

AD-A285 952



U.S. Army Research Institute
for the Behavioral and Social Sciences

Research Report 1658

Family Adaptation to the Demands of Army Life: A Review of Findings

Walter Schumm

Kansas State University

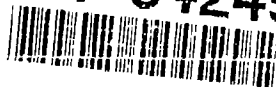
D. Bruce Bell and Giao Tran

U.S. Army Research Institute

DTIC

NOV 0 1 1994

94-34245



6/19

94 11 3 030

January 1994

Approved for public release; distribution is unlimited.

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency Under the Jurisdiction
of the Deputy Chief of Staff for Personnel

EDGAR M. JOHNSON
Director

Research accomplished under contract
for the Department of the Army

Kansas State University

Technical review by

D. Bruce Bell
Gary Bowen
Jacquelyn Scarville

Accession For	
THIS GRA&I	<input checked="" type="checkbox"/>
ERIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
By	
DATE	
Availability Codes	
1.1	1.1
A-1	

NOTICES

DISTRIBUTION: Primary distribution of this report has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, ATTN: PERI-POX, 5001 Eisenhower Ave., Alexandria, Virginia 22333-5600.

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204 Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE 1994, January	3. REPORT TYPE AND DATES COVERED Final May 92 - Sep 92	
4. TITLE AND SUBTITLE Family Adaptation to the Demands of Army Life: A Review of Findings			5. FUNDING NUMBERS DAAL03-91-C-0034 63007A 792 TCN 92-280 DO 0320	
6. AUTHOR(S) Schumm, Walter (Kansas State University); Bell, D. Bruce; and Tran, Giao (U.S. Army Research Institute)				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Kansas State University Justin Hall, HDFS Manhattan, KS 66506-1403			8. PERFORMING ORGANIZATION REPORT NUMBER ---	
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences ATTN: PERI-RP 5001 Eisenhower Avenue Alexandria, VA 22333-5600			10. SPONSORING / MONITORING AGENCY REPORT NUMBER ARI Research Report 1658	
11. SUPPLEMENTARY NOTES Dr. Schumm performed this research under the Battelle U.S. Army Summer Faculty Research and Engineering Program. Contracting Officer's Representative, D. Bruce Bell.				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b. DISTRIBUTION CODE ---	
13. ABSTRACT (Maximum 200 words) This report reviews 188 recent reports of military and civilian research that consider the main challenges facing military families. The report discusses how to adapt to the potential stresses of (1) relocation, (2) living in a foreign culture, (3) prolonged family separation, (4) physical danger, and (5) the institution of the Army itself. The sources for these reports are the three agencies that were required by the Army to examine this challenge: the U.S. Army Research Institute for the Behavioral and Social Sciences, the Walter Reed Army Institute of Research, and the RAND Corporation. In this report, adaptation is defined as the ability of soldiers and their families to meet Army demands and to achieve personal and family satisfaction at the same time. The stressor that appears to pose the most serious threat to family adaptation is separation, which is even more stressful when combined with deployment to a war zone. Although there are many aspects of the Army as an institution that impact on families, perhaps the most stressful is the expectation that the mission of the Army takes priority, with the attendant consequences of long, often (Continued)				
14. SUBJECT TERMS Family adaptation Deployment Separation Family programs Relocation Quality of life			15. NUMBER OF PAGES	
			16. PRICE CODE ---	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	

13. ABSTRACT (Continued)

unpredictable, hours and extensive volunteer work for many of the soldiers' spouses. Finally, relocation is a frequent, but less demanding, stressor that can have both positive and negative consequences, depending on the attitudes and circumstances of the family.

Research Report 1658

Family Adaptation to the Demands of Army Life: A Review of Findings

Walter Schumm

Kansas State University

D. Bruce Bell and Giao Tran

U.S. Army Research Institute

**Organization and Personnel Resources and Research Unit
Paul A. Gade, Chief**

**Manpower and Personnel Research Division
Zita M. Simutis, Director**

U.S. Army Research Institute for the Behavioral and Social Sciences
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

Office, Deputy Chief of Staff for Personnel
Department of the Army

January 1994

**Army Project Number
2Q263007A792**

Manpower and Personnel

Approved for public release; distribution is unlimited.

FOREWORD

The Army Family Research Program (AFRP) began in November 1986 as an integrated research project mandated by the Chief of Staff, U.S. Army, White Paper 1983: The Army Family and The Army Family Action Plans (1984-Present). This mandate was spelled out in the AFRP charter: the U.S. Army Research Institute for Behavioral and Social Sciences (ARI) and U.S. Army Community and Family Support Center (CFSC) Letter of Agreement dated 18 December 1986, titled "Sponsorship of ARI Army Family Research."

The object of the research was to support the Chief of Staff, Family Action Plans, and the CFSC through research products that would (1) determine the demographic characteristics of Army families, (2) identify motivators and detractors to soldier retention, (3) improve soldier and family sense of community and adaptation to Army life, and (4) improve operational readiness.

This report presents a summary of findings from AFRP and other contemporary research efforts that show the nature of adaptation to Army life, the conditions that are associated with good adaptation, and the benefits to families and the Army of having well adapted families.

The findings from this and other AFRP reports on family adaption were presented to CFSC and representatives of the Departments of Defense, Navy, Air Force, and the U.S. Coast Guard at the University of North Carolina Military Family Research Conference, which was held at the University of North Carolina at Chapel Hill, North Carolina, on 8-10 July 1992. It was also incorporated into the AFRP summary report.

EDGAR M. JOHNSON
Director

ACKNOWLEDGMENTS

Grateful appreciation is expressed to Jacquelyn Scarville of the U.S. Army Research Institute for the Behavioral and Social Sciences and to Gary L. Bowen of the School of Social Work, the University of North Carolina at Chapel Hill, for their insightful and extremely helpful reviews of the manuscript. We would also like to thank Joanne Johnson and her staff at the Department of Defense Military Family Resource Center for their assistance in locating needed articles for this review. Although the contributions and feedback from these individuals are recognized, responsibility for the contents of the report lies solely with the authors.

FAMILY ADAPTATION TO THE DEMANDS OF ARMY LIFE: A REVIEW OF FINDINGS

EXECUTIVE SUMMARY

Requirement:

The Army Family Action Plan (AFAP) required that research be conducted on the nature of family adaptation to the demands of Army life and the best methods for improving it. This report summarizes for Army managers what is now known in response to the AFAP mandate.

Procedure:

This review focuses mainly on the work of the three agencies commissioned by the AFAP to conduct Army family research: The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI), the U.S. Army Walter Reed Institutes of Research (WRAIR), and the Arroyo Center of the RAND Corporation. Altogether these three agencies have published well over 100 reports that touch on some aspect of family adaptation to the Army. The bulk of this report is devoted to summarizing and reconciling the findings from these three substantial resources of information. Information was also drawn from other recent military and civilian sources when needed to make the picture complete.

Findings:

In this review, family adaptation is defined as the ability of soldiers and their families to meet Army demands and their ability to achieve personal and family satisfaction at the same time. Army families have to adapt to four major stressors: relocation (mobility), separation, danger, and institutional aspects of the Army. The stressor that appears to pose the most serious threat to family adaptation is separation, which is even more stressful when combined with deployment to a war zone. Separation affects family adaptation during the soldier's absence, prior to departure, and during the reunion process. Separation tends to have negative effects on children. Danger increases the stress of separation and poses the threat of permanent loss of the soldier to the family. While there are many aspects of the Army as an institution that impact on family adaptation, perhaps the most stressful is the expectation that the mission of the Army takes priority over the soldier's family life, reflected in long, unpredictable working hours for the soldier and often extensive volunteer

work for the soldier's spouse. Finally, relocation is a more frequent but less demanding stressor that poses both negative and positive consequences for family adaptation. Relocation appears to be more stressful for families with teenagers and for overseas moves.

Families can overcome stressors, in general, by being prepared and well informed, and taking things one day at a time. Marriages in which the spouses work as a team but in which each spouse can function well independently probably adapt most easily to Army life. The Army can enhance family adaptation by reducing the duration of separations, helping families and soldiers communicate during separation, covering the full costs of relocation, facilitating spouse employment, keeping soldiers informed, and allowing soldiers time off for personal business.

