacceptable "hemorrhage" of combat power and to return to their units a large number of casualties (which may exceed all other WIA combined!), our priority for corrective action will be assured.

REFERENCE:

COMBAT STRESS CASUALTIES IN PERSPECTIVE

W. F. Schultheis

1. KUMANO WAR (603 B.C.)
   "Evil Gods Spewed Out Poison -- People and Things All Become III"
   Malady disappeared after troops rested and morale restored

2. CIVIL WAR
   "Nostalgia: "Mild Insanity Caused by Disappointment and Longing for Home"
   *Defective Character, Poor Moral Turpitude
   *5,200 Cases Hospitalized
   *Poor Medical Evacuation Channels
   *1863 - Incident Rate 0 -- By Directive
   *Psychosomatic Hospitalizations Soared

3. RUSSO-JAPANESE WAR (1904-1906)
   *Russian Psychiatrists Assigned Forward
   *Forward Treatment Centers Established
   *First Accurate Description of Traumatic War Neurosis
   *Initially Effective -- Later Broke Down
   *Proximity

4. WWI:
   *Gen Gorgas Dispatched Committee to France (1917)
   *Formation of 110 Bed Psychiatric Hospitals Suggested
   *Rose Hospital #117 Established
   *4,100 N/P Patients Admitted
   50% Returned to Combat
   41% Other Duties
   *Proximity Re-emerged as Primary Treatment Principle
   *Clinical Picture: Tremors, Paralysis, Mutism, Ganser Syndrome

5. WWII:
   *No Effective Treatment - Evacuation Policy Existed Until 1943
   *No Designated P/N Consultant TSGO
   *Feb 20, 1943 -- Kasserine Pass -- Green, Well Equipped American Troops Were Tested by Africa Corps
   *Situation Rectified
   *P/N Center Located on Normandy Beachhead
   *Clinical Picture: Depression, Apathy, Psychosomatic
   *"Tremblers of WWI Became Neurosis of WWII"

6. KOREA
   *Psychiatric Casualties Initially Low - Troops Retreating
   *Pusan Perimeter - Casualty Rate Increased - Static Defense
   *All Divisions (Pusan) Had Division Psychiatrist
   *Too Many Evacuated to Japan
   *N/P Centers Established in Korea
   *80% Returned to Combat Duty

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7. VIETNAM
   * A typical When Compared With All Previous Wars
   * Low P/N Casualty Rate (5%)
   * Limited Tour of Duty
   * R&R
   * Superior Aero-Medical Evac Policy
   * Intense, Brief, Sporadic Engagement with Enemy
   * Full Compliment of Divisional Mental Health Officers
   * What is Vietnam Veterans Syndrome?
   * Delayed Stress Reaction?
   * Depressive Variant?

8. ISRAELI CONFLICT (1973):
   * Many Similarities to Envisioned Central Battle Scenario of Western Europe
   * Brief -- 3-4 Days
   * Mobile
   * Fluid
   * Intense -- Initially Fought 24 Hours a Day
   * Heavy Casualties
   * Integrated -- Air, Armor, Artillery Closely Coordinated
   * High H/P Casualty Rate
   * Re-Emergence of Treatment Principles
   * Treatment:
     * Rust
     * Encouragement
     * Ventilation (Abreaction)
COMBAT STRESS REACTIONS OCCURRING IN THE ISRAELI DEFENSE FORCE DURING THE LEBANON CONFLICT OF 1982

John A. Miller
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**INSERTS**

I. Israeli Soldier and Officer Questionnaire  
II. Israeli Soldier Questionnaire  
III. Proposed 101st. Unit Status Questionnaire

**TABLES**

1. Symptoms of Combat Related-Reactions  
2. Reported Symptoms in the June 1982 Conflict in Lebanon  
3. Most Prevalent Symptoms in: WWI, WWII, Vietnam, Y-K(73), Lebanon(82)

**APPENDIX**

- Physical Casualty Data  
- Incidence Data of Psychiatric Casualties  
- Ratio of Battle Shock to Wounded by Age  
- Battle Stress Predictors  
- Psychiatric Casualty Data  
- Factors Predicting Return Rate  
- Reoccurrence Data of Battle Shock  
- Combat Fitness Retraining Unit(CFRIU) Data

*This information was received too late to be incorporated into the body of this report. The enclosures in this appendix were supplied by LTC Gregory Lucas Belenky, M.D., Department of Medical Neurosciences, Division of Neuropsychiatry, Walter Reed Army Institute of Research, Washington, D.C. 20012.*
INTRODUCTION

This report summarizes my attendance at The Third International Conference on Psychological Stress and Adjustment in Time of War and Peace hosted in Tel Aviv, Israel. During my attendance at this conference I obtained information concerning battle stress casualties suffered by the Israeli Defense Forces (IDF) during their recent conflict in Lebanon. The information contained in this report was obtained primarily from my attendance at panel presentations scheduled by the conference. Some unofficial supplemental information was obtained through private conversations with members of the Israeli Mental Health Department of the IDF, an IDF paratrooper officer and a reserve IDF tank sergeant who was a member of a tank crew which saw action in the Lebanon conflict.

The IDF appears to have been very successful in returning large numbers of battle stress reaction casualties back to duty. The actual numbers of casualties of this type which occurred and the actual numbers which were returned to duty were not made publicly available. Unofficially, however, the total number of psychiatric casualties who received treatment was reported to approach 600. It was reported at the conference that between 70-95% of all combat reaction casualties were returned to some form of duty. The majority of the combat reaction casualties were treated at the forward aid stations of the Advanced Medical Battalion (AMB). This first echelon forward treatment facility was typically located 2-4 KM to the rear of the battle area. Second and third echelon treatment facilities were initially established in Northern and Central Israel respectively. These second and third echelon treatment facilities were established for those combat reaction cases which did not respond to forward treatment modalities. It would appear that the IDF has learned a great deal about treatment of combat stress reaction casualties since their initial experiences in the 1973 Yom Kippur War.
BACKGROUND

My attendance at The Third International Conference on Psychological Stress in Time of War and Peace took place in Tel Aviv, Israel from 2-6 January 1983. My primary interest in this conference concerned the obtaining of information from IDF mental health personnel that was directly related to their battle stress casualty program. I had hoped to use the information obtained from the conference to further develop a battle stress reaction consultation, prevention and treatment program for the 101st Airborne Division (Air Assault), Fort Campbell, Kentucky, with whom I am currently assigned as the Division Psychologist. A great deal of information was obtained during my attendance at the conference and a great deal more information should be forthcoming from the IDF contacts I established. Much of the information which is contained in this report is preliminary data of sorts and subject to future revisions as the IDF Mental Health Department makes more definitive data available.

GENERAL FINDINGS REGARDING COMBAT

It appears that the IDF strongly believes that in combat, men are sustained primarily by their comrades and secondarily by their equipment. Those units with lower morale, less intimate knowledge of their fellow soldiers and less training as a unit, tended to generate higher physical and combat reaction casualties. This occurrence was especially true for reserve units. Also, much as the US units in Vietnam discovered, individual replacements tended to diminish group morale, cohesiveness and effectiveness. During the 1973 Arab-Israeli War, for example, tank crews who were assembled as they arrived and sent forward, had a three times higher incidence of stress reactions than those crews who had been together for some time. The critical factors in this example were shown to be the elements of cohesiveness and trust. Tank crews who were assembled ad hoc did not have sufficient time to develop...
group cohesion and trust prior to entering combat.

The IDF emphasizes the need for trust in commanders as a primary mode of developing and maintaining unit morale. The commanding officer plays a crucial role in leading his combat team. They have a three times higher incidence of death by enemy action than do other officers. Trust in one's commander and unit morale and cohesiveness appear to be the primary factors which support a willingness to fight and follow commanders even in the face of political and personal disagreement. The personal example of the commanding officer was identified by Israeli soldiers as the primary component of trust. The commander checking on the welfare of his soldiers was another trust developer. Perceived competence of the commanding officer was shown to be able to increase gains and decrease negative outcomes among unit members and thus the unit as a whole. The commander, himself, does not create cohesiveness, he facilitates cohesiveness towards unit goals.

Unit morale and cohesion are not enough to sustain a soldier in battle. Adaptation to combat depends on personal as well as group factors. The Israeli data indicated that when a soldier entered combat with an unresolved personal problem (family, self-esteem, self-confidence, other premorbid factors) he was more likely to be a physical or psychiatric casualty almost regardless of the type of unit from which he came. Some data also suggest that when combat reactions occur late (months or years following combat) they appear to be the result of, or an underlying symptom of, a personal disturbance (premorbid personality) which cannot be directly attributed to the unit or the combat experience.

The Israeli experiences support the notion that combat effectiveness among soldiers requires good leadership, strong unit cohesion, self-confidence and a stable family and emotional situation. Even in the presence of these characteristics,
fear of combat becomes a natural reaction among soldiers. Although the fear of combat appears to increase with experience, effectiveness is not necessarily diminished. In fact, the Israeli experience suggests that readjustment to combat after a breakdown (severe battle stress fear reaction) is usually better than prior to the breakdown. A good record and presentation of fatigue symptoms at the time of the breakdown are the more positive signs for successful readjustment. When the soldier is returned to a unit for duty, unstipulated acceptance of the individual will secure the greatest probability of the soldier being a highly effective member of that unit. Since battle stress casualties may be a primary replacement and reinforcement resource, it would appear that unit acceptance of the returning soldier becomes a vital key to effective unit performance. The Israeli Mental Health Department assigns Battle Psychologists to each Division and Brigade Commander to provide education and consultation on matters such as those discussed above.

USE OF MENTAL HEALTH RESOURCES

The Israeli Defense Force has shown the vital need for the appropriate use of mental health resources. The experiences of the IDF in the 1973 war and most recently during the Lebanon conflict, lend strong credence to their reliance on their Mental Health Department to provide important combat support services. The Mental Health Department of the IDF has three main functions: (1) Provide treatment, (2) provide command consultation (prevention and education) and (3) research. This report will focus special interest on the roles of the mental health treatment teams and command consultation programs.

In the area of treatment, five-member mental health treatment teams are typically assigned to each combat division. These teams are usually made up of a psychiatrist, psychologist, and three other mental health officers (psychologists and or social workers). When deployed, these teams operate in the forward treatment
facilities of the Advanced Medical Battalion (AMB). The AMB, during the Lebanon conflict, was usually located 2-6 Km to the rear of the forward fighting. In many cases, the sound of battle was readily heard and experienced at these facilities. Other treatment teams, assembled ad hoc, were located in the rear treatment facilities in Northern and Central Israel. These treatment facilities were staffed by varying numbers and types of professional personnel on an as-needed basis. More will be said about these Israeli treatment facilities later in this report.

