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San Diego, California 92152-7250 AP-94-3 January 1994

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NPRDC-AP-94-3 January 1994

Bibliography of Reports, Journal Articles, Books, and Book Chapters Approved for Public Release: FY93

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13. ABSTRACT *(Maximum 200 words)*

This report lists all technical reports, technical notes, administrative publications, journal articles, and book chapters that were approved for public release in FY93. Publications in each category are listed in chronological order under the following areas: Manpower Systems, Personnel Systems, Training Research, Organizational Systems, and Administrative Publications.

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Foreword

The Navy Personnel Research and Development Center (NPRDC) is an applied research center, contributing to the personnel readiness of the Navy and Marine Corps. The Center develops better ways to attract qualified people to the naval services, to select the best, to assign them where they are most needed, to train each one effectively and efficiently, and to manage our personnel resources optimally. By combining a deep understanding of operational requirements with first-rate scientific and technical abilities, the Center is unique in being able to develop new, useful knowledge while refining technology to address people-related issues. This dual expertise permits the Center to develop the technology base for improving the use of human resources within Navy systems and to apply state-of-the-art technology to solve emerging problems.

The research and development (R&D) methods used by NPRDC are derived from behavioral, cognitive, economic, and social sciences as well as from applied mathematics and statistics. The application of these methods results in tangible products of use to the Navy and Marine Corps. NPRDC constantly searches for technological opportunities to improve personnel readiness and to reduce manpower costs. We are accountable to the Chief of Naval Personnel, our sponsors, and our users for high productivity, strict ethics, honesty, integrity, professionalism, and perspective.

NPRDC seeks to do as much of its work as possible in the operational settings where final products are intended to be used. This helps to ensure that the needs and requirements of users are met and that the users themselves become familiar with the operational capabilities of the particular products.

This bibliography contains an abstract of each report published and approved for public release in FY93.

Published reports are listed in appropriate subject categories for reference convenience. The scope of each category is defined below.

Manpower Systems develops new computer-based systems and methods for allocating manpower resources, developing personnel inventories, and distributing/assigning those personnel to improve military readiness and control costs.

Foreword

Personnel Systems develops and evaluates systems for recruiting, selecting, classifying, and utilizing military personnel to improve performance. Serves as the lead Department of Defense R&D laboratory for the development of a Computerized Adaptive Testing version of the Armed Services Vocational Aptitude Battery (CAT-ASVAB).

Training Research develops new educational and training technologies to reduce formal Navy training costs and to improve Navy training effectiveness.

Organizational Systems develops and evaluates performance enhancement and control systems for improving the effectiveness, quality, and productivity of defense personnel and organizations. Develops approaches for managing a diverse work force. Serves as the Chief of Naval Operations' primary resource to coordinate and conduct attitude surveys in the Navy and Marine Corps and to develop new survey technology.

Center Support includes formal reports on significant matters relating to the technical program, management, or administration of the Center and informational, orientation, and recruiting brochures.

Qualified users may request copies of publications from the Defense Technical Information Center (DTIC), Cameron Station, Alexandria, VA 22314 (Telephone: Commercial [202] 274-7633 or Defense Switched Network 284-7633). General public may order from the National Technical Information Service (NTIS), Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161 (Telephone: Commercial [703] 487-4650). When placing report orders, it is helpful to provide NTIS with the AD number.

J. D. McAFEE
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Contents

Bibliography of Reports, Journal Articles, Books, and Book Chapters Approved for Public Release: FY93

Manpower Systems

Technical Notes

NPRDC-TN-93-2
December 1992
(AD-A258 730)

T. J. Thompson
J. P. Boyle

Probability of Detection of Drug Users by Random Urinalysis in the U.S. Navy

Drug use in the Navy and civilian sector, the source of new Navy personnel, continues to concern Navy managers. The Navy currently conducts a random urinalysis program to deter and detect drug abuse. Navy field commanders, who are responsible for execution of the testing program at their units, have latitude in both the frequency and rate of drug testing. The entire program is governed by strict procedural and legal safeguards. However, no systematic analysis of the sampling program has been undertaken to discover cheaper, more effective alternatives. This paper develops probabilistic models for urinalysis testing. Several observations are made concerning current practice, both with and without gaming. An alternative testing procedure is analyzed. Finally, a number of recommendations are made.