Army programs that currently assist families during relocation and separation should be continued. Increasing the availability of quality child care on post will help minimize difficulties that parents have in meeting short notice field exercises or other unit activities. Marriage enrichment programs or parent education programs sponsored by Army Family Community Services or chaplains should focus attention on promoting family teamwork and specific ways to adapt to Army life.

Future research needs to take into account the effects of downsizing of the Army and focus on multivariate analyses of the effects of various stressors on family adaptation to the Army. Qualitative research and short-term longitudinal studies may be of particular value in assessing the impacts of downsizing on Army families and in studying specific processes that Army families use, over their life course, to adapt to various hardships associated with Army life.

Utilization of Findings:

A draft version of this report was shared with military family program managers and military family researchers at the University of North Carolina's Military Family Research Planning Conference, which was held 8-10 July 1992. The participants who represented the Department of Defense, Army, Navy, Air Force, Coast Guard, and three universities all found the findings to be useful in their work. It was also incorporated into the AFRP summary report.

FAMILY ADAPTATION TO THE DEMANDS OF ARMY LIFE:
A REVIEW OF FINDINGS

CONTENTS

	Page
INTRODUCTION	1
THE NATURE OF FAMILY ADAPTATION	2
THE PRINCIPAL STRESSORS FAMILIES ENCOUNTER	4
Relocation	4
Family Separation	11
Adaptation to Danger	17
The Army as an Institution	24
CONCLUSIONS AND RECOMMENDATIONS	30
REFERENCES	35

LIST OF FIGURES

Figure	1. Typology of family adaptation to military life	3
	2. Matrix of relocation stressors and stress reducers	12
	3. Matrix of family separation stressors and stress reducers	18
	4. Matrix of danger stressors and stress reducers	25
	5. Matrix of Army relocation stressors and stress reducers	31

FAMILY ADAPTATION TO THE DEMANDS OF ARMY LIFE: A REVIEW OF FINDINGS

INTRODUCTION

The nature of Army family life, to which families are required to adapt, has changed over the years. Families (as in the role of camp followers during the Revolutionary War) are no longer required to serve as support troops to gain military benefits (Bell & Iadeluca, 1987). However, the Army is still a "greedy institution" that not only makes extra demands on the soldier families but also places extra demands upon families, such as the risk of injury or death of the soldier, geographic mobility, frequent and extended family separations, residence in foreign countries, and pressures on the families to exhibit "approved" behaviors (Segal, 1988). Although these pressures may be present in any family-employer setting, they are particularly salient for military families.

The willingness of the Army to help families adapt, and the rationale for providing that help, has also shifted over the years. Benefits and systems for taking care of family needs have evolved from a "hands off" stance (the family is strictly the soldier's responsibility) to what the Army now calls a "partnership," in which the Army is committed to the support of families that will result in a mutually beneficial relationship (Chief of Staff, U.S. Army, 1983). How the Army supports families and how it helps families to adapt are discussed in this report.

The purpose of this report is to provide needed information to Army policy makers and program managers on what family adaptation to the Army is, why it is important, and how it can be improved. This information comes mostly from research investigations that have been conducted since the publication of the Army Chief of Staff's (CSA's) White Paper on the Army Family (1983). In fact, most of what will be reviewed here was started in response to the CSA's mandate in the White Paper and its implementation documents: the annual Army Family Action Plans. That mission was to produce and share research products that would (1) determine the demographic characteristics of Army families, (2) identify motivators and detractors to soldier retention, (3) improve soldier and family sense of community and adaptation to Army life, and (4) improve operational readiness.

The strategy of this particular report is to identify the major stressors that Army families encounter, to identify the particular hardships associated with each major stressor, and to discuss things that both families and the Army (at both installation and unit level) can do to overcome those hardships, thereby enhancing family adaptation to the Army. In some situations, hardships are more difficult to overcome for certain types of vulnerable families, which will be identified. Recommendations for ways to improve family adaptation will be derived from the review of research.

THE NATURE OF FAMILY ADAPTATION TO THE ARMY

Family adaptation is a relatively new concept for social scientists (Bowen, 1989a; Orthner & Bowen, 1990), with often ambiguous definition and measurement (Orthner & Bowen, 1990). While noting that organizational researchers have struggled to define the concept, Orthner & Bowen (1990) indicate that it has most often been defined as an outcome of level of fit between families and systems in their environment; they further recommend that for military research the central concept be family adaptation to military life rather than family adaptation to life, in general. Variations in the definition are prevalent. For example, within AFRP alone family adaptation has been defined as:

- * family "adjustment to external organizational demands" (Orthner, Zimmerman, Bowen, Gaddy, & Bell, 1991, p. 3)
- * "outcome of the interplay between the personal and the environment systems" (Bowen, 1990b, pp.19-20)
- * "the degree to which soldiers and their family members cope and adjust to the demands of Army and family life and work together as a team in meeting Army expectations and achieving individual and collective goals" (Bowen, Orthner, Zimmerman, & Meehan, 1992, p.44).
- * "a composite of family members' overall adjustment to marital and family life as well as to Army life" (Bowen, 1990a, p. 15).
- * An outcome or level of "fit" between families and systems in their environment (Orthner and Bowen, 1990, p. 25).
- * The health of the interface of the Army as a social system and the family (Bowen, 1990a, p. 17).

Bowen (1990b) develops the theoretical background for the concept of family adaptation by discussing the parallel lines of research by McCubbin and his associates (McCubbin & McCubbin, 1987; McCubbin & Patterson, 1983) -- the ABC-X models and their modifications -- and the models of person-environment fit (Caplan, 1983; French, Caplan, & Harrison, 1982). However, much of this research does not distinguish processes that facilitate adaptation from adaptation outcomes themselves (Orthner et al., 1991); here we will focus on adaptation as an outcome rather than as processes leading to adaptation. Bowen (1990b) mentions that the person-environment fit models discuss both needs-supplies (or needs-resources in Orthner & Bowen, 1990) and demands-abilities aspects of adaptation. In simpler words, a family might adapt to the demands of army life but not be feeling satisfied, as a result of having unfulfilled personal or family needs due to military hardships or conditions. While Bowen (1990b) mentions the issue, he does not develop it into its logical typology (Figure 1).

		SATISFACTION WITH ARMY LIFE	
		High	Low
ABILITY TO MEET ARMY DEMANDS	High	GROUP 1	GROUP 2
	Low	GROUP 4	GROUP 3

FIGURE 1. Typology of family adaptation to military life.

In Figure 1, Army families are categorized in terms of their ability to meet Army demands and to find satisfaction in so doing. The sense is that families that are able to meet Army demands and to enjoy the Army lifestyle at the same time would be most adapted to military life. The model could be generalized to any family in terms of a family meeting other types of demands (personal or occupational) or attaining high satisfaction levels with respect to internal or external goals, but as the focus of this report is family adaptation to military life, the typology is defined more narrowly.

Group 1 represents families who are adapting well to the demands of army life and also find it very satisfying overall. Group 2 represents families who are adapted but find military life less than satisfying. Group 3 represents families who are not adapting nor feeling satisfied. Group 4 is a possibly unusual (or low frequency) group that is not adapting but is satisfied. The ideal army family is probably represented by Group 1. Group 2 families may be functional for short term situations (soldiers mobilized for major regional conflicts but not career active component personnel) but may not be suitable career families, particularly in an era of downsizing. Group 3 families are probably "problem" families that would likely volunteer to leave the service in an era of downsizing and a volunteer army. Group 4 families, though probably rare, may represent those using the army as a "welfare" organization, taking more than they contribute, likely unwilling candidates for termination from the service in an era of downsizing.

Because previous research has focused either on satisfaction with military life or adaptation to demands without considering the potential interaction between the two

concepts, much new work remains to be done, even with previous data sets, if this definition of family adaptation, as a combination of meeting Army demands and maintaining satisfaction with Army life, is accepted.

THE PRINCIPAL STRESSORS FAMILIES ENCOUNTER

The principal stressors which families encounter were outlined in Segal's paper (1988). Each of these demands (i.e., relocation, foreign countries, family separation, danger, and the institution of the Army) on military families will be discussed in turn. However, the issue of living in foreign countries will be dealt with under the heading of relocation.