The command consultation program is conducted by the Battle Psychologists. One of the primary roles of the command consultation team is the conducting of unit morale surveys. These surveys are performed at many different times under combat and non-combat conditions (see INSERT I and II for sample Israeli Questionnaires). The surveys are conducted on a regular basis with most every unit. The surveys are also conducted in response to specific events such as a change of commanders, prior to entering combat, following certain combat missions and the like. The surveys are conducted at the Brigade and Division levels by military officers (Battle Psychologists) who function in a manner similar to our organizational effectiveness officers. The surveys are administered only with the agreement of the commanding officer. The results are not presented to higher headquarters without first being presented to the commanding officer. The results are also not presented to a higher commanding officer without first being presented to the subordinate commanding officer. The results are presented and followed by a discussion concerning the significance, possible ramifications and recommendations based on the data collected. Areas which are surveyed include: Unit morale, perceived cohesion, combat readiness (psychologically speaking), confidence for combat in the commander, equipment, training of comrades and the overall willingness of the unit to fight, etc.

I have been in the process of modifying the Israeli questionnaires for use with units of the 101st Airborne Division (Air Assault), Fort Campbell, Kentucky. (see
The commander of the 326th Medical Battalion, to whom I am assigned, has given me permission to begin surveying our Air Assault medical companies for initial feedback and analysis of usefulness. If successful with this unit, and with proper command emphasis, a division-wide ongoing program can be developed.

SYMPTOMS OF BATTLE STRESS REACTIONS

Ineffectiveness among soldiers of the 17th, 18th and 19th centuries was originally seen, by medical persons, to be a result of nostalgia, an "organic illness". Social and environmental factors were gradually recognized as part of the overall symptomatology. In World War I, for example, psychological explanations were used to describe combat breakdown and sophisticated treatment procedures were employed. In World War II the need to examine the role of unit cohesion and the influence of physical exhaustion was recognized. During the Korean War the use of rest from combat and the recognition of battle anxiety played important roles in influencing treatment procedures. The Vietnam War witnessed the rise of characterological problems among participants in low-intensity, politically unpopular conflicts. In the 1973 Yom Kippur War (Arab-Israeli War) large numbers of casualties were produced from the high intensity nature of the conflict. The Israeli's officially admit to 10% of all casualties being psychiatric in nature. More recent figures suggest that psychiatric casualties may have been greater than 30%. Privately however, mental health officers suggest that the incidence was probably slightly higher. The discrepancy appears to be the result of recognizing the role of inadequate diagnosis and insufficient record keeping. The preliminary figures from the Lebanon conflict suggest a combat reaction incidence rate of more than 20% of all casualties. Potentially, as many as 10-20% of all Israeli personnel engaged in the Lebanon conflict may have suffered some symptoms associated with battle stress reaction, though most did not require treatment.
Exposure to war itself appears to be the primary stressor in current conflicts. The high-intensity nature of current combat takes a tremendous toll on the psyche of even the most stable and hardy soldier. Some researchers believe that recent trends in combat reaction symptomatology may be due more to diagnostic labeling than to actual symptom differences (Refer to Table 3 for symptom prevalence by war). In the Lebanon conflict, for example, the primary and most prevalent symptoms of combat reaction included anxiety/irritability, depressive affect, sleep disturbances, fears and social estrangement (Refer to Table 1 for symptom list and Table 2 for frequency distribution). The above symptoms were also prevalent in the 1973 Yom Kippur War, however initial treatment was not as appropriately available as in the Lebanon conflict. Return to duty rates were therefore, proportionately lower in the 1973 war, probably as a result of the use of a different treatment paradigm than that which was used in the Lebanon conflict.

In both of the above Israeli conflicts, as well as the U.S. experiences in World War II and Korea, the initial combat reaction symptoms of anxiety, confusion and fatigue progressed into more severe depressive, dissociative, conversive or antisocial symptoms if initial treatment was delayed or ineffective. Battle stress symptoms appear even before combat, with the anticipation of combat action, and continue throughout the conflict. In Lebanon, combat stress symptoms continue to be seen among the Israeli occupation forces. Although they are being seen in very small numbers, they occur even in the absence of major combat actions. This data suggests the probability that stress symptoms are potentially a part of any military action.

INCIDENCE OF BATTLE STRESS CASUALTIES

As has been mentioned, the IDF suffered significant numbers of battle stress casualties. The Israeli Mental Health Officers at the conference were not allowed
to release actual casualty numbers. The reported percentages of battle stress casualties range from 10-40% of the total number of casualties. Not all battle reaction casualties were counted because not all of these casualties were evacuated for treatment. Many were reported to have been treated by their commanders, comrades, friends, etc. without evacuation from the unit. A paratroop officer and a tank gunner each told me about soldiers who began to break down in combat and were taken by the commander into his vehicle (tank, APC, jeep, etc.). These commanders appear to have unknowingly applied battlefield psychology procedures through a crisis management model. In many cases, the reassurance and role-modeling of the commander resulted in effective return of the soldier to his normal duties in 2-3 days.

Battle stress reactions also occurred among the physically wounded. There were no figures released concerning the number or percent of battle reaction cases which were also physically wounded. However, the best estimates of the mental health officers suggest that 10% of all combat reaction casualties also suffered some physical wounds. There were also no detailed records of which came first, the combat reaction or the wound. In general, the data from the Lebanon conflict and the 1973 War was not significantly different in respect to numbers and types of battle stress reaction casualties.

TREATMENT FACILITIES AND METHODS

Forward treatment of combat psychiatric casualties has been considered the preferred treatment since World War I. This treatment typically consists of short-term, intensive and brief psychotherapy as close to the place of breakdown as possible with the full expectation of returning the casualty to duty in 2-3 days. The major aim of forward treatment is the restoration of biological deprivations such as food, water, sleep and warmth. Forward treatment procedures rely on unit cohesion and leadership to help motivate the individual to rapidly return to his unit.
Wars since World War I have demonstrated the superiority of forward treatment facilities over rear treatment facilities in the return of psychiatric casualties as effective soldiers. The conflict in Lebanon supported the expectation that forward treatment was by far superior in returning battle reaction casualties to effective functioning as soldiers. These treatment facilities ultimately returned 90% of all combat reaction casualties they treated to forward units. Those forward treatment facilities which were able to keep the combat reaction soldier near and in contact with his unit had a greater than 90% return rate.

As previously mentioned, during the Lebanon conflict the first echelon of treatment was the Advanced Medical Battalion (AMB) located 2-6 Km to the rear of fighting. It was staffed primarily by younger professionals with more combat experience and expertise in the treatment of combat reaction casualties than the staff of the rear treatment facilities. The combat reaction casualties typically arrived by ground ambulance (APC) after being referred for treatment by the battalion aid station. These casualties were held at the AMB for up to 48 hours. They would then be returned to their units or if not sufficiently improved, evacuated rearward. Treatment at the AMB consisted of biological replenishment (food, water, rest) and intensive therapy conducted 2-3 times daily.

The main goal of treatment at this forward facility was to convey to the person that he had worth and could quickly recover and return to his unit with full effectiveness. Soldiers from the casualty's unit were encouraged to visit when possible. The purpose here was to help re-establish self-esteem and alleviate guilt and shame. The casualty was continually reminded that he was a soldier. He retained his personal weapon (when appropriate), was used to help other wounded and combat reaction soldiers and was generally made a productive member of the facility. He was not segregated or isolated from the other physical casualties and was thus not made to feel like an outcast. Combat reaction soldiers were labeled as casualties, not patients. The
latter label tended to inhibit positive treatment. In this facility, rest did not mean lying down. Reaction casualties received rest from combat while being kept productive. This proved to be another means of enhancing treatment results. The greatest problem for this facility was in the establishment of reassignment channels for soldiers to be returned to their original unit. It appeared that fewer combat reaction casualties suffered relapses or required re-evaluation when they were successfully returned to, and accepted by, their original units.

Those soldiers initially treated at the AMB who failed to improve within 48-hour or who were evacuated directly to Israel, were treated at a second echelon facility. This facility was originally located on a military base in Northern Israel and met with only limited initial success. The staff was assembled ad hoc and, unlike the forward treatment teams, had not been extensively trained in the treatment of battle stress casualties. The casualty return rate from this facility, during the early weeks of fighting, was reported to be less than 30%. Most of those casualties not returned to forward duty received discharges or psychiatric profiles. Later in the conflict, this facility was closed and the IDF established second echelon treatment in Southern Lebanon. These new second echelon facilities were located close to or even co-located with the AMB. Toward the end of the conflict, the second echelon treatment began returning close to 100% of the casualties they treated. The experience of the IDF with these facilities adds further support to the need for forward treatment of battle stress casualties by well-trained and well-organized mental health personnel.

The second echelon treatment facility had three main goals: (1) To return the battle stress reaction casualty to optimum function, (2) to retain the casualty with a military framework without the psychiatric discharge stigma and (3) to return the soldier to his original military unit if at all possible. The major principles of
the facility were as follows: (1) To co-locate with a military training center which had heavy military traffic in the area, (2) to maintain the military milieu at all times (to include possession of and training with one’s individual weapon, (3) intensive group and individual therapy, (4) include daily military training, (5) arrange for commanders to give group talks, (6) limit treatment to a maximum of 14 days and (7) include daily physical training and recreation activities. These principles for the treatment of combat reaction casualties reflect the current doctrine as it was developed from the lessons learned by the Israelis during their 1973 War.

The third echelon of treatment was the Combat Fitness Retraining Unit (CFRU). It was established for the treatment of combat reactions who failed to return to normalcy after one or two previous therapeutic attempts. It was developed to help prevent psychiatric hospitalization of the more severe combat reaction casualties. The major goal of this treatment facility was the improvement of the casualty’s functioning to that of the pre-war level, within their natural environment, within three weeks. Return to combat was the primary goal of the facility.

Most of the casualties treated at this facility displayed extreme stress reactions and all were said to have had significant civilian and military adjustment reactions. The major presenting symptoms of the casualties were focused around depression and fears. Depression was attributed primarily to feeling helpless, attributing this helplessness to some self-defect, not having adaptive solutions, and a loss of reinforcers. The fears appeared to be caused by a conditioning of the emotional trauma to the military and the presence of strong irrational beliefs. Ninety percent of these more severe casualties were said to have premorbid personalities which included character disorders, schizoid, paranoid or other personality disturbances. The methods of treatment reflected the more serious nature of these casualties and varied somewhat depending upon the specific symptom pattern of the casualty. The
principles under which the facility functioned were the same for everyone:

1. Maintain the military milieu at all times.
4. Additional psychopharmacologic and behavioral methods developed as needed and on a case by case basis.
5. Use of an interdisciplinary approach.
6. Therapeutic cooperation was maintained between the professional and non-professional personnel.
7. The therapist functions as the casualty's military commander.

The comprehensive treatment strategy listed above included the use of individual and group psychotherapy, individual and group athletics, physical fitness training and military regimentation. This facility placed major importance on developing group cohesiveness and promotion of individual identity. This goal was accomplished by maintaining a military regimen and using competitive athletics and physical training within the same physical and emotional setting. Staff personnel carried weapons from day 2 and encouraged the casualties to do the same. Military formations and inspections were regular daily occurrences. Participation in weapons demonstrations and firing range exercises were also encouraged from day 2. Military physical fitness training, military drills, skill development and skill rehabilitation were a regular part of this rehabilitation program. Sports coaches who were experienced in working with combat reactions conducted rigorous athletic training focused on group cooperation and group effort.