NPRDC-TN-93-3
January 1993
(AD-A259 590)

J. P. Boyle
C. Mullins

Integration of PREPAS and EPS Attrition and Reenlistment Rate Forecasts

Two distinct, unrelated systems exist to develop plans for the "cradle" (recruitment) to "grave" (leaving the Marine Corps) movement of Marines. The systems are not linked together and each produces forecasts of losses and reenlistments. This leads to training and overall strength plans being produced with different forecasts of personnel strengths and flows. This report describes the methods used to generate attrition rates and reenlistment rates for the Precise Personnel Assignment System (PREPAS) using Enlisted Planning System (EPS) rates and data as the foundation.

Manpower Systems

Technical Notes

NPRDC-TN-93-5
March 1993
(AD-A263 274)

T. J. Thompson
J. P. Boyle
D. J. Hentschel

Markov Chains for Random Urinalysis I: Age-Test Model

Since any drug abuse impacts readiness, health, and safety, continuing evaluation and improvement of the Navy's program is required. One method of improving the Navy's program is to develop and analyze alternative testing strategies.

The Nuclear Regulatory Commission (NRC) proposed a urinalysis testing strategy based on time since last test. That is, the probability of a person being tested depends on the amount of time since the person was last tested. Southern California Edison (SCE) has implemented a variation of the NRC proposal. Urinalysis testing strategies based on time since last test are defined by a high testing rate for personnel not yet tested in a given time period and a low testing rate for previously tested personnel with negative results in a given time period.

The probability distribution of random urinalysis tests is modeled under a general class of age-test urinalysis strategies. Age-test is a particular Markov chain with the probability of being tested defined as a function of time since last test. The NRC proposal, the SCE program, and current Navy practice can all be modeled as age-test Markov chains. Various age-test strategies are analyzed.

NPRDC-TN-93-6
May 1993
(AD-A265 557)

J. P. Boyle
D. J. Hentschel
T. J. Thompson

Markov Chains for Random Urinalysis II: Age-Test Model With Absorbing State

This is the second of a series of papers on the use of Markov chains to model random urinalysis programs. Previous work introduced the age-test Markov chain. This chain was used to model random urinalysis strategies stratified by time since last tested. This paper extends the age-test model by including an absorbing state for detection of drug users. We quantify the extent to which age-test urinalysis strategies can be gamed by drug users. The theory and formulas for calculating the distribution of time to absorption (e.g., detection of drug users), the mean time to absorption and the expected number of visits to intermediate states (e.g., number of tests) prior to detection are developed. This model is used to analyze three age-test strategies.

Manpower Systems

Journal Articles

Ali, A. I., Kennington, J. L., & Liang, T. T. (1993). Assignment with en route training of Navy personnel. *Naval Research Logistics, 40,* 581-592.

Armstrong, S., & Collopy, F. (1992).*[1] Error measures for generalizing about forecasting methods: Empirical comparison. *International Journal of Forecasting, 8,* 69-80.

Callahan, J. D., & Sorensen, S. W. (1992). Using TETRAD II as an automated exploratory tool. *Social Science Computer Review, 10*(3), 329-336.

Clark, R., Kennington, J., Meyer, R., & Ramamurti, M. (1992).* Generalized networks: Parallel algorithms and an empirical analysis. *ORSA Journal on Computing, 4*(2), 132-145.

Collopy, F., & Armstrong, J. S. (1992).* Rule-based forecasting: development and validation of an expert systems approach to combining time series extrapolations. *Management Science, 38*(10), 1394-1414.