I. Relocation.

Military personnel change stations on average every two to three years (Croan, Levine, & Blankinship, 1992; Devine, Bishop, & Perrine, 1987; Doering, Hutzler, Francisco, & Sanchez, 1982; Vernez & Zellman, 1987). Army personnel, both officers and enlisted, move more frequently than their peers in the other military services (Puskar, Wilson, & Mocnis, 1990; Vernez & Zellman, 1987). Quite often Army moves involve crossing state or international boundaries (Statuto, 1984), since more than 40% of active duty soldiers are stationed outside of the continental United States (CONUS) (Burnam, Meredith, Sherbourne, Valdez, & Vernez, 1992; Croan et al., 1992; Devine, Bishop, Perrine, & Bullman, 1988). Relocation differs from separation; if a soldier moves to a distant duty station without his or her family, relocation is involved but the research focus is usually on separation. Relocation in this report refers to moving a household in relation to an official reassignment to a different duty station.

Relocation, under any circumstances, can be stressful for Army families. Despite various reports of relocation stress from clinical or non-representative samples of Army families (e.g. Gonzales, 1970; Klein, Tatone, & Lindsay, 1989; Koehler, 1980; Puskar et al., 1990; Styles, Janofsky, Blankinship, & Bishop, 1990), it has only been recently that relocation stress has been firmly documented in large, random, representative samples of Army families.

Over ten percent of enlisted soldiers in the 1985 DoD survey reported that they felt their spouse had serious problems adjusting to relocation (Vernez & Zellman, 1987). Devine et al. (1987) reported at least 15% of families experiencing severe problems; Croan et al. (1992) report 27.0% having slight problems and another 25.6% having

serious problems because of relocation.¹ Orthner, Giddings, & Quinn (1986, p. 197), after analyzing their Air Force data, state that "relocation is the most significant adjustment adolescents routinely make."

Relocation stress has implications for the Army. The stress of relocation has been correlated with family adaptation to the Army in several of the more important recent representative Army studies (Bowen, 1989a, 1989b; Croan et al., 1992; Teitelbaum, 1990). Burnam et al. (1992) found lower levels of marital satisfaction and emotional well-being among soldiers stationed outside the continental United States (OCONUS) than CONUS soldiers in the 1987 RAND survey; they also found that those soldiers who expected to make a Permanent Change of Station (PCS) every two years (versus every three years) expected to remain in the army two years less on average. However, Lakhani (1991) found no significant relationship between projected undesirable assignments or overseas assignments and officer retention plans in a 1986 survey of over 1400 Army officers. Notably, Ross (1986) found that 76% of officers attending the War College (a group that is highly committed to an Army career) viewed living in foreign lands as a retention incentive, but the rate was higher for colonels (92%) than for lieutenant colonels (73%). Ross (1986) also found that the lowest rate (54%) fell to officers with 22-23 years of service, possibly because many of those officers had high school age children at home.

Schneider & Gilley (1984) and Ozkaptan, Sanders, & Holz (1986) found in separate research surveys that more soldiers and spouses associated relocation with a decrease in marital or children's happiness than associated it with an increase. Vernez & Zellman (1987) using a 1979 DoD survey found that relocation problems were cited among the most important reasons for leaving the army by ten percent of enlisted and five percent of officers. Styles et al. (1990) in their pilot survey of 184 soldiers at three installations found that relocation was cited as one of the five major disadvantages of Army life. Thus, it appears clear that relocation can be a stressor for Army families. The specific aspects of relocation that make it a stressor will next be considered.

Relocation Hardships

What is it about relocation that produces difficulties for Army families? General areas of stress include finances and housing, adapting to a new environment, and the impact on the spouse's career. In terms of finances, relocation can be expensive, with not all costs subject to reimbursement by the military; indeed, Vernez & Zellman (1987) cite a National Military Wives Association study (1983) as indicating that as little as one-

¹Some reports indicate positive aspects of relocation, such as learning a new language, meeting new people, learning about a new culture, or building family unity (Croan et al., 1992; Darnauer, 1976; Hunter & Sheldon, 1981; Klein et al., 1989; Marchant & Medway, 1987; Puskar et al., 1990; Rainey, 1978; Styles et al., 1990).

third of the costs of moving are reimbursed by the government for military moves. Guiliano (1988) estimated that Air Force enlisted families lost \$1946, \$1163, and \$2415 for CONUS to overseas, CONUS to CONUS, and overseas to CONUS moves, respectively (for each move). In a 1985 survey of 323 Air Force and Army officers at the Air Force War College, Upchurch (1986) found that average costs are not reimbursable for PCS moves were approximately \$2700. Such losses add up over time with families moving every two to three years. Moving costs that are not reimbursable were cited by over 37% of Army personnel in a 1979 DoD survey as either somewhat of a problem or as a serious problem, but there was some hope that matters had improved with changes in reimbursement schedules (Vernez & Zellman, 1987). Styles et al. (1990) found in their focus groups that many respondents said they lost money with each move. However, in the 1989 AFRP survey, the problem of costs of moving which are not reimbursable were cited by over 43% of the soldiers as a serious problem (Croan et al., 1992); thus, the problem does not appear to be diminishing.

A related area of concern or stress is housing at the new duty station. Housing is often inadequate, especially in Europe (Bowen, 1989a; Bower, 1967; Puskar et al., 1990) and obtaining permanent housing quickly can be a major contributor to relocation stress. In the 1989 AFRP survey, finding permanent housing quickly was cited by 31% of the soldiers² as a problem. Citing logistical problems in general increased from only 6.5% for those who found housing immediately to 57.2% for those for whom the wait was 3 months or more (Croan et al., 1992). Of course, waiting for housing is likely to increase moving costs. Interestingly, Schneider & Gilley (1984) found that living on post made relocation easier since newcomers on post got more help in getting settled and felt more like part of their new neighborhood more quickly than did those who moved into an off post home.

A second important area of stress, indirectly associated with finances, is the adverse impact of moving on the spouse's career (and income) (Blanchard, 1982; Bowen, 1989a; Chaskel, 1964; Jacobson, 1983; Scarville, 1991; Styles et al., 1990). Using Navy data from the 1985 DoD survey, Warner & Little (1988) found that service members lost as much as ten to twenty percent of family income from decreased spouse's income in the first year after a move. Nearly 52% of those soldiers with a spouse (and who had at least one PCS move) cited the effects on spouse employment as a serious problem with relocation in the 1989 AFRP survey (Croan et al., 1992).

A third area involves adjusting to one's new environment (Ammons, Nelson, & Wordarski, 1982; Chaskel, 1964; Styles, et al., 1988; Teitelbaum, 1990). Some spouses feel like they can never establish "roots" or make a house their "home" (McCormick, 1982). All family members may feel affected by relocation. In the 1989 AFRP survey (Croan et al., 1992), soldiers felt that they, their spouses, and their children had

²Of all soldiers who had experienced at least one PCS move.

problems adjusting to their new environments, with 21% reporting self-adjustment problems and over 30% reporting problems with respect to spouse or child adjustment to the new environment. However, the research on child adjustment has been mixed with both negative (Gonzales, 1970; Khelif, 1978; Kurlander, Leukel, Palevsky, & Kohn, 1961; McKain, 1973; McKain, 1976; Orthner, Brody, Hill, Pais, Orthner, & Covi, 1985; Shaw & Pangman, 1975; Vernez & Zellman, 1987) and positive (Hunter, 1982; Jensen, Lewis, & Xenakis, 1986; Marchant & Medway, 1987; Partin, 1967; Pepin, 1966; Smith, 1975) reports; most of the negative research concerns emotional adjustment whereas most of the positive research concerns academic achievement. Both military and civilian wives in Puskar et al.'s (1990) research said that relocation was more difficult if one had children than if one did not. Orthner, et al. (1986) found in their Air Force research that adolescents, especially females, had a difficult time adjusting to relocation and making new friends. Darnauer (1976) found that military teenager children found frequent relocation to be one of the most upsetting aspects of military life.

What Helps

The things that help families to adapt to relocation can be broken into three groups: (1) things that families can do, (2) things that the Army can do, and (3) things which help but are not within anyone's control. The latter matters help to identify families that may be especially vulnerable to the hardships. Our focus will be on things that are helpful for all families, not just one or two types of families.