As noted above, the major goal of this treatment facility was the effective return to combat of the stress casualty. The therapeutic principles of treatment were thus designed to include the above military and physical training in a general
treatment program. Individual psychotherapy was an integral part of the whole military and therapeutic program. Individual therapy focused on abreaction (expression of pent-up affect) of the traumatic experience(s) which contributed to, or produced, the breakdown. The individual was helped to work through and resolve the underlying problems and trauma. He was helped to attain personal insight into himself and thus strengthen his own self-identity resolving his guilt and shame and reasserting his strength and manhood. Each therapist was also the immediate commander of the casualty and took part in all of the physical and military activities. The therapist thus was able to encourage, motivate, order, analyze and direct the individual's daily activities in a positive influential manner. In general, this individual therapy approach appeared most successful when it focused specifically upon dealing with the post-traumatic crisis itself. The foci here were issues of shame and guilt, aggression, manhood vs weakness, dependency vs independence, coping vs flight, and self-esteem vs self-depreciation.

The comprehensive nature of the treatment program at the CFRU also included group therapy. The focus here was designed to parallel the combat reaction process. The main issues of the group were; dealing with the trauma of combat and the breakdown, the post-traumatic process, and concern with loss of group and personal identities. Since the group experience is a crucial element in a fighting unit, the failure of group involvement increases the chances for combat reaction. Recovery from combat reaction appears to be enhanced by improving group experiences and re-establishing group identity. Therefore, the total program of the CFRU emphasized the group experiences of belonging, trusting and sharing. Group therapy was an important part of this emphasis. One premise of combat psychiatry is that when a combat reaction casualty is evacuated from the close proximity and support of his comrades, the separation becomes a lonely experience which produces a severe blow to his self-esteem and identity. The group process of the CFRU functioned to develop a new
group identity for its members and thereby improve personal identity. For this

group therapy program to be successful it required the resolution of three distinct

stage sequences: (1) The abreaction of the trauma and preoccupation with the symp-

(2) forming group cohesion and crystallizing group and individual identities and

(3) learning to cope with the future, separation, and return to military service or

the civilian life. The success of the CFRU's group therapy program appears to suppo-

the premise that with severe psychiatric stress reactions, abreactive group work

is the treatment of choice.

PREVENTION OF BATTLE STRESS REACTION CASUALTIES

As mentioned in the early part of this report, battle stress reaction casualties
appear to be a normal consequence of war. It also appears that total prevention is
unlikely and every combatant and support soldier, regardless of rank, can become a
combat reaction casualty. Although combat reactions cannot be totally prevented,
they can be minimized. Primary prevention techniques include the education of
individual soldiers and commanders in the use of prevention methods, development of
unit morale and cohesion based on mutual respect, confidence and personal identity,
acceptance and use of mental health resources for treatment and training, and regular
surveying of units to provide feedback to commanders on current unit effectiveness
and suggestions for potential areas of change.

The Israeli Defense Force maintains an active, ongoing and extensive combat
reaction prevention program. It assigns psychologists to the staff of each division
to advise division commanders concerning the morale and other psychological factors
important in maintaining combat effectiveness. Typically, one psychologist is
assigned to the division commander's staff and one to each brigade commander's staff.
These psychologists are typically referred to as Battle Psychologists and function
as command consultants similar to our organizational effectiveness officers. They
are not primary treatment personnel. Treatment is the function of a separate group
of five mental health officers who are assigned to each division to specifically provide treatment.

During the Lebanon conflict, the Battle Psychologists appear to have played an important role in helping to minimize combat reaction cases. It was reported that those brigade commanders who used their psychologists as consultants had lower incidences of psychiatric casualties, higher unit morale and better unit cohesion than those commanders who failed to appropriately use their psychologists. It should also be noted that the elite units, those units whose training emphasis is on unit morale, cohesion and pride, had few significant problems with psychiatric casualties. These units are typically small (company or smaller) and have highly specialized strategic missions. They are similar to our Special Forces, Pathfinders, Navy Seals, etc.

The IDF experiences from the 1973 War and the Lebanon conflict have shown the need and effectiveness of a well-developed and command supported battle stress prevention program. Command utilization of mental health resources was shown to be a critical element in the success of such a program, while the availability of psychological consultants within the brigades appears to be a necessary part of any preventive program. With minor TO&E changes, and command education, we in the U.S. Army are capable of providing even more comprehensive and effective command consultations than the Israelis. These changes could include the following:

1. Assignment of a mental health officer (psychologist or social worker) to each brigade. This officer would function much like the Israeli Battle Psychologist, as a command consultant, but could also provide direct clinical treatment.

2. Make combat training more realistic through the use of psychiatric casualty plays. Commanders should be made aware of what combat reaction casualties
are going to do to their manpower. These casualty plays should be supervi-
sed and evaluated by the mental health teams at brigade and division
level and used during every FTX.

3. All mental health personnel should be cross-trained in emergency medical
specialty skill areas. In high intensity combat, mental health specialist
will probably need to treat the psychiatric and physically wounded under
battlefield conditions and thus need the extra medical training.

4. Eliminate the psychiatric field chests from TO&E inventories and substitute
portable aid bags. These bags should contain a minimum of psychological
equipment (surveys, unit questionnaires, on an as needed basis) and a
maximum of first aid equipment. The metal psychiatric chests are bulky and
the current equipment contained within them will likely not be used during
combat operations.

5. Mental health survey teams should be a regular command consulting element
of every unit. These teams would survey the units during special events
such as change of command, prior to field exercises, during field exercises
following field exercises, as the unit rotates in and out of combat, before
during and after deployment (such as MFO), etc. The areas to be surveyed
would include morale, cohesion, confidence, combat psychological effective-
ness, etc. Potential problem soldiers could also be identified and poten-
tial severe problems minimized.

IDF FUTURE PLANS

Based on the experiences of the Lebanon conflict, the IDF has begun to make
changes in their mental health format. Some of the proposed changes include the
following:

1. Mental health personnel are to be placed far forward with medical
treatment capabilities.
2. Simulated combat exercises will be made as real as possible and will integrate the mental health capabilities.

3. Commanders are to be indoctrinated into the use of psychologists to eliminate their mystique and bias.

4. Whenever the mental health facilities are positioned, they will be dependent on the medical element.

5. Medical personnel will be involved in the psychiatric treatment of casualties.

6. Commanders of combat units will be made a part of all decision processes; convince him that mental health treatment is a systems approach; keep the lines of communication between commander and treatment facility open and two-way.

7. Mental health is an extension of command. Mental health providers are to be leadership trained and experienced.

8. Train forward mental health providers in communication skills, military skills and professionalism.

9. Consider the mission of the mental health provider just as important as anyone else's.

10. Use of psychological teams to survey units after heavy fighting, heavy casualties, after being hit by friendly fire, etc., to clear up rumors and immediately treat developing symptoms to avoid evacuation rearward.

**SUMMARY AND CONCLUSIONS**

This report summarizes my attendance at The Third International Conference on Psychological Stress and Adjustment in Time of War and Peace, hosted in Tel Aviv, Israel. It presented major information available concerning psychiatric casualty occurrence and treatment obtained from the Israeli experiences during their recent Lebanon conflict.
The Israeli Defense Force admittedly suffered significant numbers of psychiatric casualties during their Lebanon conflict. Although some of the physically wounded also displayed psychiatric symptoms, the majority were unalloyed battle stress reactions. They occurred in large numbers primarily to units which did not appear to have high cohesion and morale, did not have significant training time together, were hit by friendly fire or were involved in very intensive sustained combat. Combat stress reactions are seen as a normal reaction to the stressors of war and are more likely to occur in the mid and high-intensity combat scenario. The IDF feels that it has been able to reduce the incidence of combat reactions through the use of Battle Psychologists and realistic combat training exercises which integrate mental health capabilities. During the Lebanon conflict, those Brigade commanders who utilized their Battle Psychologists as consultants, had a lower incidence rate of combat reaction casualties.

The IDF used a three echelon treatment program for their psychiatric casualties. The forward treatment facilities were able to return 90-95% of combat reaction casualties back to their units within 48 hours. The rear echelon facilities were less successful in returning the more severe reaction cases. Forward treatment is concluded to be the treatment of choice, since the further to the rear the initial treatment, the less likely the potential for effective return of the casualty to a combat unit.

The IDF learned a number of lessons during the Lebanon conflict. They have plans to implement changes in their mental health program as a result of these lessons. They determined that mental health resources can be more effectively used in treatment of battle reaction casualties and unit training of preventive measures. The development of good morale, leadership, training and family and community stability were seen to promote effective combat performance and reduce the incidence
of battle stress casualties. The planned use of Battle Psychologists in an expanded role in these areas is a further development toward improved pre-war planning and training.

The recent Israeli experiences with combat reaction casualties would appear to suggest that the U.S. Armed Forces may need to reexamine the role and current use of their mental health personnel.

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CPT, MSC
Division Psychologist
101st. Airborne Division(Air Assault)
Fort Campbell, Ky. 42223
TABLES

WAR RELATED STRESS: AN OVERVIEW OF THE CLINICAL PICTURE IN THE JUNE 1982 CONFLICT IN LEBANON.
**Table No. 1: Symptoms of combat-related reactions.**

<table>
<thead>
<tr>
<th>Anxiety</th>
<th>Sleep disturbances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irritability</td>
<td>Tremors</td>
</tr>
<tr>
<td>Depressive affect</td>
<td>Psychomotor disturbances</td>
</tr>
<tr>
<td>Guilt</td>
<td>Conversive reactions</td>
</tr>
<tr>
<td>Crying</td>
<td>Memory impairment</td>
</tr>
<tr>
<td>Fear—diffuse, focused</td>
<td>Confusion, concentration dist.</td>
</tr>
<tr>
<td>Constricted affect</td>
<td>Impaired functioning</td>
</tr>
<tr>
<td>Disturbing dreams, memories</td>
<td>Speech, communication impair.</td>
</tr>
<tr>
<td>&quot;Flashbacks&quot;</td>
<td>Social estrangement, detachment</td>
</tr>
<tr>
<td>Exhaustion, fatigue</td>
<td>Dissociative states</td>
</tr>
<tr>
<td>Decreased appetite</td>
<td>Avoidance behavior</td>
</tr>
<tr>
<td>Gastrointestinal discomfort</td>
<td>Discipline problems</td>
</tr>
<tr>
<td>Headaches</td>
<td>Explosive aggressive behavior</td>
</tr>
<tr>
<td>Sensitivity to noise, startle</td>
<td>Substance abuse</td>
</tr>
</tbody>
</table>

*These symptoms of combat-related reactions are the most frequently reported in World War One, World War Two, the Vietnam conflict and the 1983 Yom-Kippur war.*
Bar-On et al.