Scheines, R., & Spirtes, P. (1992).* Finding latent variable models in large databases. *International Journal of Intelligent Systems, 7,* 609-621.

Wang, Z., & Kennington, J. (1992).* A shortest augmenting path algorithm for the semi-assignment problem. *Operations Research, 40*(1), 178-187.

Book Chapter

Scheines, R., Spirtes, P., & Glymour, C. (1992).* TETRAD II: Finding causal models of statistical data. In F. Faulbaum (Ed.), *Advances in statistical software 3* (pp. 143-152). New York: Gustav Fischer.

[1]An asterisk denotes that all referenced authors are not NPRDC employees; however, this research was supported by the Center.

Personnel Systems

Technical Reports

NPRDC-TR-93-2
October 1992
(AD-A257 446)

L. V. Hedges
B. J. Becker
J. H. Wolfe

Detecting and Measuring Improvements in Validity

Navy Personnel Research and Development Center (NPRDC) developed new aptitude tests for possible addition to the Armed Services Vocational Aptitude Battery (ASVAB). Validity studies are currently underway to determine whether the new tests produce an increment in validity using either a training or a job performance criterion. Because most samples are small, it is necessary to pool information across sites to obtain a sufficiently powerful test for incremental validity.

Methods for obtaining the sampling distributions of incremental validities (the differences between multiple correlations) from the same and from independent samples were developed and are presented. These results were applied to yield methods for pooling incremental validities, testing the statistical significance of pooled validities, constructing confidence intervals for the pooled incremental validity, and conducting a power analysis of the pooled test for incremental validity. It was concluded that the test for the statistical significance of the pooled estimate should have adequate power to detect increments of .02 in validity given pooled sample sizes of $N \geq 4{,}000$.

NPRDC-TR-93-9
September 1993
(AD-A271 042)

R. D. Hetter
B. M. Bloxom
D. O. Segall

Item Calibration: Medium-of-Administration Effect on Computerized Adaptive Scores

An important question in the development of item pools for computerized adaptive tests (CATs) is whether data for calibrating items should be collected by a paper-and-pencil (P&P) or a computer administration of the items. This study evaluated the effect on adaptive scores of using a P&P calibration. The correspondence between adaptive scores obtained with computer-administered items and a P&P calibration with adaptive scores obtained with computer-administered items and a computer calibration was evaluated. Forty items from each of four ASVAB content areas (general science, arithmetic reasoning, word knowledge, and shop information) were administered by computer to one group of Navy recruits and by P&P to a second group. These data were used to obtain computer-based and P&P-based calibrations of the items. Each calibration was then used to estimate item response theory adaptive scores for a third group of recruits who received the items by computer. The effect of

medium of administration was assessed by comparative regression, correlation, and reliability analyses of the scores using the alternative calibrations. Results indicate that, although statistically significant medium effects were found on some content areas, medium of administration did not affect the reliability of the adaptive scores. Although these findings support the use of the P&P parameters of the current CAT-ASVAB item pool, it is recommended that further analyses be performed to elucidate the significant effects.

Personnel Systems

Journal Articles

Held, J. D., Alderton, D. L., Foley, P. P., & Segall, D. O. (1993). Arithmetic reasoning gender differences: Explanations found in the Armed Services Vocational Aptitude Battery (ASVAB). *Learning and Individual Differences, 5*(2), 171-186.

Morrison, R. F., & Branter, T. M. (1992). What enhances or inhibits learning a new job? A basic career issue. *Journal of Applied Psychology, 77*(6), 926-940.

Book

Trent, T., & Laurence, J. H. (Eds.). (1993). *Adaptability screening for the armed forces.* Washington, DC: Office of Assistant Secretary of Defense (Force Management and Personnel).