Things families can do. Having a positive attitude toward relocation appears to help (Hunter, Gelb, & Hickman, 1981; Klein, et al., 1989; Marsh, 1970; Pedersen & Sullivan, 1964) as well as seeing relocation as a normal event (Lyon, 1967), as military wives often do (Puskar et al., 1990). A present-time orientation (taking one day at a time) also may help (Carlson, 1982) as well as having high levels of personal confidence (Bowen, 1989a). A second thing that families relocating outside CONUS can do is to prepare for relocation by becoming familiar with the language and culture of the new location (Lavee, McCubbin, & Patterson, 1985). If families, through preparation, have obtained accurate, realistic expectations about what they will encounter at the new location, they may adapt much more easily than if they are unhappily surprised by what they encounter (Bowen, 1989a).

What the Army Can Do. What the Army can do can be described in terms of (1) what installations or higher commands can do and in terms of (2) what units themselves can do.

First, at the installation or higher level, the Army can provide as much advance notice as possible to families, which will give them more time to prepare, with confidence, for their relocation (Barton & Chin, 1989; Ozkaptan et al., 1986). Secondly, the Army can provide both pre-move and post-move information to families; results from the 1989 AFRP survey indicate that having both pre-move and post-move information

was most helpful, while having only post-move information was not useful at all (Croan et al., 1992). Griffith et al. (1988) found that most families used welcome packets provided by their new installations. The 1987 RAND survey (Burnam et al., 1992) also found that relocation assistance was associated with less depression and higher emotional well-being among soldiers. Installations can be helpful in providing incoming soldiers with realistic expectations about their new duty station.

The Army can help provide social support and community support, particularly the latter, including child care and job assistance for spouses, services that have been found to be helpful (Bowen, 1989a; Bower, 1967; Carlson, 1982; Farkas & Durning, 1982; McKain, 1973). In fact, Bowen (1989a) found that community support was the next most important factor in relocation adjustment after accurate expectations for both officers and enlisted personnel moving to Germany.

Unit support is also important, especially from unit leaders (Mohr, Holzbach, & Morrison, 1981); Teitelbaum (1990), as well as Burnam et al. (1992) in the 1987 RAND survey, found that a positive unit welcome was very important whereas welcome packets were not seen as very useful (however, as noted previously, Griffith et al., 1988 found that most people used the welcome packets). Sponsorship needs command emphasis - sponsors appear to be helpful when assigned and involved (Barton & Chin, 1989; Dickieson, 1968; Ozkaptan et al., 1986) but they may not be very useful when not assigned or they don't take their job seriously, which happens frequently, especially for junior enlisted personnel (Dinwiddie & Ingram, 1980). Schneider & Gilley (1984) in a survey of 102 Army families found that 51% of the soldiers had not had a sponsor and only 38% felt their sponsor was effective (11% had an ineffective sponsor); however, effective sponsorship was correlated with retention intentions - 6% of those with an effective sponsor intended to leave the Army but 25% of those with an ineffective or no sponsor intended to leave. In the 1989 AFRP survey (Croan et al., 1992) it was found that sponsorship use ranged from as low as 14% for junior enlisted to nearly 60% for senior officers. However, another way in which units can help soldiers and their families relocate is to allow them time off to settle in after they arrive; although, typical leave patterns of soldiers involve taking leave before moving to a new location, units should allow for soldiers to take leave after arriving.

Uncontrolled factors. Certain types of families may have more difficulty with relocation than others, but obviously neither the family nor the Army can do much in the short term about family composition or certain other factors that make these families more vulnerable to the hardships of relocation. Some factors will change on their own over time - teenage children do eventually grow up and leave home while other factors may be under the Army's control at the micro level but not at the macro level (e.g. while the Army can change the overseas assignment of any one soldier, it is required to place thousands of soldiers overseas, some of whom will probably not want to be assigned overseas; likewise, any one family could be given housing on post but the Army cannot afford to build on post housing for all families). Some factors may have been under a

family's control but are now no longer so - once family has children, they normally don't "give them back." Another similar factor is spouse employment, which may be under a family's long term control but is not under short term control, as shown by the fact that some spouses are always looking for but unable, at the moment, to find suitable paid employment; likewise, a soldier can over time improve his rank but in the short run must accept his current status.

Family composition appears to play an important role in adjustment to relocation (Puskar et al., 1990). Previous reports suggest that older families (Tarzier, 1990), families with fewer children (Marsh, 1970), or families with preschool or elementary school-aged children as opposed to adolescent children (Barrett & Noble, 1973; Brett, 1982; Brown & Orthner, 1980; Derr, 1979) have fewer problems with relocation. One exception to the generalization that relocation presents more problems for families with teenagers was McCubbin and Lavee (1986) who found in a survey of 782 enlisted couples who had moved to Germany that the families with preschool and elementary school aged children experienced more post arrival strain than did other families. However, in that survey, only 13% of the enlisted families had any adolescent children, compared to 35% at the preschool stage and 29% at the school age stage (McCubbin & Patterson, 1983, p. 73); there may not have been a large enough number of adolescent-stage families to allow for a valid comparison with the other types of families. In the 1989 AFRP survey, single soldiers had fewer problems with housing, finances, and setting up at the new location than did single parents or married couples (Croan et al., 1992). Furthermore, in the 1989 AFRP survey, families with fewer children had fewer difficulties with relocation; the families with the fewest problems were those with a child aged two years or less.³

In contrast, those families with a child aged 6 to 12 years had the most problems, except for officers' families, which had the most problems with a child aged 13 to 17 (Croan et al., 1992).

Families with a spouse working outside the home for pay seem to adjust better overall to relocation than do other families, in spite of the problems associated with continuing the spouse's career without interruption (Manning & DeRoutin, 1981; Bowen, 1989a).

Evidence has been and continues to be mixed on the effects of having experienced previous PCS moves. While some have reported that those with fewer PCS moves have more difficulties (Catalyst, 1983; Marsh, 1976; Ozkaptan et al., 1986; Segal, 1988; Siebernaler, 1986), others have found no relationship (Marriott, 1982; Pedersen & Sullivan, 1964). Data from the 1989 AFRP survey suggest that officers experience more

³ Croan et al. (1992) focused on the effects of child's age by analyzing results only for one-child families; using families with children in several age groups would have confounded the effects of number of children with ages of children.

problems with moves in terms of cost and children's responses after having moved more than four times (there were few differences between families that had moved one or two times and those that had moved three to four times) (Croan et al., 1992).

Limited evidence suggests that within CONUS moves are less stressful than OCONUS moves, perhaps especially for enlisted families (Barton & Chin, 1989; Croan et al., 1992) or families not as familiar with the new language or culture (Lavee et al., 1985). Having to move overseas appears to intensify relocation problems (Furukawa, 1977; Koehler, 1980; Military Family Resource Center, 1984, p. 108; Nice & Beck, 1978; Nida, 1980). Croan et al. (1992) found that officers and enlisted persons reported far more problems with finding housing in Europe and other OCONUS locations than in CONUS (for example, 58% of enlisted had problems in Europe compared to 37% in CONUS while 52% of officers had problems in Europe compared to 34% in CONUS). However, re-entry into CONUS from overseas is not as easy as some families expect (Koehler, 1980; Siebener, 1986).

Assignments that are preferred for location or by timing are less stressful than those that are unwanted (Croan et al., 1992; Marsh, 1976; Teitelbaum, 1990). Fortunately, near 50% of enlisted moves and nearly two-thirds of officer moves are to preferred locations, but these percentages are lower for the Army than for the Navy and the Air Force (Burnam et al., 1992). Being assigned to a desired location is associated with higher emotional well-being (Burnam et al., 1992).

Living on post may reduce relocation stress (Marriott, 1982; McKain, 1976; National Military Wives Association, 1983; Schneider & Gilley, 1984), but evidence is limited since it comes from smaller, less representative surveys.

In general, higher rank is associated with better adjustment to relocation (possibly because more officers obtain assignments of their preference than do enlisted personnel) (Croan et al., 1992) but this association is subject to considerable variation.

Family Adaptation

So far, we have looked at general stressors and general behaviors/situations that appear to reduce the stressful aspects of relocation. However, in spite of limited research, there are some ways in which we can associate how which stress reducer deals best with which type of stress; furthermore, we may be able to see how such combinations are more relevant for certain types of families. In other words, what do we know about how certain types of families adapt successfully to certain types of stressors?