Table No. 2: Reported symptoms in the June 1982 conflict in Lebanon.*

<table>
<thead>
<tr>
<th></th>
<th>Symptom</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anxiety</td>
<td>56%</td>
</tr>
<tr>
<td>2</td>
<td>Depressive affect</td>
<td>38%</td>
</tr>
<tr>
<td>3</td>
<td>Sleep disturbances</td>
<td>34%</td>
</tr>
<tr>
<td>3</td>
<td>Fear—diffuse, focused</td>
<td>34%</td>
</tr>
<tr>
<td>5</td>
<td>Social arrangement, detachment</td>
<td>24%</td>
</tr>
<tr>
<td>6</td>
<td>Conversive reaction</td>
<td>22%</td>
</tr>
<tr>
<td>7</td>
<td>Crying</td>
<td>21%</td>
</tr>
<tr>
<td>8</td>
<td>Decreased appetite</td>
<td>19%</td>
</tr>
<tr>
<td>9</td>
<td>Headaches</td>
<td>19%</td>
</tr>
<tr>
<td>10</td>
<td>Exhaustion, fatigue</td>
<td>17%</td>
</tr>
<tr>
<td>11</td>
<td>Psychomotor disturbances</td>
<td>17%</td>
</tr>
<tr>
<td>11</td>
<td>Disturbing dreams, memories</td>
<td>17%</td>
</tr>
<tr>
<td>13</td>
<td>Tremors</td>
<td>13%</td>
</tr>
<tr>
<td>13</td>
<td>Confusion, concentration disturbances</td>
<td>13%</td>
</tr>
<tr>
<td>15</td>
<td>Speech, communication impairment</td>
<td>12%</td>
</tr>
<tr>
<td>17</td>
<td>Dissociative states</td>
<td>11%</td>
</tr>
<tr>
<td>17</td>
<td>Irritability</td>
<td>11%</td>
</tr>
<tr>
<td>17</td>
<td>Explaive aggressive behavior</td>
<td>11%</td>
</tr>
<tr>
<td>17</td>
<td>Memory impairment</td>
<td>11%</td>
</tr>
<tr>
<td>20</td>
<td>Noise sensitivity, startle</td>
<td>10%</td>
</tr>
</tbody>
</table>

* These are the most prevalently reported symptoms in the June 1982 conflict in Lebanon. They are presented in ranked order, according to the frequency of their appearance in the soldiers' files. The figures that appear to the right of each symptom reveal that the particular symptom was reported in X % of the cases.
Table No. 3: The most prevalent symptoms in: W.W.I W.W.II VIAT Y-K LEB. NAM '73 '82

<table>
<thead>
<tr>
<th>Symptom</th>
<th>W.W.I</th>
<th>W.W.II</th>
<th>VIAT</th>
<th>Y-K</th>
<th>LEB.</th>
<th>NAM '73</th>
<th>'82</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Depressive affect</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fear—diffuse, focused</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Constricted affect</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disturbing Dreams, Memories</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Exhaustion, fatigue</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased appetite</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastrointestinal discomfort</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Headaches</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitivity to noise, sterile</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep Disturbances</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tremors</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychomotor disturbances</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversive reactions</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confusion, concentration disturbances</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social estrangement, detachment</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissociative states</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipline problems</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explosive aggressive behavior</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Substance abuse</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

501
INSERTS

ISRAELI SURVEY QUESTIONNAIRES

PROPOSED 101st AIRBORNE DIVISION (AIR ASSAULT) SURVEY QUESTIONNAIRE
personal in nature

questionnaire for the soldier and officer

the Israeli army is interested in knowing what the individual soldier thinks and feels about various subjects at this time. there are few questions in front of you and each question has a few answers. read each question and select the most appropriate answer provided by circling the number.

note: numbers 1 through 12 for office use.

13. what is the condition of the morale in your unit?
   1. very high  2. high  3. medium  4. not so high  5. low

14. how ready (in your opinion) is your unit for war?
   1. very high  2. high  3. medium  4. low  5. not at all

15. in what condition using your own evaluation is the war supply of your unit?
   1. very high  2. high  3. medium  4. low  5. not at all

16. in your opinion how much will your friends show a willingness to fight if asked?
   1. very likely  2. likely  3. maybe  4. low  5. not at all

how much do you trust each of the following in time of fighting?

<table>
<thead>
<tr>
<th></th>
<th>very high</th>
<th>high</th>
<th>some</th>
<th>not much</th>
<th>not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>17. your leaders</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. your unit as a whole</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. your friends in your unit</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. yourself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

21. what are the prospects, in your opinion, that your unit will be involved in war activities in the near future?
   1. very high
   2. high
   3. medium
   4. low
   5. very low
**What Degree of Trust Do You Have in Your Chain of Command?**

<table>
<thead>
<tr>
<th>22. Battalion Leaders</th>
<th>Very High</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>23. Brigade Leaders</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>24. Division Leaders</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>25. GHQ Leaders</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>26. Ability of Army to Protect Israel.</th>
<th>Very High</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>27. Governmental Ministers</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

22. How well do you believe your unit's readiness condition is today? (Area, ability to defeat the enemy)


29. How well do you know the duties that your unit is suppose to do in a full...


30. What percentage of the time does your unit conduct: (training, preparation, exercise-physical, and so on...)

1. All the time 2. Most of the time 3. Part of the time 4. Very little

31. How much do you trust your equipment?


32. How great is your technical knowledge?


33. In general how do you evaluate yourself?


34. In general how do you evaluate the Syrian soldier?


35. In general how do you evaluate the terrorists as soldiers?


36. How has your unit crystallized from the point of view of establishing fric...


37. What is the social relationships between officers and soldiers in your uni...

1. Very good 2. Good 3. Not so good 4. Poor—not good at all

38. How much do you fear what might happen to you personally if military acti...

1. How much do the soldiers talk amongst themselves about preparing for combat?

20. Do unit officers talk with troops about soldiers' feelings and ideas?

41. Have you been able to call home when you first arrived to your present unit?

42. How much to believe that there is a need or justification to go to war?

43. What is the status of your individual morale today?

44. What do you believe to be the best solution to Israel's situation today?
   1. Political war 2. War 3. To continue in the political after war.

NOTE: WRITE ANY COMMENTS YOU MAY HAVE ABOUT THE SITUATION HERE:

BACKGROUND DETAILS:

COMPANY:
BATTALION:
BRIGADE:
DIVISION:

What is your military occupational specialty?

RANK:

TYPE OF SERVICE: 1. Regular 2. Draftee 3. Reservist on active duty

DID YOU PARTICIPATE IN ANY PRIOR WARS: YES OR NO

HOW LONG HAVE YOU BEEN ASSIGNED TO YOUR PRESENT UNIT?

EDUCATION LEVEL: 1. 8th grade 2. 9-12 years(no high school degree) 3. High graduation
   4. More than high school


WHAT IS YOUR AGE: 1. 18-21 2. 22-27 3. 23-33 4. 34-40 5. 41 an over

HOW MANY DAYS HAS YOUR UNIT BEEN ON ALERT? (Fill in the number of days)
QUESTIONNAIRE FOR THE SOLDIER

It is very important to your commander to know what you are feeling and thinking about the life in your division, about the course that you completed, about the style of the command, etc. Your thoughts together with the answers of your friends in the division will give us a picture about the condition, and on this basis your commanders will be able to change everything that needs to be changed.

It is very important that you give your real opinion so the picture that we’ll get will be correct, so please answer this questionnaire honestly and sincerely.

Confidentiality of your answers is assured. Your questionnaire will be read only by the psychological crew and in no case will your personal opinions be transferred to any other person. (Your answers are only used in combination with the answers of your friends in the division.)

1. Personal Number, 10-12 Enlistment Month, 13-15 Unit, 16-17 Division
2. Where do you live?
3. How many years did you study in school?
4. How many months have you served in the military?
   - 3 months
   - 4-6 months
   - 7-9 months
   - 10-12 months
   - 13 months plus
5. Which course have you recently participated in?
   - List
6. How hard did you and your friends try to succeed in the course?
   - 1. Very Much
   - 2. In-between
   - 3. Very little
7. How would you evaluate your relations with other members of your division?
   - 1. Good
   - 2. Not Good, Not Bad
   - 3. Bad
   - 4. Don't Know
8. How would you evaluate the punishments that were given by your commanders during the course?
   - 1. Usually Correct
   - 2. Sometimes Correct
   - 3. Usually Not Correct
9. How would you evaluate the discipline of your course?
   - 1. Hard
   - 2. In-between
   - 3. Soft
10. How would you define the relation you had with your commander?
    - 1. Good
    - 2. Not Good, Not Bad
    - 3. Bad
    - 4. No Relations
11. Same as 26 but different level of commander
12. Same as above

506
30-32. Evaluate the ability of your commanders to instruct:

<table>
<thead>
<tr>
<th>Type of Commander</th>
<th>Very Good</th>
<th>Good</th>
<th>In-between</th>
<th>Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

33-35. Evaluate the professional level of your commanders:

<table>
<thead>
<tr>
<th>Type of Commander</th>
<th>Very Good</th>
<th>Good</th>
<th>In-between</th>
<th>Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>33. Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. Rank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

36-39. How satisfied are you with the following factors:

<table>
<thead>
<tr>
<th>Factor</th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Marginally Satisfied</th>
<th>Not Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>36. Food</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. Quartermaster</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Dispensary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. Weekly Talks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

40. How satisfied are you with the subject of personal interviews?

<table>
<thead>
<tr>
<th></th>
<th>Very Satisfied</th>
<th>Satisfied</th>
<th>Marginally Satisfied</th>
<th>Not Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

41. How satisfied are you with the course that you just completed?

<table>
<thead>
<tr>
<th></th>
<th>Very much</th>
<th>In-between</th>
<th>Very Little</th>
</tr>
</thead>
<tbody>
<tr>
<td>41.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

42. What is the morale in your division or battery that you are serving in?

<table>
<thead>
<tr>
<th></th>
<th>Usually High</th>
<th>Sometimes High, Sometimes Low</th>
<th>Usually Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>42.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

43. If I had the opportunity I would like to:

<table>
<thead>
<tr>
<th></th>
<th>Stay in this group</th>
<th>Leave this group and be a tighter in a different unit</th>
<th>Go back to a rear echelon unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>43.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44. How proud are you in your friends or in (illegible)

<table>
<thead>
<tr>
<th></th>
<th>Very Much</th>
<th>In-between</th>
<th>Very Little</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

45. How proud are you of your unit?

<table>
<thead>
<tr>
<th></th>
<th>Very Much</th>
<th>In-between</th>
<th>Very Little</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

46. How much did you want to serve as a soldier (One word illegible) at the time you went into the military?

<table>
<thead>
<tr>
<th></th>
<th>Very Much</th>
<th>In-between</th>
<th>Very Little</th>
<th>Not At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

47. How much would you like to advance in your military career and be an officer?

<table>
<thead>
<tr>
<th></th>
<th>Very Much</th>
<th>In-between</th>
<th>Very Little</th>
<th>Not At All</th>
</tr>
</thead>
<tbody>
<tr>
<td>47.</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

48. How would you define the relationship between your commanders in the division amongst each other?

<table>
<thead>
<tr>
<th></th>
<th>Good</th>
<th>Not Good, Not Bad</th>
<th>Bad</th>
<th>Don't Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>48.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

507
50. How strict is military discipline in your unit as to your personal appearance, discipline in your camp, etc...
   1. Very Much  2. In-between  3. Very Little

51. How do they adhere to rules of discipline in your unit as regards to training, performing missions, safety, following orders, reporting truth, etc...
   1. Very Much  2. In-between  3. Very Little

52-54. How much do the following commanders try to solve the personal problems of the soldiers?