Book Chapters

Larson, G. E., & Alderton, D. L. (1993). The structure and capacity of thought: Some comments on the cognitive underpinnings of g*. In D. K. Detterman (Ed.), *Current topics in human intelligence, volume 2: Is mind modular or unitary?* (pp. 141-156). Norwood, NJ: Ablex Publishing Corporation.

Trent, T. (1993). The Armed Services Applicant Profile (ASAP). In T. Trent & J. H. Laurence (Eds.), *Adaptability screening for the armed forces* (pp. 71-99). Washington, DC: Office of Assistant Secretary of Defense (Force Management and Personnel).

Training Research

Technical Reports

NPRDC-TR-93-1
October 1992
(AD-A257 078)

A. Moranville
D. H. Hewitt

Rating Training Continuum: Baseline Data

The Deputy Chief of Naval Operations (Manpower, Personnel, and Training) (OP-01) tasked NPRDC to construct a training continuum design methodology using the Operations Specialist (OS) and the Electronic Warfare Technician (EW) ratings as the design vehicles. Rating Training Continuum Development Workshops were held for the OS and EW ratings in FY89 and FY90. The results of the workshops were incorporated into Continuum Training Plans (CTPs) and published in 1991. To determine the effectiveness of the OS and EW CTPs an evaluation plan was also published in 1991. The evaluation plan identified four attributes that would reflect changes in the rating before and after implementation of the CTPs. The four attributes were: Job performance, force structure, training effectiveness, and career attitude. To provide the pre-implementation baseline data specified in the evaluation plan, NPRDC used existing organizational databases whenever possible. When existing databases were not available, surveys were developed and distributed.

NPRDC-TR-93-4
April 1993
(AD-A264 228)

C. D. Wetzel
P. H. Radtke
H. W. Stern

Review of the Effectiveness of Video Media in Instruction

Visual forms of instruction are increasingly used as a result of the widespread use of video technologies such as broadcasts, teleconferencing, tapes, videodiscs, and emerging multimedia combinations of computer and digital video technologies. The considerable amount of research that stretches back to early work with film, television, and static visual materials can be of benefit in developing these new forms of instruction. The objective of this report is to present a review of the current research literature regarding the use of dynamic video media in instruction. Research on the following topics was reviewed: general reviews of the effectiveness, acceptance, and costs of several forms of educational television; teaching techniques used effectively with video media; combining visual and ve l information; the effects of motion, animation, and interactivity; the relationship between media perceptions and learning; the effect of various video production techniques on learning; and critical perspectives on learning from media. This review can be used as background material for future research or instructional development efforts concerned with learning from video-based media.

Training Research

Technical Reports

NPRDC-TR-93-5
June 1993
(AD-A265 855)

G. B. Semb
J. A. Ellis
C. Matheson
M. A. Fitch
M. Kuti
S. Parchman

On-the-Job Training Practices on Navy Ships

This report describes the results of a questionnaire designed to assess Navy on-the-job training (OJT) practices. The questionnaire was based on shipboard observations and on a model of the OJT trainer as a coach who guides the trainee through a task using three steps: (1) assessment, (2) training, and (3) evaluation. The questionnaire was sent to over 5,000 shipboard supervisors; 2,321 responded.

Three major conclusions can be drawn from the information and data provided in the report. First, OJT is an important component of the Navy training process and should become even more important as the Navy increases the emphasis on shipboard training in the coming years. Apprentice training and "A" school training do not and will not produce personnel capable of independently performing jobs. Second, very few shipboard petty officers receive any information or training on how to conduct OJT. Third, while over 50% of the supervisors reported that they used appropriate OJT techniques, at least 20% do not, and another 30% are not as effective as they could be. Evidence from tutor training studies shows that training can improve performance of both tutors and the students they train. Therefore, there is both a need and a capability to improve the quality of shipboard OJT.