In the 1989 AFRP survey, families appeared to adapt best in terms of financial/housing issues when they were moving to a preferred location more than at a preferred time; however, with respect to children adjusting to a new location, preferred

timing appeared to be as helpful as preferred location. In particular, August appears to be the best time for families with teenagers to move (Kirtland & Katz, 1989).

In the 1989 AFRP survey, officers who had experienced fewer PCS moves had fewer difficulties, but there was no apparent effect for enlisted soldiers and their families (Croan et al., 1992).

In general, however, we have relatively little research available on which types of families find which type of support most helpful for various types of problems. A summary of what we know to date with some subjective estimates of where factors belong is shown in Figure 2 below.

II. Family separation.

As observed by Coolbaugh and Rosenthal (1992, p. 1) "... separations are a fact of life for the military family." However, it is important to note that there are several types of separations for Army families. Soldiers may be separated from their families on unaccompanied tours (e.g. having orders for a one year tour in Korea) or temporary duty (TDY) (e.g. being sent to the Sinai as part of an international peace-keeping force for six months) tours for longer periods of time. However, shorter periods of time away from home also occur for field training at distant sites (e.g. National Training Center for two months) or local sites (e.g. field training for a week on post, as well as short tours for individual training or to support Reserve Component forces training. Situations involving long term absence due to captivity by an enemy force (Benson, McCubbin, Dahl, & Hunter, 1974; Hunter, 1977; Hunter & Plag, 1972, 1977; Segal, Hunter, & Segal, 1980) will not be considered in this report.

While it may not be surprising that there have been few studies of the effects of separation in Army populations (Van Vranken, Jellen, Knudson, Marlowe, & Segal, 1984), it is surprising that there have been few studies of the incidence and duration of separations for Army families. Orthner et al. (1986) reported that Air Force families experienced about twice as much separation as a control group of civilian families. Fentress (1987) cited Goldman & Segal (1976) who reported that up to twenty percent of all married U. S. servicemen were assigned at locations away from their families at any given time. Using 1987 RAND data, Burnam et al. (1992) reported that their Army soldiers had experienced during the previous year an average of 3.4 separations for an average total of 3.7 months apart. The best and most recent data on separation incidence comes from the 1989 survey of the Army Family Research Project. From that data, Coolbaugh & Rosenthal (1992) report that 8% of married soldiers were not living with their spouse with only 2.1% on unaccompanied tours. Most unaccompanied tours involved Europe with the fewest such tours occurring, as one might expect, in CONUS locations. However, separations were common even when soldiers were accompanied by their families.

ACTIONS/SITUATIONS UNDER CURRENT CONTROL OF:

	Families	The Army	Neither
Hardships			
All	Realistic Expectations	Advance Notice	More Children
	Positive Attitude	Pre/Post Move Information	Teenage Children
	"Day to day" Orientation	Effective Sponsorship	Spouse Employed
	High Personal Confidence		Outside CONUS
			Lower Rank
Financial Situation and Housing	Anticipate Unreimbursed Costs	Reimburse a Higher Percentage of Actual	Now Preferred Location
			Living off Post
			Officers w/Fewer Moves
Spouse Employment		Child Care	
		Job Assistance	
Adjusting to New Location	Detailed Preparation	Unit Welcome	Now Preferred Timing for Adolescent
	Learn new language and culture		Living Off Post

FIGURE 2. Matrix of relocation stressors and stress reducers.

Within the previous six months, over 90% of soldiers reported spending one or more nights away from home and a majority reported spending at least two weeks away from home in that time period. Within the previous year, 37% of soldiers reported spending a month or more away from home; of that 37%, a fifth had spent five or more months away and nearly two-thirds had spent one to two months away.

Thus, our best evidence indicates that separation is indeed a frequent and common occurrence for Army families. But is it a problem?

While separation is somewhat of a problem for the soldier, who often experiences guilt about leaving and misses his family, most research concurs in focusing on the effects on the spouse or children (Coolbaugh & Rosenthal, 1992). There the news is not good. According to Piotrkowski & Gormick (1987, p. 268) "... research on work absent fathers reveals a host of negative implications for wives and children." Lagrone (1978) comments that probably the most severe stress a military wife and children face is enforced separation from the father. For example, Knudson, Jellen, Harris, Schneider, & Oldakowski (1982) studied 29 Army wives and found that 48% had moderate to severe problems with well-being before their husband's three-week deployment, 32% had such problems during the deployment, and 28% did after the deployment. Spjut & Studer (1975) in their Air Force study found 29% of wives having had important problems with deployments. In the 1989 AFRP survey, 15% of wives said they had difficulties "from a moderate to very great extent" making decisions on their own during separation; likewise, 30% reported that life improved after their husband returned (65% said things remained the same). But separation can be positive or negative - Van Vranken et al. (1984) found 40% of the wives having a positive experience overall and 31% a negative experience as a result of the Sinai deployment of their husbands. Some couples may need marital therapy to help work through separation related problems (Peck & Schroeder, 1976).

As for children, some evidence points to no problems (Curran, 1981), but most does not (Hunter, 1982). Yeatman (1981) in research with 100 separated Army families found 66% of them experiencing problems with their children during the separation and 38% afterwards. The 1989 AFRP survey found that 41% of families reported at least moderate trouble with their children during separations (Coolbaugh & Rosenthal, 1992).

But do separations have any impact on retention or readiness? A variety of studies have found family separation to be cited by military personnel or their wives as the worst aspect of military life and usually a primary reason to leave the service (Day, 1979; Howell, 1980; Leider, 1970; Manley, McNichols, & Stal, 1977; Mohr et al., 1981; Weinstein & Beach, 1984). Ross (1986) in a survey of 145 attendees at the Army War College found that over 82% cited unaccompanied tours as a possible reason for leaving the Army with over 78% citing time away from family as a negative incentive for staying in the Army. Bowen & Neenan (1989) in a reanalysis of 1985 DoD survey data found a positive correlation between satisfaction with separation and satisfaction with the military as a way of life. Styles et al. (1990) in a study of 184 Army soldiers at three installations found that separation was cited as one of the five major disadvantages of Army life. In the 1989 AFRP survey it was found that reenlistment intentions were significantly related to anxiety about past or future separations, but the correlations were small (.18 to .23). Van Vranken et al. (1984) in research with 78 wives whose husbands deployed to Sinai for six months found that enthusiasm for Army life declined from positive to neutral for wives of officers and NCOs while it declined from neutral to negative for wives of junior enlisted personnel. The 1989 AFRP survey also found that anxiety about separations correlated in the .20's with family adaptation to the Army. Burnam et al. (1992) found that perceiving separations as unnecessary was correlated with expecting to remain on active duty for fewer years. Less evidence is available for the effects of separation on readiness. Archer & Cauthorne (1986) in research with 215 Navy couples, found significant relationships between self-rated job performance and positive deployment

attitudes, family coping abilities, better family communication, and less emotional distress during separation. Burnam et al. (1992), using the 1987 RAND survey, found a correlation between lost duty time and perceptions that separations were unnecessary. In the 1989 AFRP survey, weak but significant relationships were found between soldier and supervisor readiness ratings and soldier and spouse separation anxieties. Thus, it appears clear that separation represents an important stressor for Army families.

Separation Hardships

How does separation affect Army families specifically? There appear to be six general areas of stress that affect wives: physical illness and pregnancy, affective conditions (depression, anger, loneliness, tension/irritability, emotional aspects of sex), marital adjustment, practical aspects of maintaining car and home, having to assume sole responsibility for family life and a dual role as parent(s) with respect to children, and making adjustments upon the return of one's husband.

Physical illness and pregnancy. Early research seemed to find greater levels of physical illness, primarily among Navy wives (Snyder, 1978a, 1978b), but later it was believed to be mostly psychosomatic illness (McCubbin, 1977a) or stress-related health symptoms rather than major illness (Van Vranken et al., 1984). Nice (1980) interpreted his data on Navy wives to mean that concerns about avoiding major illness during the absence of one's spouse led wives to seek medical attention for minor symptoms more often lest symptoms develop into something major (i.e. their actual rates of illness did not vary with separation but their use of medical facilities did). Wood and Gravino (1988) in their study of 42 wives of Army personnel deployed to the Sinai for six months found pregnancy during separation to be a major stressful condition.