<table>
<thead>
<tr>
<th>Type of Commander</th>
<th>Very Much</th>
<th>In-between</th>
<th>Very Little</th>
</tr>
</thead>
<tbody>
<tr>
<td>52. Battalion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>53. Company</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>54. Platoon</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

55. How secure do you feel in going into battle with your friends in the division?

56. How secure do you feel going into combat with your unit commander?

57. What has been your morale in the past few weeks?

58. How proud are you of your branch of service?

If you have any problems that are disturbing you, mark in the rectangle the two problems that are disturbing you the most in order of concern (importance to you). Write the number of the problem which follows below:
1. Medical problem  2. Transferring to another branch  3. Family problem
4. Leaves  5. Get acclimated to hardship, keeping up with the formation  6. Bad treatment from the commanders  7. Emotional problems

59. Most Severe Problem

60. Second Problem

61. How would you evaluate the level of your group operating a tank or (abbreviation)?
   1. High  2. In-between  3. Low  4. I'm not operating a tank

62. How would you evaluate the level of the maintenance of your group in a tank or (abbreviation)?
   1. High  2. In-between  3. Low  4. I don't operate a tank
63-65. How secure do you feel going into battle with the following commanders:

<table>
<thead>
<tr>
<th>Type of Commander</th>
<th>Very Secure</th>
<th>Secure</th>
<th>In-between</th>
<th>Not So Secure</th>
<th>Not Secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battalion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platoon</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

66. Are you satisfied with the cohesion of your group?

67. How efficiently was the course time used?
1. Very Good  2. Good  3. Not Very Good  4. Bad-Lots of time was wasted

68. How ready and trained are you for combat?
1. I feel that I'm trained to a very satisfactory level  2. I feel that I'm trained to a satisfactory level  3. There is need for a little more training to reach a satisfactory level  4. There is need for much training to reach a satisfactory level

69. The following questions are specific for tank units only:

69. Since when do you know the people in your unit (gunner, loader, driver)?
1. I know them only since (abbreviation)  2. I became acquainted with them (different abbreviation)  3. I knew them well from (second abbreviation), but I wasn't in the same group with them  4. I met them in the (2nd abbreviation) and knew them well, one of them was already in the professional group  5. I was with both of them in the professional level group and I know them very well

70. How much time does your group spend on the tank as opposed to other groups in your division?
1. We are investing very much labor  2. Investing much, but not very much  3. Not investing very much  4. Not-investing much  5. Not investing at all

71. How much do you want to serve in a tank unit?

72. How much does the problem of vacations disturb you?

73. In the lines below give your opinion freely about the course that you completed or about another subject in your military service in which you are interested in expressing an opinion.
UNIT STATUS QUESTIONNAIRE (proposed for use with 101st.)

In an attempt to help improve unit combat effectiveness, Division Mental Health requests your cooperation in answering the following questions. The questions relate to elements of your unit's morale, cohesion and confidence.

It is very important that you answer these questions honestly and on your own. Confidentiality is assured. The data will be used only on a unit basis and will not reflect individual responses.

Please circle the most correct response to each question.

1. How would you rate your relations with other members of your unit?
   1. VERY GOOD   2. GOOD   3. O.K.   4. BAD   5. VERY BAD

2. How would you rate your relations with your chain of command?
   1. VERY GOOD   2. GOOD   3. O.K.   4. BAD   5. VERY BAD

3. How would you rate your relations with your commander?
   1. VERY GOOD   2. GOOD   3. O.K.   4. BAD   5. VERY BAD

4. How would you rate the methods of discipline used in your unit?
   1. VERY STRICT   2. STRICT   3. O.K.   4. LENIENT   5. NOT APPROPRIATE

5. To what extent does your commander set an example of leadership for you to follow?
   1. VERY GREAT   2. GREAT   3. O.K.   4. LITTLE   5. NOT AT ALL

6. Evaluate the ability of your NCO chain of command to command!
   1. EXCELLENT   2. VERY GOOD   3. GOOD   4. O.K.   5. BAD

7. Evaluate the ability of your officers to command!
   1. EXCELLENT   2. VERY GOOD   3. GOOD   4. O.K.   5. BAD
8. Evaluate the ability of your commander to command!
   1. EXCELLENT  2. VERY GOOD  3. GOOD  4. O.K.  5. BAD

9. How would you rate your equipment?
   1. EXCELLENT  2. VERY GOOD  3. GOOD  4. O.K.  5. BAD

10. How would you rate the morale in your unit?
    1. VERY HIGH  2. HIGH  3. O.K.  4. LOW  5. VERY LOW

11. How much pride do you have in yourself as a soldier?
    1. VERY MUCH  2. MUCH  3. O.K.  4. LITTLE  5. VERY LITTLE

12. How much pride do you have in your unit?
    1. VERY MUCH  2. MUCH  3. O.K.  4. LITTLE  5. VERY LITTLE

13. How willing do you think your chain of command is to solve the personal problems of the soldier?
    1. VERY WILLING  2. MOSTLY WILLING  3. SORT-OF-WILLING  4. NOT AT ALL

14. How ready is your unit to go to combat?
    1. VERY HIGH  2. HIGH  3. MEDIUM  4. LOW  5. VERY LOW

15. How ready is your commander to go to combat?
    1. VERY HIGH  2. HIGH  3. MEDIUM  4. LOW  5. VERY LOW

16. How willing are you to fight if the need exists?
    1. VERY MUCH  2. MUCH  3. SORT OF  4. LITTLE  5. VERY LITTLE
17. How willing to fight do you think your friends in the unit are, if the need exists?
   1. VERY MUCH  2. MUCH  3. SORT-OF  4. LITTLE  5. VERY LITTLE

18. How secure do you feel going into combat with your NCO chain of command?
   1. VERY MUCH  2. MUCH  3. SORT-OF  4. LITTLE  5. VERY LITTLE

19. How secure do you feel going into combat with your officers?
   1. VERY MUCH  2. MUCH  3. SORT-OF  4. LITTLE  5. VERY LITTLE

20. How secure do you feel going into combat with your commander?
   1. VERY MUCH  2. MUCH  3. SORT-OF  4. LITTLE  5. VERY LITTLE

21. Do unit NCO’s talk with troops about soldier’s feelings and ideas?
   1. MANY TIMES  2. SOMETIMES  3. FEW TIMES  4. NOT-AT-ALL

22. Do unit officers talk with troops about soldier’s feelings and ideas?
   1. MANY TIMES  2. SOMETIMES  3. FEW TIMES  4. NOT-AT-ALL

23. In a combat situation, how many people in your unit would be more trouble than they are worth?
   1. MOST  2. MANY  3. A FEW  4. VERY FEW  5. NONE

24. Over all, how do you think your unit would perform in a combat situation?
   1. EXCELLENT  2. VERY GOOD  3. GOOD  4. O.K.  5. NOT GOOD

25. Write what you think to be the major problem in your unit!
26. Write what you think to be the second major problem in the unit!

27. Write what you think to be your major personal problem!

28. Write what you think to be your second major personal problem!

29. Write any comments about your unit you wish to make! You may use the rest of this page and the reverse side of the pages in this questionnaire to make any comments you wish, about anything!
APPENDIX*

*This information was received too late to be incorporated into the body of this report. The enclosures in this appendix were supplied by LTC Gregory Lucas Belenky, M.D., Department of Medical Neurosciences, Division of Neuropsychiatry, Walter Reed Army Institute of Research, Washington, D.C. 20012
PHYSICAL CASUALTIES IN ISRAELI FORCES IN LEBANON
JUNE-SEPTEMBER 1982
(Adopted from Do Lev (personal communication))

Wounded in Action
(WIA) 2600

Killed in Action
(KIA) 465

For WIA:
80% evacuated beyond level of medical Bn

For KIA:
50% severe head injury
20% severe crush injury to body
5% also beyond help

So 75% beyond help even with most vigorous medical + surgical intervention
INCIDENCE OF PSYCHIATRIC CASUALTIES
(BATTLE SHOCK & OTHERS)
IN ISRAELI FORCES IN LEBANON
JUNE-SEPTEMBER 1982

(Adapted from International Herald Tribune
8-9 January 1983 + Noy (personal communication))

Psychiatric Casualties 600
Wounded in Action (WIA) 2600
Killed in Action (KIA) 465

Ratio of Psychiatric Casualties (includes the 10% of Psychiatric Casualties who were also wounded) to WIA was 23:100

In comparison for the 1973 Arab-Israeli war the Ratio of Psychiatric Casualties (does not include Psychiatric Casualties who were also wounded) to WIA was approximately 30:100
### Ratio of Battle Shock to Wounded by Age in Israeli Forces in Lebanon

(Adapted from Solomon and Noy (1983))

<table>
<thead>
<tr>
<th>AGE</th>
<th>RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-21</td>
<td>1:10.27</td>
</tr>
<tr>
<td>22-25</td>
<td>1:4.47</td>
</tr>
<tr>
<td>26-30</td>
<td>1:2.66</td>
</tr>
<tr>
<td>31-35</td>
<td>1:3.47</td>
</tr>
<tr>
<td>36-55</td>
<td>1:3.57</td>
</tr>
</tbody>
</table>

By Chi Square on actual members, groups differ (p < .0000).