NPRDC-TR-93-6
June 1993
(AD-A266 344)

W. E. Montague
F. G. Knirk

What Works in Adult Instruction: The Management, Design and Delivery of Instruction

This report, a reprint of a special issue of the International Journal of Educational Research, is to provide summaries of research results for people who must design and deliver instruction. In the international industrial and military training community these individuals are mostly subject matter specialists not extensively versed in educational research. Thus, it is important for them to have sources of understandable, accurate and reliable information about "what works" in educating and training young adults. The basic assumption we make is that this information can be useful for instructional decisions and improve instruction. Individuals involved in instructional administration, design, or delivery can benefit from concise descriptions of factors that consistently improve student learning: What works. This document is meant to provide recommendations in an easily comprehensible form as a guide for instructional practice, evaluation, to help planning and policy making.

Training Research

Technical Notes

NPRDC-TN-93-1
October 1992
(AD-A256 662)

K. Redmond
J. Sheppard
M. Humphrey
L. Stacy

CD-ROM Applications in Professional Military Education (PME)

This effort was conducted to identify the most cost-effective and efficient utilization of Compact Disk-Read Only Memory (CD-ROM) within the Marine Corps PME schools at the Marine Corps University.

NPRDC-TN-93-4
February 1993
(AD-A261 051)

H. Simpson

Conversion of Live Instruction for Videoteletraining: Training and Classroom Design Considerations

This work refined and documented a procedure developed by NPRDC for converting live instruction for delivery via videoteletraining (VTT). The conversion methodology consists of six main steps and their substeps. In step 1, Preparation, a working group is formed and planning occurs. In step 2, Data Collection, the live classroom floor plan is drawn and observations are made of live classroom processes, physical locations of personnel, and timing of classroom events. In step 3, Analysis, class organizational structure and communication flow are analyzed and classroom functional areas are identified. In step 4, VTT Training Design, training activities, materials, aids, and media, and testing supervisory, and administrative procedures are analyzed and converted. In step 5, VTT Classroom Design, the VTT classroom floor plan is designed, audio and visibility requirements are determined, and audiovisual equipment is identified. In step 6, Implementation and Refinement, VTT training and classroom design are implemented, instructors and facilitators are trained, a pilot course is conducted, and training is evaluated and revised. The methodology includes descriptions of three different VTT classroom designs tailored to three different types of courses: (1) lecture-based course, (2) lecture/demonstration with hands-on laboratory, and (3) small-group processes. Suggestions for VTT instructor training are provided.

Training Research

Technical Notes

NPRDC-TN-93-7
July 1993
(AD-A268 238)

M. A. Fitch
G. B. Semb

The ASK Model of Peer Tutoring: Theory and Research

This paper proposes a model of peer tutoring for use in college classrooms. The peer tutor is conceptualized as a "coach" who guides and shapes students' learning. Three components of peer tutoring are considered: (1) the tutor's *attitude* toward teaching, (2) tutoring *skills* such as diagnosing (questioning, listening, and observing), intervening (prompting and clarifying), and evaluating (providing feedback and reinforcement), and (3) the tutor's *knowledge* of the subject. Thus, this is called the ASK model of peer tutoring. The model represents a synthesis of literature from three theoretical perspectives—behavioral, cognitive, and sociocognitive. Theory and research in these three areas are offered to support the model and its components.

NPRDC-TN-93-12
August 1993
(AD-A269 566)

C. A. Robinson
B. E. Taylor
F. Soriano

In-Service Motivational Workshop: Draft Instructor Guide

The objective of this effort was to design and develop a guide for directors of instruction and training officials to use in conducting in-service motivational workshops. First, a motivational model consisting of five components—attention, relevance, in control, setting goals, and efforts rewarded—was developed. Next, for each of the five components, a list of classroom strategies was developed. Finally, based on the motivational model and list of strategies, a draft guide was designed to guide the workshop leader systematically through the varied tasks needed to prepare for and deliver an effective workshop. This report includes the draft instructor workshop guide.