Affective conditions. Loneliness and depression are common experiences among wives during separation (Archer & Cauthorne, 1986; Beckman, Marsella, & Finney, 1977; Burnam et al., 1992; Decker, 1978; McEvoy, 1982; Nice, 1981; Nice & Beck, 1980; Wood & Gravino, 1988). However, such problems don't magically appear the day after the service member departs; many studies find they begin from two to four weeks prior to departure. For example, McEvoy (1982) found that 28% of 585 Navy wives experienced anger, hostility, increased family tensions, and marital arguments prior to departure. Knudson et al. (1982) found that the lowest general well-being of wives occurred just prior to the soldier's deployment, with 48% of wives reporting moderate to severe problems, compared to 32% during separation and 28% after separation. Glisson, Melton, & Roggow (1980) found that the lowest levels of self esteem and highest levels of depression occurred for their wives two to four weeks prior to separation and in the middle of the separation period. Wood & Gravino (1988) found high levels of tension and irritability among wives prior to separation. Nice (1983) found high levels of depression at least two weeks prior to separation. Curran (1981) found the wives in his research to have the most difficult time prior to separation. Hunter (1983) also noted increased anger by wives prior to husband's departure. In fact, many couples find themselves in peculiarly intense arguments prior to separation, which may reflect the increased tension or may be a way of easing the pain of the separation (Bey & Lange, 1974; Den Dulk, 1980; Hunter, 1982).

Marital adjustment. Marital satisfaction often declines during separation (Burnam et al., 1992), possibly reaching its lowest level in the middle of the separation (Glisson, Melton, & Roggow, 1980). Fears of infidelity are common (Van Vranken et al., 1984). Although sexual adjustment is thought to be a problem, little research has been done on that sensitive topic (Snyder, 1981).

Maintaining car and home. Performing maintenance on home and car(s) may be a new role for the wife; wives may even be seen as easy "takes" by service personnel who frighten or cajole them into accepting non-essential repairs or improvements (Van Vranken et al., 1984). McEvoy (1982) found 17% of wives having difficulties with getting auto repairs accomplished.

Assuming sole responsibility for family life. Wives have reported problems with having to make major decisions alone (Van Vranken et al., 1984), as well as dealing with finances alone. Being the sole person responsible for all aspects of family life is a new position for many wives (Rosenfeld, Rosenstein, & Raab, 1973). Problems with children are often cited, as the wife takes on both roles of mother and father (McEvoy, 1982; Rosenfeld et al., 1973; Shaw, Duffy, & Privitera, 1978; Van Vranken et al., 1984).

Re-entry. The last stressor is re-entry of the father back into the family, a difficult process (Bey & Lange, 1974; Den Dulk, 1980; Frank, Shanfield, & Evans, 1981; Hunter, 1982). McEvoy (1982) cited 23% of wives as having problems getting reacquainted. In a 1986 survey of 785 Navy couples, Eastman, Archer, & Ball (1990) reported that husband and wife stress at re-entry was the highest of any period. The more successful the wife has been at becoming self-sufficient and independent, the more difficult it may be for her to give up part of that role and "allow the absent one to become a significant person again within the family (Fentress, 1987; Spjut & Studer, 1975)." Children may also distance themselves from their father as a way of expressing their anger at his departure and having to share mother again upon his return (Fentress, 1987). Van Vranken et al. (1984) found that 47% of children became ill after the father's return and a third of the mothers resented having to give up some of the independence they had gained during the separation. Coolbaugh & Rosenthal (1992) found that nearly 65% of wives said they became more independent as a result of Army separations.

What Helps

The things that help families to deal with separation can be divided into three groups: (1) things that families can do, (2) things that the Army can do, and (3) things which help but are not within anyone's immediate control. The focus will be on things that are helpful for all families, not just one or two types of families.

Things families can do. Prior planning is important, especially legal and financial; the wife should be kept informed (Spjut & Studer, 1975), which may require improved family communication (McCubbin, 1977a). Having cash reserves and a joint checking account have proven to be more important than a power of attorney (Coolbaugh & Rosenthal, 1992) in the AFRP survey. Having fewer money problems and the wife's being employed are also assets (Coolbaugh & Rosenthal, 1992; Scarville, 1990; Snyder,

1978a). Maintaining communication between husband and wife via telephone (provided the bill doesn't get too large!) and via mail are important (Benson & Van Vranken, 1977; Spjut & Suder, 1975; Van Vranken et al., 1984; Wood & Gravino, 1988). Wives who have a positive, day to day attitude and believe in the value of the Army will adapt better to separation (Carlson, 1982; Voydanoff, 1987; Wood & Gravino, 1988). Keeping active seems to be important for wives during separations (McCubbin, 1979). Learning to be self-reliant and independent appears to be important for wives (David & Orton, 1981; Hunter & Benson, 1977; McCubbin, 1977, 1979; Snyder, 1978a, c; Voydanoff, 1987; Weinstein & Beach, 1984), especially if the wife sees the separation as an opportunity for growth (Hunter, 1983). A "helpless female," passive role doesn't help (Snyder, 1978b). Notably, wives appear to assume more responsibility for family financial decision-making as more separations are experienced (Reinerth, 1976). Maintaining social support from family and friends appears to be important (Carlson, 1982; David & Orton, 1981; Decker, 1978; McEvoy, 1982; Snyder, 1978a; Voydanoff, 1987; Wood & Gravino, 1987, 1988). Religiosity is a help to some families in dealing with separation (Bermudez, 1977; Hunter, 1982; McCubbin, 1979). Having a good marriage or few marital problems also appears to correlate with adjustment to separation (Coolbaugh & Rosenthal, 1992; Wood & Gravino, 1988), as well as a couple feeling they are a "team" (Hunter & Benson, 1977).

Things the Army can do. In terms of installation and higher level command, whenever possible, the Army should avoid long term separations. The 1989 AFRP survey found that 41% of spouses and nearly half of soldiers expected serious problems with separations of five months or longer (Coolbaugh & Rosenthal, 1992). Since families who have just relocated appear to have extra difficulty in dealing with separation (Coolbaugh & Rosenthal, 1992; Hunter & Hickman, 1981), it may help if commands discourage sending new arrivals on long TDY immediately, if it is possible to avoid such separations. Although usage of some separation social services may not be frequent, they are still seen as useful by respondents in the 1989 AFRP survey (Coolbaugh & Rosenthal, 1992). Some wives have expressed an interest in being provided counseling for dealing with family issues during and after separation (Benson & Van Vranken, 1977). Promoting social acceptance of military personnel by the local community and social integration within the military community may foster social support that will assist military families with separation (McCubbin, 1977a). Since serious illness and pregnancy are factors that make adjustment to separation even more difficult (Wood & Gravino, 1988), the Army can design the delivery of medical services so as to not shortchange wives whose husbands are not on hand to assist.

At the unit level, evidence is mixed on the cost effectiveness of wives' support groups, unit newsletters, and telephone chains; they are helpful for some wives but may not be worth the effort, at least during peacetime (Carlson, 1982; Van Vranken et al., 1984). Evidence is a bit firmer on chaplain support (McEvoy, 1982; Van Vranken et al., 1984), rear detachments that have commanders committed to family support, and helpful wives of unit commanders and first sergeants. The chaplains may also be able to enhance the value of religion for some families in dealing with separation (Bermudez, 1977; Hunter, McCubbin, & Metres, 1974; McCubbin, 1977a, 1979). Another issue that units may be able to influence is the length of working hours required prior to

deployment, which often create a near-separation even before the actual separation or deployment (Hunter & Benson, 1977).

Uncontrolled Factors. Certain factors are known to influence adjustment to separation but cannot be changed easily by families or the Army. Separation appears to be most difficult the first time, for newlyweds and younger families, for junior enlisted, and for families with more difficult children (Bey & Lange, 1974; Coolbaugh & Rosenthal, 1992; Nice, 1980; Weinstein & Beach, 1984; Wood & Gravino, 1988), although Nice & Beck (1980) did not find a connection between number of separations and depression and Burnam et al. (1992) actually found a slight negative relationship between more frequent separations and emotional well-being. Notably, Wood & Gravino (1988) found that younger married couples, those facing marital strife or illness, and those who were pregnant accurately anticipated that they would have more separation difficulties. Some believe that the combination of an emotionally disturbed mother with paternal separation/absence is what leads to major problems with children during and after separation (Pederson, 1966). Furthermore, paternal absence may upset female children and younger adolescents more than others (Orthner, Giddings, & Quinn, 1986).