Also predicting breakdown:
- Low education
- Low motivation score (personality, attitude towards Army, etc.)
- Low performance predictor score (intelligence, Hebrew, etc.)
- Reservist
- Low rank
- Support unit
BATTLE STRESS- MAJOR PREDICTOR OF BATTLE SHOCK
ISRAEL FORCES IN LEBANON
JUNE-SEPTEMBER 1982
(Adopted from Noy & Solomon 1983)

Based on 4 Battalions

Ranked:

Preparation (enemy location, mission, false alarms, training)
Battle (artillery, air attack, ambush, hostage, mine field)
Support (tactical, logistics, equipment)
Enemy resistance (stubborn, adequate, weak)
Trust by commander in higher command (unjustified pressure, some pressure, adequate support)

Rank (1-4 most difficult to least difficult)

<table>
<thead>
<tr>
<th>Physical casualties</th>
<th>Psychiatric casualties</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36</td>
<td>31</td>
</tr>
<tr>
<td>2</td>
<td>23</td>
<td>09</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>01</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>
Results of Treatment (Net Return) by Echelon for all Psychiatric Casualties (Battle Shock alone in parentheses)

<table>
<thead>
<tr>
<th>TREATMENT</th>
<th>Returned to Unit</th>
<th>Not Returned to Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immediate</strong> (break occurred at front)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward (2-5 Km from the front)</td>
<td>59% (66%)</td>
<td>41% (34%)</td>
</tr>
<tr>
<td>Border (still close initially to the front)</td>
<td>59.5% (65.6%)</td>
<td>40.5% (34.4%)</td>
</tr>
<tr>
<td>Central + Northern Israel</td>
<td>39.5% (45.8%)</td>
<td>60.5% (54.2%)</td>
</tr>
</tbody>
</table>

| **Delayed** (break occurred at home on pass) |
| Central + Northern Israel | 16.3% (11.2%) | 83.7% (88.8%) |

By Chi Square on actual numbers, groups differ (p < .0001).
FACTORS PREDICTING RETURN
(Other than forward treatment)
(Adapted from Noy + Solomon (1983))

Younger soldiers more likely to return

Combat soldiers more likely to return

Dx of Battle Shock (emotional reaction to stress of battle)
increased likelihood of return

No correlation:
  Pre-war medical history
  Country of origin
  Kaba (performance predictor) score
  Intelligence
  Education
  Motivation score (on induction)
  Type of service (regular or reserve)
REOCCURRENCE OF BATTLE SHOCK IN
ISRAELI FORCES IN LEBANON
JUNE-SEPTEMBER 1982

After initial breakdown in the 1973
Arab-Israeli War
(Adapted from Solomon (1983))

Cases of Battle Shock from
1973 Arab-Israeli War

By June 1982 of above
(600 still on record):
Combat ready by profile
Exempt from military service

By June 1982 of control group of
1973 Arab-Israeli War Veteran:
Combat ready by profile
Exempt from military service

Recovered Battle Shock from 1973
actually in serving in Lebanon

Reoccurrence of Battle Shock in Lebanon
in Battle Shock cases from 1973

Occurrence of Battle Shock in control
group of 1973 Arab-Israeli War Veterans

Overall risk of occurrence of Battle
Shock for all Israeli Forces in
Lebanon

Cases of Battle Shock from
1973 Arab-Israeli War

By June 1982 of above
(600 still on record):
Combat ready by profile
Exempt from military service

By June 1982 of control group of
1973 Arab-Israeli War Veteran:
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group of 1973 Arab-Israeli War Veterans

Overall risk of occurrence of Battle
Shock for all Israeli Forces in
Lebanon
COMBAT FITNESS RETRAINING UNIT (CFRU)
(3rd Echelon)
(Adapted from Margalit (1983))

60 Patients (10% of total) treated at CRFU
Equally divided between reservists + regular soldiers
Most from combat units
Stayed an average of 26 days
5 patients (8% of total) received tricyclic antidepressants

Regular service soldiers:
43% returned to original unit
57% reassigned to non-combat unit

Reservists:
38% returned to original unit
62% reassigned to non-combat unit

Some actually back to combat
Battle Stress Casualties in the Israeli Defense Force
During the War in Lebanon

Gregory Lucas Belenky, MD

OCONUS Trip Report - Visit to the Mental Health Department
of the Israeli Defense Force
JUNE-JULY 1982
1. Introduction: This report summarizes my visit to the Mental Health Department of the Israel Defense Force (IDF). During this visit I met with personnel of the Mental Health Department of the IDF and discussed battle stress casualties resulting from the war in Lebanon. The IDF was successful in returning 90-95% of forward treated battle stress casualties to their units within 48-72 hours, with a net return (initial return minus reevacuation) of between 70-85%. This excellent result was accomplished by mental health officers placed forward in the advanced medical battalions which supported each division. These mental health personnel were mostly reservists, and had little or no prior experience with battle stress casualties. The success was due to their placement forward with the division, and to the didactic training in the treatment of battle stress casualties they received from the mental health department prior to the war.

2. Background: My visit with the IDF took place from 26 June to 4 July 1982. I was in Israel attending and presenting a paper at the 13th Collegium Internationale Neuropsychopharmacologicum in Jerusalem (21-25 June 1982). During this conference, I contacted my colleague in the IDF Mental Health Department, Lieutenant Colonel (Dr.) Shabtai Noy, who invited me to extend my visit to observe the management of the cases of battle stress casualties generated by the war in Lebanon. In the course of my visit, I met with Colonel (Dr.) Ron Levy, the head of the IDF Mental Health Department, and with Colonel (Dr.) Reuven Gal, former head to the Psychology Department of the IDF Personnel Command. I visited the IDF rear echelon mental health treatment facilities, participated in interviews of soldiers with battle stress fatigue and in case conferences discussing such cases, and had free and wide ranging discussions with the psychologists and psychiatrists of the IDF Mental Health Department concerning the natural history, prevention, and treatment of battle stress casualties. The places that I visited included the headquarters of the Mental Health Department, the mental health research group, the central mental health clinic, the convalescent hospital for the recovering wounded, and the battle stress casualty rehabilitation facility in Central Israel; and the rearward battle stress casualty treatment facility in Northern Israel. The IDF is keeping excellent records on battle stress casualties and is already beginning a formal analysis of its experience with battle stress casualties in Lebanon. The following are the impressions I formed during my visit, supplemented by subsequent correspondence and conversations with the Israelis since my return.

3. Incidence of Battle Stress Casualties: The IDF had significant numbers of cases of battle stress casualties generated by the fighting in Lebanon. By my estimate, the proportion of psychiatric casualties to physical casualties during the first two weeks of the war was similar to that of the Yom Kippur War in 1973, that is approximately 10%. According to reports published in the Jerusalem Post the IDF suffered 1200 wounded and 250 killed in the first two and a half weeks of fighting in Lebanon. I estimate therefore that the IDF had approximately 150 soldiers evacuated as psychiatric casualties during this period. Later in the war, the proportion of the psychiatric casualties rose to between 20-25% of total casualties. A small proportion of the psychiatric casualties throughout the war were not true battle stress reaction but rather disaffection from military service.

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4. Syndrome of the Battle Stress Reaction: The clinical syndrome of battle stress reaction in Lebanon was similar to that which was observed by the IDF in 1973, and observed by our own forces in the Korean War and the Second World War. I was present during ten clinical interviews, heard descriptions of another twenty or so cases from mental health officers, and reviewed a random sample of twenty case records. The syndrome of battle stress reaction was characterized by anxiety, confusion, and fatigue. Predisposing factors included continuous fighting, intense fighting, or the death of a friend or commander. If initial treatment was ineffective or delayed, the syndrome progressed and depressive, dissociative, conversive, or antisocial symptoms emerged. Battle stress casualties were first seen in the first few days of combat, and cases continued to emerge in heavy fighting. In many instances, the soldiers had been engaged in heavy fighting and had gone without sleep for two or more days. Cases were more numerous where the fighting was intense and physical casualties were high. Immediate precipitating events were frequently intense combat, seeing friends or immediate commanders wounded or killed, or a personal close escape from death. In one situation where IDF soldiers were hit by friendly fire, battle stress casualties were high, as were physical casualties. In the 1973 Yom Kippur War, reservists (who were generally older, less fit, more likely to be married, further from their initial military training, and who presumably had weaker ties to their units when compared to regular service soldiers) appeared to be more vulnerable to battle stress reaction. As yet no formal statistical comparisons have been made upon the effects of reserve status on likelihood of battle stress reaction during the fighting in Lebanon.

5. Treatment of Battle Stress Casualties: Prior to the war in Lebanon, the Mental Health Department of the IDF had made plans to treat battle stress casualties forward at the level of the Advanced Medical Battalion (AMB). They had conducted extensive education and training (including exercises) of the forward mental health teams attached to the AMBs. Each AMB supports a division, and is located from 2 to 20 Kilometers to the rear of the fighting. This meant that in Lebanon the AMB operated near the front. The forward mental health team attached to each AMB consisted of a psychiatrist, a psychologist, and three other mental health officers, usually psychologists and/or social workers. According to the IDF plan, battle stress casualties were to be seen first at the battalion aid station, and if treatment was required would then be evacuated by ground ambulance to the AMB where the forward mental health treatment team would hold them up for up to 48-72 hours before either returning them to their units or, if they were unimproved, further evacuating them rearward. In practice, of the soldiers with battle stress reaction treated by the forward mental health treatment team in the AMB, 90-95% were successfully returned to their units within 48-72 hours. Some of these relapsed and required re-evacuation. Overall, there was a net return (initial return minus re-evacuation) of 70-85%. Thus, overall 70-85% of battle stress casualties were returned to their units after 48-72 hours of forward treatment. Toward the end of the war the net return rate increased to from 80-100%. The IDF found that the placement of knowledgeable mental health officers forward with the division to be of great value in insuring effective treatment of battle stress casualties. In one instance, an AMB received 22 battle stress casualties over the space of a few hours. This AMB was about to move, and the commander of the division wanted the battle stress
casualties evacuated out of the division area. The division psychiatrist spoke with the division commander and requested that he and his mental health team be allowed to stay in place temporarily so that they could hold and treat the battle stress casualties within the division and avoid further rearward evacuation. The discussion was heated, but the division psychiatrist prevailed through his knowledge of and authority on psychological, medical, and military matters. When the division psychiatrist led his team forward 48 hours later to rejoin the AMB, he brought with him 20 of the 22 battle stress casualties ready to return to their units and to combat duty. The division psychiatrist appeared to have played a crucial role in insuring the effectiveness of the division mental health personnel in treating battle stress casualties.

Because of the tactical situation, only half of the psychiatric casualties were treated forward. The terrain in Lebanon, especially in the East, is hilly, and the roads are narrow and run through steep valleys. Military traffic moving forward toward the front made rearward ground evacuation nearly impossible. Evacuation from the battalion aid station for both those with physical wounds and those with battle stress reaction was therefore by helicopter. The lightly wounded were flown to the AMB, and the heavily wounded were flown directly back to civilian hospitals in Israel. As battle stress casualties were evacuated with the physically wounded, approximately half of the estimated 150 cases were evacuated from the battalion aid station to the AMB and treated there, while half were evacuated back to Israel. These more rearward evacuated soldiers were seen initially at civilian hospitals and then transferred to a rearward second echelon treatment facility established during the first few days of war in Northeastern Israel. The distribution of cases between the two routes of evacuation, and thus between forward and rearward treatment, appears to have been quite random and specifically uncorrelated with the severity of the symptoms of battle stress. Treatment for both forward and rearward treated soldiers was similar and consisted primarily of 48-72 hours rest with rehydration and food. In contrast to the 90-95% initial and 70-85% net return for soldiers treated forward, only 30% of the soldiers treated rearward were returned to their units. A Chi Square analysis of the currently available numbers reveals probability of less than one in ten thousand that this result could be due to chance.