Training Research

Journal Articles

Ellis, J. A., & Knirk, F. G., Taylor, B. E., & McDonald, B. A. (1993). The course evaluation system. *Instructional Science, 21*, 313-334.

Montague, W. E., & Ellis, J. A. (Eds.). (1993). U.S. military developments in instructional technology [Special Issue]. *Instructional Science, 21*.

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Montague, W. E., & Knirk, F. G. (Eds.). (1993). What works in adult instruction: The management, design and delivery of instruction [Special Issue]. *International Journal of Educational Research, 19*.

Montague, W. E., & Knirk, F. G. (1993). Findings matrix: What works in adult training. *International Journal of Educational Research, 19*, 345-430.

Robertson, M. M., Whitehill, B. V., & Hasslet, J. (1993). A two phase evaluation of "What works: A summary of educational research as it relates to adult learning." *International Journal of Educational Research, 19*, 431-443.

Semb, G. B., Ellis, J. A., & Araujo, J. (1993). Long-term memory for knowledge learned in school. *Journal of Educational Psychology, 85*, 305-316.

Simpson, H., & Pugh, H. L. (1992). A user friendly electronic mail system to support correspondence instruction. *Educational Technology Publications, XXXII*(12), 20-25.

Simpson, H., Pugh, H. L., & Parchman, S. W. (1993). Empirical comparison of alternative instructional TV technologies. *Distance Education, 14*(1), 147-164.

Sticht, T., Ellis, J. A., Montague, W. E., Quellmalz, E., & Slappy, J. (1993). Combining environmental design and computer programs to enhance learning in Navy technical training. *Military Psychology, 5*, 63-75.

Training Research

Journal Articles

Van Matre, N., Ellis, J. A., Montague, W. E., & Wulfeck, W. H. (1993). Computer-managed instruction in naval technical training. *Instructional Science, 21*, 295-311.

Wetzel, C. D. (1993). Generative aspects of the Computer Based Educational Software System (CBESS). *Instructional Science, 21*, 269-293.

Whitehill, B. V., & McDonald, B. A. (1993). Improving learning persistence of military personnel by enhancing motivation in a technical training program. *Simulation & Gaming, 24*(3), 294-313.

Wulfeck, W. H., Dickieson, J. L., Apple, J., Vogt, J. L. (1993). The automation of curriculum development using the Authoring Instructional Materials (AIM) system. *Instructional Science, 21*, 255-267.

Book Chapter

Snyder, H. L., & Trejo, L. J. (1992). Research methods. In H. Widdel & D. L. Post (Eds.), *Color in electronic displays* (pp. 95-135). New York: Plenum Press.

Organizational Systems

Technical Reports

NPRDC-TR-93-3
June 1993
(AD-A264 161)

P. J. Thomas
M. D. Thomas
P. Robertson

Absences of Navy Enlisted Personnel: A Search for Gender Differences

This report compares lost time of Navy enlisted women and men and determines whether single parents lose more time than other personnel. A secondary goal was to replicate a 1978 study of women's and men's absenteeism behavior. Two separate investigations were conducted. The first relied on work diaries that were completed by immediate supervisors at 50 commands and the second consisted of lost time that was recorded in personnel and medical data tapes (as done a decade earlier).

Key findings are:

1. No gender difference in lost time was found in ships, aviation squadrons, and four of the seven types of shore commands in the sample. Women lost an average of 17 minutes more a day (62 hours per year) than men in naval stations, naval air stations/air intermediate maintenance detachments and shore intermediate maintenance activities due to pregnancy and postpartum convalescent leave.

2. Parents lost more time than nonparents in two command types, averaging 11 minutes a day (40 hours per year), to care for the needs of their dependents and for medical reasons.

3. Married personnel lost 10 minutes more a day (37 hours per year) than single personnel in one command and single personnel lost 9 more minutes (33 hours per year) than married personnel in another.