Figure 3 presents a matrix of stressors and relevant helps regarding family separation that parallels the format used for Figure 2 on relocation.

III. Adaptation to danger

By its very nature, military service is a dangerous profession. Despite the Army's best efforts, people do get killed and injured even during peacetime. However, their families are even more concerned when soldiers are sent into a hostile environment as peacekeepers or combatants. Our knowledge of how families react to these more dangerous situations come from social science research during the last 10 years among the families of American soldiers deployed to the Sinai, Grenada, Panama, and Operations Desert Shield and Desert Storm (ODS/S) in Southwest Asia. The nature of the stressors, family assets, and how well families can cope with this aspect of Army life are discussed below.

Family Hardships

The deployment of a soldier into a potentially hostile environment can certainly constitute a family crisis: a discrete event that places demands on the family's total coping resources. The stress is also made worse if the deployment is dangerous, rapid, unplanned and prohibits rapid/reliable communication with the soldier (Lewis, 1984a).

Family concerns about danger can be seen in both interviews and surveys with the spouses of soldiers deployed to Southwest Asia during ODS/S. It showed that most spouses were distressed over the soldier's well-being/safety, their inability to predict how long the operation would last, and the living conditions the soldiers were experiencing (Bell, 1990; Rosen, 1991; Teitelbaum, 1991; and USAREUR ODCSPER, 1991).

ACTIONS/SITUATIONS UNDER CURRENT CONTROL OF:

	Families	The Army	Neither
Hardships			
All	Frequent Communication by Telephone or Mail between Soldier and Spouse	Commanders Committed to Families	Low Community Support
	Joint Checking Account	Reduced Working Hours Prior to Deployment	Previous Financial Problems
	Spouse has Cash Reserves	Encourage Informal Social Supports	Spouse Unemployed
	Spouse learns to be Self-Reliant	Counseling Available	Difficult Children
	Positive Attitude	Effective Family Support Groups	Younger Families
	"Team" Orientation in Marriage	Reduce TDY for recently relocated families	Lower Level of Religiosity
Physical Illness, Including Pregnancy and Miscarriage	Pregnancy Timing	Advance Notice of Major Deployments Improved Accessibility of Medical Services Respect for Preventive Approach to Illness (and Frequent Use of Medical Services)	
Loneliness	Keeping Active	Child Care	
Marital Stress	Personal Fidelity	Sex Education Reunion Information Classes	Spouse Infidelity
Spouse's Sole Responsibility for Household	Effective Marital Communication About Finances, Legal Issues	Sure Pay Solo Parenting Information and Classes	Power of Attorney Issues

ACTIONS/SITUATIONS UNDER CURRENT CONTROL OF:

	Families	The Army	Neither
Hardships			
Re-Entry Stress	Patience Role Flexibility	Education About Re-Entry Process	
Child Adjustment Problems	Custodial Parent's Emotional Maturity	Child Care	Child's Difficult Temperament

FIGURE 3. Matrix of family separation stressors and stress reducers.

The rapid and unplanned nature of ODS/S meant that families could not modify their plans or even reach emotional closure with their loved ones. For example, 28% of ODS/S spouses in USAREUR had no send-off and 43% had multiple send-offs (USAREUR ODCSPER, 1991).

It is well known that **communication** between the soldier and his/her family reduces stress (Lewis, 1984a and Teitelbaum, Wood, & Gravino, 1989). Spouses attempted to communicate with deployed soldiers during ODS/S via various electronic media but found that they were neither fast nor reliable (USAREUR ODCSPER, 1991). This inability to communicate added stress to the family.

Spouses have a hunger for **accurate information** about the real status of their deployed soldier. According to Lewis (1984a) what spouses want to know is: where is my soldier, is he/she in danger, how can I communicate with him/her, and when will he/she be home.

The nature of modern communications and the needs for operational secrecy can make it difficult for the Army to respond to these needs. Army spokesmen may not have the latest information available to news media or spouses who are in telephone contact with the deployed unit. Different sources of information and different interpretations of the same information can make rumor control virtually impossible. Lack of timely and accurate information can add to the stress the family is already experiencing since what they hear or can imagine is often worse than what is actually occurring.

Deployment also brings **additional responsibilities** and expenses which can also add to the strain. Household jobs that used to be shared or carried by the soldier are suddenly the sole responsibility of the remaining spouse. Problem areas that have been identified include: child care responsibilities and the repair of cars and household appliances. For example, during ODS/S the spouses of deployed soldiers were more worried than those of non-deployed soldiers about their children's health and well-being and their own and their children's safety. Both peacekeeper research (Van Vranken et al., 1984) and early interviews during ODS/S (Teitelbaum, 1991) suggested that

arranging adequate transportation was also a real problem for the spouses of deployed soldiers. However, the USAREUR survey did not show that transportation was a greater problem for families of soldiers who were deployed than for others (USAREUR ODCSPER, 1991).

During ODS/S spouses were also more concerned about expenses that were related to the soldier's deployment (notably long distant phone bills). Other added expenses that were documented early in the deployment included the purchase of military gear, storage of personal effects, and added child care costs. Although these expenses were noted in interviews (Bell, 1990), a USAREUR survey showed that the level of concern about "paying bills" was not notably higher among the spouses of deployed (as opposed to non-deployed) soldiers (USAREUR ODCSPER, 1991)⁴.

Loss of income seemed to be a significant problem among reserve forces, particularly among soldiers who were working on commission or were self employed. Loss of income from a second job was not a sizable problem for active duty soldiers (i.e., it was listed as a problem by only 2% of the spouses of deployed soldiers in USAREUR). What was a bigger problem was the loss of income from spouse jobs. Twelve percent of all USAREUR spouses experienced problems which seemed to be caused by the economic downturn of local areas because of the absence of troops as consumers and the delay of major purchases by spouses because they did not know what to plan for.

In addition to the deployment related stressors listed above, the families also had to contend with stress generated by general life events and daily hassles which were present even before ODS/S. For example, Wood and Gravino (1988) noted that spouses who were either pregnant or were experiencing marital difficulties had a much harder time adjusting to the stresses of family separation during the deployment of U. S. peacekeepers to the Sinai. Likewise, both interviews and surveys during ODS/S indicated that the spouses of deployed soldiers reported difficulty in understanding Army entitlements such as the Civilian Health and Medical Program of the Uniformed Service (CHAMPUS) (Bell, 1990; Teitelbaum, 1991; and USAREUR ODCSPER, 1991). That lack of understanding probably preceded ODS/S. However, the spouses had a greater need to understand these benefits because they were more likely to use them now.

⁴ The reason that the surveys found no difference can be explained by two factors. First, some spouses commented that they were actually saving money because their increased expenses were being counter balanced by the fact that the soldier was no longer their to spend money on sodas and cigarettes et cetera on the way home. Likewise, by the time of the USAREUR survey (February, 1991), the families would have begun to receive extra pay for the deployment.

What Helps

The things that help families to adapt to danger can be broken into three groups: (1) things that families can do (2) things that the Army can do, and (3) things which help but are not within anyone's control.

Things families can do. Prior research has shown that family communication with the soldier (particularly via telephones) greatly reduces stress. Letter writing is also helpful but is not as satisfying. Researchers have also found that families do better if they have open communication among those who remain behind.

Prior research has suggested that adopting the "proper" attitude and behaviors both help. Helpful attitudes include: becoming optimistic and accepting the fact that one cannot control deployment events. Helpful behaviors include: becoming busy (i.e., get a job or volunteer one's time); starting or joining a support group; learning all one can about what the soldier will be encountering; and working on family goals, finances, and well-being; seeking support from family and friends; and establishing new routines (Bell, 1991). Most families get their support within their local community. However, there is a tendency for young spouses (particularly those who do not have school age children and/or do not have outside employment) to return to their home of origins for the duration of the deployment (Bell, 1990; USAREUR ODCSPER, 1991; Van Vranken et al., 1984).