I visited the rearward treatment facility in Northern Israel. Although it was on a military base, the atmosphere tended to drift to one of a conventional civilian mental hospital, and the expectation of a rapid return to duty was largely absent. Members of the staff were competent mental health workers but they had been assembled ad hoc, and, unlike the forward mental health teams, had not been extensively trained in the treatment of battle stress casualties and seemed to be unaware of the importance of brief treatment and a rapid return to the combat unit. Even had they been more knowledgeable, the ambience of safety, the attitude of the soldiers themselves, and logistical problems due to their rearward location would have made a rapid return to the combat unit difficult. Later in the war, the IDF closed the facility in Northeastern Israel and established second echelon treatment facilities in Lebanon, very close to, or even co-located with, the AMBs. Soldiers initially treated at the AMBs who failed to improve within 48-72 hours, or soldiers who had been evacuated directly to Israel by-passing the AMBs, were treated at these new second echelon facilities.
In the case of soldiers who had been evacuated to Israel, this meant returning them forward for treatment. Toward the end of the war, the percentage of soldiers returned to their unit from these forward second echelon facilities approached 100%. The IDF experience in Lebanon provides further support for the effectiveness of forward treatment by well trained and well organized but not necessarily extensively experienced mental health personnel.

These data from the IDF experience in Lebanon underscore the importance of forward treatment within the divisional area in order to effectively rehabilitate soldiers with battle stress reaction. For such forward treatment to be possible mental health personnel must be deployed forward with the division. The critical person in the divisional mental health team is the psychiatrist. Through his military, medical, and psychological training, he is indispensable in insuring the effective employment of forward deployed mental health personnel.

6. Delayed Battle Stress Casualties: In the IDF it is customary (tactical situation permitting) to give units who have fought in difficult actions 48 hours leave to visit home. During the fighting in Lebanon, a number of units received passes of this kind. These passes are used as a reward for good performance in combat. Some of the soldiers from these units developed battle stress reactions while at home on pass. The symptoms were typically crying, loss of appetite, and sleeplessness. The affected soldiers were generally unable to account for their symptoms. The IDF psychiatrist who headed the central clinic of the Mental Health Department, and who therefore saw most of those cases, though that these men would not have broken down had they remained with their units in Lebanon. In his view, the granting of these passes weakened the soldiers' ties to their units, reduced their ability to cope with their recent combat experiences and thereby virtually created de novo battle stress casualties. He rejected the alternative hypothesis that either these soldiers were sent on pass because their commanders recognized in them the signs of incipient breakdown, or that they developed symptoms because they were afraid to return to the front. It is my impression that there were some tens of such cases seen at the central clinic of the IDF Mental Health Department. Most of these cases were referred for outpatient psychotherapy, a few were referred to the rearward treatment facilities in Northern Israel, and few, if any, were returned to their units. The delayed battle stress casualties were similar to those seen by the IDF in the Yom Kippur War in 1973. The occurrence of delayed battle stress casualties provides further evidence of the importance of unit cohesion and comradeship in withstanding the stress of combat.

7. Battle Stress Reactions in the Wounded: Battle stress reactions occurred in wounded soldiers. I have no estimate of the frequency of occurrences. The IDF deployed mental health officers to the hospitals treating the wounded, and to the IDF convalescent center in Central Israel, to evaluate and treat such cases. From my discussions with the staff of the convalescent center, battle stress reactions appeared to me to be more common in the lightly rather than the heavily wounded. However, my impressions were formed during the early part of the war, and only a few of the more seriously wounded had reached the convalescent center. The IDF mental health officers described primarily depressive or convervive symptoms in the wounded soldiers with battle stress reaction. Of the two cases I saw at the convalescent center, neither was an unalloyed battle stress casualty, as both appeared to have significant precombat maladjustment.
8. Longer Term Treatment of Battle Stress Casualties: Of the approximately 150 soldiers evacuated as psychiatric casualties, only thirteen were deemed to be in need of continued institutional care after initial forward or rearward treatment. After a week of initial treatment, these thirteen were transferred to a longer term facility in Central Israel for three weeks of rehabilitation. The guiding idea was "maximum walking minimum talking". Sports coaches who had worked with battle stress casualties following the Yom Kippur War played an important role in the rehabilitation program. They conducted rigorous athletic training for the soldiers focused upon group cooperation and group effort. In addition, mental health officers conducted reality oriented group therapy, and abreactive individual therapy. This facility was an active cheerful place. The recovering soldiers, who were largely the same ones whom I had seen in Northern Israel a week earlier, were, with two exceptions, improving. The fact that 12 out of the 13 more chronic cases initially received initial rearward as opposed to forward treatment further supports the effectiveness of forward treatment in fostering recovery and preventing chronicity.

9. Prevention of Battle Stress Casualties: The IDF has deployed psychologists from its personnel command to the staff of each division commanders on morale and other psychological factors important in maintaining performance in combat. These personnel function in a manner similar to our own organizational effectiveness officers. It remains to be seen what role these officers played and how useful they were in promoting soldier effectiveness.

10. Unit Reconstruction: Battle Stress Casualties were higher in units hard-hit in battle. In the one instance in which an IDF unit had high numbers of physical casualties from friendly fire, battle stress casualties were unusually high. Mental health officers with whom I spoke raised the issue of whether something could be done at the unit level to restore morale following casualties from friendly fire, and, more generally, whether some technique of unit reconstruction might not be productively applied to any unit taking heavy casualties. The group interview method used by the U.S. military historian S.L.A. Marshall was mentioned as being of possible usefulness.

11. Rumors: Several mental health officers commented that rumors had a deleterious effect upon morale. For example, the aforementioned instance in which IDF soldiers were hit by friendly fire was multiplied through rumor so that this single instance appeared to have happened in eight widely separated locations to eight different units. The mental health officers felt that clarity and consistency of war aims would help prevent such rumors from occurring.

12. IDF Response to Events in Lebanon and Plans for the Future: Shortly after the war began, it became clear that the second echelon rearward treatment in Northern Israel was ineffective. In response, the IDF established second echelon psychiatric facilities in Lebanon often co-located with the AMBs and closed the second echelon facility in Northern Israel. These new facilities were used to treat battle stress casualties who had not responded to 48-72 hours initial treatment at the AMB, or who had been evacuated further rearward than the AMBs, even though in some cases this meant returning soldiers evacuated to Israel back to Lebanon for treatment. The location of these facilities in Lebanon increased the expectancy and eased the logistic problems of a rapid return to the combat unit, and facilitated the effective treatment of battle stress reaction in soldiers who required more than 48-72 hours respite or who had been evacuated over or around the forward AMB.
Lieutenant Colonel (Dr.) Shabtal Noy and his colleagues in the research group of the Mental Health Department have begun formal analysis of the data collected during the Lebanese war. They are investigating the group and individual factors that predispose to battle stress reaction. From prior work done by Lieutenant Colonel (Dr.) Noy following the Yom Kippur War in 1973, it appears that good morale, leadership, and training, as well as family and community stability, promote effective combat performance and reduce the incidence of battle stress casualties. The detailed case records available from the war in Lebanon will permit further evaluation of this interesting and important conclusion.

Dr. Noy's research group will also study the demographic and personal situational characteristics of the forward and rearward treated cases to determine if in fact the assignment to forward or rearward treatment was indeed as random as it initially appears to have been. If it was random, this will further strengthen the support for the effectiveness of forward treatment. Also, the researchers will follow up both groups to determine how effective were the forward-treated soldiers once they returned to their units, and determine the ultimate outcome in the rearward treated cases who were not returned to their units. Past U.S. experience from the First and Second World Wars and the Korean War suggests that the battle stress casualties who are returned to their units do well, while battle stress casualties not so returned are at risk for chronic psychiatric disability. A further area of IDF interest is the battlefield ecology of battle stress reaction, and the clinical course breakdown, evacuation, treatment, and return. Dr. Noy plans to interview the members of the forward mental health teams and to reconstruct their experiences based on these interviews. Colonel (Dr.) Ron Levy, the head of the Mental Health Department, has suggested a formal exchange of information between the IDF and the U.S. Army to include experimental observations and the results of the analysis of the data from Lebanon in conjunction with the Third International Conference on Psychological Stress and Adjustment in Time of War and Peace to be held in early January of 1983 in Tel Aviv.

13. Summary and Conclusion: Psychiatric casualties were a significant source of manpower loss for the IDF in the war in Lebanon. In the first two weeks of war, they constituted about 10% of total casualties. Later in the war, the proportion of psychiatric casualties rose to 20-25% of total casualties. Most of the psychiatric casualties were battle stress reactions, although some, especially later in the war, appeared to be cases of disaffection from military service. Using forward treatment by reserve mental health personnel, the IDF was successful in returning 90-95% of soldiers with battle stress reactions to their units within 48-72 hours. Some relapsed, leaving approximately 70-85% of soldiers with battle stress reaction returned to effective combat duty. In contrast to forward treatment, rearward treatment was significantly less effective in returning soldiers to their units. This contrast in effectiveness between forward and rearward treatment confirms the lesson from WWII and the Korean War, that if a psychiatric casualty is evacuated beyond the division he is very unlikely to return to effective combat duty. Thus, the Israeli experience in Lebanon supports the placement of mental health personnel within the division, and the employment of these personnel in the treatment of battle stress casualties. Of these forward deployed mental health personnel, the division psychiatrist through his knowledge and authority appeared to play an important role in insuring that forward treatment was implemented. The occurrence of delayed
battle stress reactions in soldiers who were home on pass confirms the importance of comradeship in sustaining the soldier not only before and during battle, but after battle as well. Overall, the preliminary analysis of the IDF experience in Lebanon provides strong confirmation for the central tenets of combat psychiatry (both prevention and treatment) and further more structured analysis should provide a more detailed view than has been heretofore available of the phenomena of battle stress reaction.

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The tasks and functions needed to be performed for recognizing and dealing with stress reactions can be broken down into four areas of responsibility: individual soldiers, leaders, AMEDD personnel, and mental health personnel. Each level of responsibility has similar types of decisions to make with regard to psychiatric casualties; however, the degree of intervention becomes more sophisticated with the decision to move a stress casualty away from the combat situation.

The term psychiatric casualty or transient battle reaction/battle fatigue refers to transient emotional reactions to the stresses of combat. The manifestations may be either psychological and/or physical; they represent a collection of ineffectiveness conditions with varying organic, psychological, social, cognitive, motivational, and political components (Rath, 1980). The symptoms may change in a matter of several hours to several days, depending upon the individual, the nature of the combat, and how the casualty is labeled. A soldier who becomes a psychiatric casualty is ineffective in his combat role for reasons other than wounds, organic disease or ineptitude.

**Individual Soldier Responsibilities.**

The individual soldier needs to know the other squad and unit members. Cohesive units are established through effective training and team building. Individual soldiers probably are the first to know which members of the unit are not functioning up to the demands of a tactical situation. Soldiers compare themselves with each other to assess what responses other individuals are making to the tactical situation. Group consensus will unofficially decide what are the "normal" reactions for the individual in the combat/tactical situation. A buddy care system will be the first level for recognizing individual stress reactions. A fellow squad member will probably be the first to detect apparent wounds, injuries, chemical, or radiation exposures.