4. Single parents did not have significantly more lost time than married parents.

5. As was found in 1978, men had more recorded days absent than women for disciplinary events. When added to absences for hospitalization, a category where women's rates are higher than men's, the gender difference still was present.

6. Days lost due to disciplinary events are highly related to level of education.

Organizational Systems

Technical Reports

NPRDC-TR-93-7
June 1993
(AD-A264 161)

H. G. Baker
D. W. Robertson

1991 Naval Reserve Survey: Highlights for Navy Managers

The 1991 Naval Reserve Survey was administered from November through December 1991, to a sample of 31,763 reservists (10% of reservists not recalled for Operations Desert Shield and Desert Storm; 25% of recalled reservists in medical occupations; and 100% of recalled reservists in nonmedical occupations). The adjusted rate of return was 44%. Survey topic areas included: overall reserve experiences; in- and out-processing, active duty experiences, and return to civilian life. Respondents were also given the opportunity to provide write-in comments in each section of the survey.

NPRDC-TR-93-8
September 1993
(AD-A270 373)

S. Booth-Kewley
M. D. Thomas

The Subjective Quality of Life of Navy Personnel

The subjective quality of life (QOL) of a sample of enlisted Navy personnel (68 males and 64 females) was studied. Measures were administered assessing: global QOL, satisfaction with 13 life domains, satisfaction with the Navy, satisfaction with Navy job, personality dimensions, and demographic characteristics. Subjective global QOL for this Navy sample was high. Respondents were the most satisfied with Relations With Your Children, Marriage/Romantic Relationship, and Health. They were the least satisfied with Income/Standard of Living, Neighborhood, Community, and the Navy. The life domains that contributed the most to respondents' global subjective QOL were Income/Standard of Living, Marriage/Romantic Relationship, Job and Self. In general, the demographic variables were not related to subjective QOL. Each of the six personality variables studied was significantly associated with global QOL. The results of this investigation were compared with past civilian QOL research, and their implications for the Navy were discussed.

Organizational Systems

Technical Notes

NPRDC-TN-93-8
August 1993
(AD-A269 776)

M. A. Quenette
C. J. Steerman
S. K. Le

Navy-wide Personnel Survey (NPS) 1992: Statistical Tables for Enlisted Personnel

The third annual NPS was mailed in December 1992 to a random sample of 20,547 active duty enlisted personnel and officers. Completed questionnaires were accepted through mid-February 1993. The adjusted return rate was 49%. Survey topics included rotation/ permanent change-of-station moves, training, QOL programs, organizational climate, and health issues. Responses were weighted to allow generalization of sample results to the Navy population. Responses of enlisted personnel are broken out by pay grade and other important demographic variables.

NPRDC-TN-93-9
August 1993
(AD-A269 776)

M. A. Quenette
C. J. Steerman
S. K. Le

Navy-wide Personnel Survey (NPS) 1992: Statistical Tables for Officers

The third annual NPS was mailed in December 1992 to a random sample of 20,547 active duty enlisted personnel and officers. Completed questionnaires were accepted through mid-February 1993. The adjusted return rate was 49%. Survey topics included rotation/ permanent change-of-station moves, training, QOL programs, organizational climate, and health issues. Responses were weighted to allow generalization of sample results to the Navy population. Responses of officers are broken out by pay grade and other important demographic variables.

NPRDC-TN-93-10
August 1993
(AD-A269 776)

M. A. Quenette
C. J. Steerman
S. K. Le
C. Bendik

Navy-wide Personnel Survey (NPS) 1992: Graphic Presentation of Results for Enlisted Personnel

The third annual NPS was mailed in December 1992 to a random sample of 20,547 active duty enlisted personnel and officers. Completed questionnaires were accepted through mid-February 1993. The adjusted return rate was 49%. Survey topics included rotation/permanent change-of-station moves, training, QOL programs, organizational climate, and health issues.

This technical note provides graphic presentations of the responses of enlisted personnel. Responses (weighted to allow inference to the Navy population) are shown by total group, pay grade, and other demographic variables, where appropriate.

Organizational Systems

Technical Notes

NPRDC-TN-93-11
August 1993
(AD-A269 776)

M. A. Quenette
C. J. Steerman
S. K. Le
C. Bendik

Navy-wide Personnel Survey (NPS) 1992: Graphic Presentation of Results for Officers

The third annual NPS was mailed in December 1992 to a random sample of 20,547 active duty enlisted personnel and officers. Completed questionnaires were accepted through mid-February 1993. The adjusted return rate was 49%. Survey topics included rotation/permanent change-of-station moves, training, QOL programs, organizational climate, and health issues.

This technical note provides graphic presentations of the responses of officers. Responses (weighted to allow inference to the Navy population) are shown by total group, pay grade, and other demographic variables, where appropriate.

Organizational Systems

Journal Articles

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Center Support

Administrative Publications

NPRDC-AP-93-1
December 1992

R. G. Dalton
A. V. Stout

Bibliography of Reports, Journal Articles, and Book Chapters Approved for Public Release FY92

This report lists all technical reports, technical notes, administrative publications, journal articles, and book chapters that were approved for public release in FY92. Publications in each category are listed in chronological order under the following areas: manpower, personnel, education and training, organizational systems, and administrative publications.

NPRDC-AP-93-2
December 1992

M. Barrineau

Seapower Through People

This publication presents an overview of NPRDC and addresses the research performed within four functional areas (Manpower, Personnel, Training, and Organizational Systems).

NPRDC-AP-93-3
March 1993

P. J. Thomas

Women and Multicultural Research Office

This brochure describes NPRDC's Women and Multicultural Research Office (WOMRO) topic areas and services offered.

NPRDC-AP-93-4
April 1993
(AD-A264 735)

W. E. Montague

Independent Research and Independent Exploratory Development FY92 Annual Report

This report documents the activities and accomplishment of the FY92 Independent Research and Independent Exploratory Development programs.

NPRDC-AP-93-5
May 1993

M. Barrineau

Seapower Through People

This publication features the first NPRDC Technology Fair and summarizes four research projects: CAT-ASVAB, Compensatory Screening Model, Marine Corps EPS, Command Assessment Team Survey System.

Center Support

Administrative Publications

NPRDC-AP-93-6
June 1993

C. Fendelman

NPRDC Research Fax (Partnerships We Desire)

This publication encourages sharing Center developed research technologies with private industry, state and local government, and other military services.

NPRDC-AP-93-7
June 1993

C. Fendelman

NPRDC Research Fax (What Do We Do)

This publication informs current and potential sponsors and users about Center research programs

NPRDC-AP-93-8
July 1993
(AD-A269 051)

Command History Calendar Year 1992

This report reflects NPRDC's 1992 operating philosophy, commanding officer/technical director biographies, history, organization, center resources, R&D program, technical accomplishments, publications and presentations, significant events, personnel changes, and awards.

NPRDC-AP-93-9
July 1993

P. J. Thomas

Women and Multicultural Research Office

This brochure describes NPRDC's WOMRO topic areas and services offered. The WOMRO conducts applied research that addresses contemporary issues involving women and minority personnel in the Department of the Navy. This report replaces AP-93-3.

NPRDC-AP-93-10
August 1993
(AD-A271 404)

J. Borack (Editor)

Conference on Applications of Artificial Neural Networks and Related Technologies to Manpower, Personnel, and Training: Proceedings

This conference proceedings documents papers presented at the Artificial Neural Networks and Related Technologies to Manpower, Personnel, and Training Conference held at NPRDC on 2-3 February 1993. Conference participants represented the academic and military research communities, both governmental and private. Conference presentations discussed the relationship of neural networks to statistics, personnel, brain activity, expert systems, classification and learning, and tactical issues. A conference seminar discussed "Learning in Artificial Neural Networks: A Statistical Perspective."

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