**Leaders' Responsibilities.**

Unit leaders (squad leader, platoon sergeant, platoon leader) have the responsibility for establishing cohesive units through effective training and adequate leadership. Leaders must continually assess the members of the unit who are not functioning up to the demands of the tactical situation. Leaders need to determine the nature and amount of individual soldier's fatigue, stress, duration of exposure, disease, fear, chemical exposure, and/or radiation exposure. Unit cohesion, team building, buddy system techniques must be emphasized. Leaders must decide whether reactions are normal to the situation. Individuals must cope alone, or at least within the unit. Soldiers must be encouraged to carry out their duties (even though not necessarily symptom free).

For soldiers unable to cope, temporary rest breaks may help. Leaders must reassure their soldiers of what constitutes normal reactions to the situation. If a soldier's symptoms are disruptive and/or he cannot exercise his combat role...
skills or effectively perform his duties in a reasonable amount of time, the leader should call in the assistance of an aidman.

AMEDD Personnel Responsibilities.

The aidman must assess whether the soldier is disabled from: an apparent wound, injury, disease, chemical exposure, or stress reaction. The aidman must decide whether the reactions of the soldier are normal for an individual in the combat/tactical situation. The aidman must reassure the soldier of normal reactions to a situation. The aidman must assess the soldier from personal knowledge of the individual's past history and experience as to: how long in combat, previous stress reactions, previous medical treatments (what, how long ago, recovery time), and the tactical situation. The aidman must assess the soldier's capability of functioning from not functioning based upon: the aidman's knowledge of common symptoms, course, or phases of stress reactions. If possible the aidman should instill the expectation the soldier will return to duty. If rest is not helpful, the aidman must document the soldier's history and past military performance. Only if the tactical situation allows, should the aidman consider evacuating a soldier for further evaluation if necessary.

Physicians and PAs need to assess soldiers for apparent wounds or injuries before considering combat stress reactions. If reassurance and time do not resolve the soldier's behaviors, the soldier must be assessed for whether the behaviors will be disruptive. Soldiers capable of functioning in their combat role (though not necessarily symptom free), must be returned to their units. Only for soldiers not capable of functioning in their combat role and if the tactical situation allows, should AMEDD personnel consider evacuating soldiers for further rest and evaluation.

Mental Health Personnel Responsibilities.

Mental health personnel provide consultation during pre-deployment, pre-combat, and during combat to individual soldiers and commanders. Commanders and staff elements need to be aware of mental health concerns. Mental health personnel must be actively involved in education, prevention, and training programs.

In combat settings, mental health personnel assist soldiers to cope. Mental health personnel must determine if brief psychotherapy is required, or if medication is necessary, or what interventions are needed. The senior 91G should supervise individual soldiers not capable of returning and functioning in their combat role but who could be used in combat support roles. Mental health personnel must continue to instill the expectation that soldiers will return to their units. Only if the soldier cannot be restored to adequate functioning should further evacuation be considered.

Table 1

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>TASKS/FUNCTIONS</th>
<th>TIME</th>
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</thead>
<tbody>
<tr>
<td>COMPANY/SQUAD</td>
<td></td>
<td>1 - 2 hours</td>
</tr>
<tr>
<td>Individual Soldier, Squad Leader, Platoon Sgt, Platoon Leader, 1st Sgt, Company Cdr</td>
<td>Assess all members of unit who are not functioning to demands of tactical situation</td>
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<tr>
<td></td>
<td>Determine nature and amount of fatigue, stress, duration of exposure, disease, fear, chemical exposure (self-induced and/or external), radiation exposure</td>
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<tr>
<td></td>
<td>Recognize preventable measures for transient battle reaction/fatigue</td>
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<tr>
<td></td>
<td>Emphasize unit cohesion, team building, buddy system</td>
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<tr>
<td></td>
<td>Decide whether reactions are normal for individual in combat/tactical situation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recognize and assess whether individual is disabled:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Apparent wound, injury, disease, chemical or radiation exposure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) Transient battle reaction/fatigue</td>
<td></td>
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<tr>
<td></td>
<td>c) Will individual's behaviors be disruptive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reassure individual of normal reactions to situation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Individual must cope by himself or at least within unit</td>
<td></td>
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<tr>
<td></td>
<td>b) Individual must be able to carry out his/her duties (although not necessarily symptom free)</td>
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<tr>
<td></td>
<td>Instill expectation to return to duty: policy of no evacuation</td>
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</tbody>
</table>
If soldier's symptoms are disruptive and/or he cannot exercise combat skills or effectively perform his duties in a reasonable amount of time, call aidman

Decide whether reactions are normal for individual in combat/tactical situation.

Assess whether individual is disabled:
   a) Apparent wound, injury, disease, chemical or radiation exposure
   b) Transient battle reaction/fatigue
   c) Will individual's behaviors be disruptive

Reassure individual of normal reactions to situation.

Assess individual from personal knowledge of individual's past history and experience
   a) How long in combat
   b) Previous stress reactions
   c) Previous medical treatments
   d) Tactical situation

Assess capability of functioning/not functioning:
   a) Knowledge of common symptoms of transient battle reaction battle fatigue
   b) Course of battle reaction/fatigue
   c) Phases of battle reaction/fatigue
   d) Employ acceptable treatment methods
   e) Provide crisis treatment for transient battle reaction/fatigue

Instill expectation to return to duty.

Insure individual's history and past military performance (if known) is documented.

Only if tactical situation allows, consider evacuating individual to Battalion Aid Station for rest and further evaluation if necessary.
Check for whether individual is disabled:

- a) Apparent wound, injury, disease, chemical or radiation exposure
- b) Transient battle reaction/fatigue
- c) Will individual's behavior be disruptive

Instill expectation to return to duty

Assess capability of functioning/not functioning:

- a) Tactical situation
- b) Knowledge of common symptoms of transient battle reaction/fatigue
- c) Individual's past history, experiences and past military performance
  1) How long in combat
  2) Previous stress reactions
  3) Previous medical treatments
  4) Evaluation by aidman
- d) Course of transient battle reaction/fatigue
- e) Phases of transient battle reaction/fatigue
- f) Employ strategies for coping
- g) Employ acceptable treatment methods

Assess whether individual's behavior will be disruptive

Assess for return to unit if capable of functioning in combat role (although not necessarily symptom free)

Only if not capable of functioning in combat role and if tactical situation allows, consider evacuating individual to Brigade Clearing Company for rest and further evacuation
<table>
<thead>
<tr>
<th>BRIGADE CLEARING STATION</th>
<th>12-24 hours</th>
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</thead>
<tbody>
<tr>
<td>91G (E5-E6)</td>
<td></td>
</tr>
<tr>
<td>Mental Health Officer (M.H.O.: 60N, 68R, 68S)</td>
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</tr>
<tr>
<td>Physician</td>
<td>Provide consultation during pre-deployment, pre-combat, and during combat to individual soldiers and commanders</td>
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<tr>
<td>Dentist</td>
<td>Determine needs of units, strengths and weaknesses</td>
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<tr>
<td></td>
<td>Consult with commanders and staff elements on mental health aspects</td>
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<tr>
<td></td>
<td>Educate as required</td>
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<tr>
<td><strong>In combat at Brigade Clearing Station</strong></td>
<td></td>
</tr>
<tr>
<td>Check for whether individual is disabled:</td>
<td></td>
</tr>
<tr>
<td>a) Apparent wound, injury, disease, chemical or radiation exposure</td>
<td></td>
</tr>
<tr>
<td>b) Transient battle reaction/fatigue</td>
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<tr>
<td><strong>Instill expectation to return to duty</strong></td>
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<td><strong>Assess capability of functioning/not functioning</strong></td>
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<td>a) Will individual's behaviors be disruptive</td>
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<td>c) Knowledge of common symptoms of transient battle reaction/fatigue</td>
<td></td>
</tr>
<tr>
<td>d) Individual's past history and experiences</td>
<td></td>
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<tr>
<td>e) Course of transient battle reaction/fatigue</td>
<td></td>
</tr>
<tr>
<td>f) Phases of transient battle reaction/fatigue</td>
<td></td>
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<tr>
<td>g) Employ strategies of coping</td>
<td></td>
</tr>
<tr>
<td>h) Employ acceptable treatment methods</td>
<td></td>
</tr>
<tr>
<td>91G</td>
<td>Determine if psychotherapy is required, either in groups or individually</td>
</tr>
<tr>
<td>M.H.O.</td>
<td>Employ brief psychotherapy if necessary</td>
</tr>
<tr>
<td>91G (E-6)</td>
<td>Determine if medication is required and make recommendation</td>
</tr>
<tr>
<td>M.H.O.</td>
<td>Screen need for medication and administer if necessary</td>
</tr>
</tbody>
</table>

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If rest is required, insure individual is monitored for changes in mental and/or medical status (particularly after medications)

Supervise individuals not capable of returning and functioning in combat role, but who are temporarily used in combat support role at the brigade level, if tactical situation permits.

If soldier is not capable of functioning in either combat or combat support roles and if tactical situation permits, consider evacuating to Rear Clearing Area at Headquarters and Support Company for further evaluation
EVACUATION CATEGORIES

1. URGENT. Immediate surgery or resuscitative treatment is essential to preserve life or limb. Vascular injuries with uncontrollable bleeding and massive abdominal or chest wounds are examples. Evacuate at once to the combat support or evacuation hospital, by air if available, in accordance with division SOP, those cases which must be evacuated within four hours.

2. PRIORITY. Priority identifies patients requiring surgery or resuscitative care to preserve life or limb, but who may be delayed for a short period; evacuation may be delayed 24 hours. Although each case must be evaluated individually, the management related to the special conditions present, no patient should be kept in a forward unit station any longer than is absolutely necessary. Final surgery results depend chiefly upon reducing the time lag between wounding and initial wound surgery. Evacuate by air if available. Destination may be either combat support hospital or clearing station.

3. ROUTINE. Routine category includes all other cases. Evacuate by motor or air. Destination is usually to a clearing station. Evacuation may be up to 72 hours.

4. TACTICAL-URGENT. The foregoing are three presently recognized evacuation categories. For control purposes within some units, subpriorities are employed. For example, tactical-urgent is sometimes used to identify patients who do not meet the medical criteria for urgent yet who must be evacuated promptly to enable the unit to continue its mission.

Casualty Triage

1. Immediate: Patients who, upon receipt of prompt medical attention, have a good chance of survival.

2. Minimal: Patients requiring only minimal treatment and are expected to return to duty immediately.

3. Delayed: Patients for whom treatment can be delayed without impairing their recovery. Hospitalized.

4. Expectant: Patients for whom immediate surgery or active treatment is not likely to alter a fatal outcome, but require complicated or prolonged medical care to improve life expectancy. Hospitalized.