The Army strives to remind soldiers and their families to get their personal affairs in order (e.g., updating wills, issuing Power's of Attorney, and maintaining some money in the bank to tide the family over for at least two weeks). Both the interviews with families and service providers and survey data strongly suggest that this type of preparation by families and soldiers pays off. However, the efficacy of this advice has not been formally tested in any of the reports reviewed here.

Things the Army can do. The Army used a number of mechanisms to help families to cope with the strains of ODS/S. Most of these mechanisms can be traced back to efforts at Ft Bragg, NC to deal with deploying peacekeepers to the Sinai (Lewis, 1984b). If they were used prior to that time, it was not widely reported (Bell & Iadeluca, 1987).

Information about what families could expect to encounter and what supports would be available were passed via **pre-deployment briefings** which were held in the units and at some locations were also held at the post level. The families have rated this service as being very helpful but they do complain about information overload, the timeliness of information, and the lack of specific detail about what is most important to them: the location and well-being of their soldier (Bell, 1991; Lewis, 1984a; USAREUR ODCSPER, 1991). It was also hard to reach certain "key players" via this mechanism (e.g., boy/girl friends, parents, and off-post families).

Some posts kept up this flow of information via periodic update meetings for key spouses or in some cases for all spouses who wished to attend. Information about

changes the status of the troops and support needs or elements of the support system was also passed from post level through key spouses to the unit based **Family Support Groups (FSGs)**. FSGs, in turn, passed information to individual spouses via meetings, newsletters, and telephone trees. Increased awareness of the existence of FSGs and attendance at their functions attest to their success during war (USAREUR ODCSPER, 1991).

Assistance with emotional and instrumental needs (e.g., emotional support and resolving pay problems) were handled by both the FSGs, the unit elements which was left behind to handle its affairs (i.e., **The Rear Detachment Command or RDC**), and the one-stop social services center (**The Family Assistance Center or FAC**). The use of these two service deliver mechanisms differed by post. One post had a single RDC which allowed them to deploy more soldiers. However, the researchers noted that having a single RDC put extra strain on both the families and the key spouses who were trying to assist them (Winneke, 1991).

Most posts had at least one FAC and most tried to operate their FAC 24hr/day while the demand for services justified it. Reserve units did not have RDCs but did make extensive use of FACs and toll free help lines (McGee, 1991; U. S. Army Reserve (1990). Although the family members (USARUER ODCSPER, 1991) and FSG leaders (Vaitkus & Johnson, 1991) felt that the FAC was supportive of their needs, the USARUER Inspector General felt that these centers spent too many resources for the case load being served. At one post, at least, the FAC became symbolic of whether the Army really cared about families. When the families reacted to the reduction of hours the FAC was open, the post resumed 24hr operations using volunteers.

Rosen (1991) also produced a path model that showed how 21 family characteristics, stressors and social support mechanisms predicted family well-being. That analysis showed that the following social support mechanisms were important: unit climate (prior to and after the start of ODS/S); unit activities (prior to and during ODS/S); Rear Detachment Commands; Family Support Group activities and leaders; community support; and the support of extended families, neighbors and friends.

Uncontrolled factors. Prior research has also showed the power of **other factors** which appear to be beyond the control of either the families or the Army, but have the effect of making families more vulnerable to the hardships of danger. They include: prior experience with the Army and deployments, level of civilian education, being an officer's wife, and living in a community long enough to have established a social network (Bell, 1991), and being deployed to Southwest Asia. Although these relationships do not appear to be changeable within the current system, the Army might build on some of these relationships by: targeting more of the family orientation training on how to cope with deployments, keeping families in the same location longer, and developing special policies for "newcomers." Those policies might include either making special efforts to integrate newcomers into the social support network or not sending newcomers to a war zone until his/her family has had a chance to be integrated into the community.

Family adaptation to danger. Researchers in this area have looked at adaptation (or non-adaptation) along two dimensions: the presence of stress symptoms and the ability of families to meet their obligations.

Early investigations compiled a rather impressive list of symptoms such as headaches, weight change, insomnia, and menstrual irregularity during peacetime deployments of peacekeepers (Van Vranken et al., 1984). These same symptoms have been reported among individuals undergoing other stressful events (e.g., moving, divorces, changing jobs, and dealing with the death of a close relative or mate) and should diminish spontaneously over time (Perez, 1990).

The ODS/S research showed that levels of stress were still relatively high among the spouses of deployed soldiers during February-March, 1991 (USAREUR ODCSPER, 1991). For example, loneliness, trouble sleeping, and being sad were being experienced at least 4 days a week by 51%, 44% and 38% of the spouses of deployed soldiers. In contrast, only 16% to 19% of the spouses of non-deployed soldiers reported similar distress. However, those measures were taken while the deployment events were still rather stressful⁵. Comparable surveys for ODS/S spouses a year after ODS/S have been completed but are not yet analyzed.

There was also evidence of family stress among **soldiers** during ODS/S. Reservists returning from ODS/S reported that they had experienced more family/personal-life stress this year (70%) than the year before (57%). Most (57%) also reported that they were "very worried" about their families during the deployment although most (63%) thought that their families had been well taken care of (Oliver, 1991). Survey results from the spring of 1991 from returning active duty ODS/S veterans indicate that their concerns about their families were a great deal lower than they were during ODS/S the previous year (Jan. - Mar. 1991). However, the levels of concern were still significantly higher than pre-war levels (Bell, 1992).

A special survey of non-deployed soldiers still in the United States in December of 1990 found that both officers and NCOs reported that their families were **meeting the demands** of Army as well as they were during peacetime; the most likely explanation for these findings was the high level of social support that was present, particularly for those two groups (Bell, Tiggle, & Scarville, 1991). The families of junior enlisted soldiers are more socially isolated and therefore receive less social support (Griffith et al., 1988).

Given the high levels of distress, it was surprising to learn that ODS/S spouses were meeting life demands as well as they were. Spouses of deployed soldiers in USAREUR reported meeting Army, family, work, and social demands as effectively as the spouses of non-deployed soldiers (USAREUR ODCSPER, 1991).

⁵Although the war was over the 27th of February most of the USAREUR soldiers were still in the Kuwaiti theater when the survey was administered. In fact, the troops were still in danger from unexploded munitions and the possibility that the mission might be expanded or in some other way hostilities might began again.

In summary, it appears that the spouses of soldiers deployed to ODS/S experienced significantly more emotional distress than did the spouses of those who were not deployed. Likewise both the reservists and active duty soldiers who were deployed to Southwest Asia experienced more stress and worry than did other soldiers. Nonetheless, the families of ODS/S soldiers managed to meet the life demands that were placed on them.

The general family stress literature suggests that the emotional difficulties spouses were experiencing during ODS/S should diminish and return to pre-deployment levels. The soldier data indicates that they have a higher level of worry about their families now than prior to ODS/S. Which pattern will be present in the spouses, remains to be shown.

Figure 4 shows the matrix of stressors and helps for the issue of danger and family adaptation, which parallels the previous figures in format.

IV. The Army as an Institution.

While there is no doubt that separation, relocation, and danger are critically important factors in explaining family adaptation to military life, in a more global sense Army life confronts soldiers and their families as a "total institution," (Goffman, 1961) with a unique constellation of requirements (Segal, 1988, p. 7). While any one of these peculiar requirements may resemble some civilian situations, few if any civilian occupations duplicate all of them.

Although the Army continues to change as an institution, possibly towards more of an occupational status as a result of the all volunteer force (Butler, 1988; Moskos & Wood, 1988) and other social changes, the Army remains for the foreseeable future a unique institution that places demands on families that are different than what families are likely to encounter in most civilian occupations.

Nevertheless, the Army cannot escape the fact that it is a smaller, though large, system within the total system of our American society (Keith & Whitaker, 1984). As the larger society changes - with increased ethnic diversity, greater empowerment of women, and more individually oriented values, for example - the Army will be forced to respond to these changes. While traditionally the Army has expected its subsystems - soldiers and families - to change, it may find itself subject to change in order to adapt to its larger macrosocial system, as is the case with all major American corporate organizations (Bowen, 1991).

Institutional Hardships

Work stress. Long duty hours and unit demands are two hardships that are frequently mentioned in the research literature as a problem that makes it difficult for the soldier to spend enough time with his or her family (Bowen, 1985; Griffith & Helm, 1992; Woelfel & Savell, 1978). In addition to time spent "at work," the soldier is subject

ACTIONS/SITUATIONS UNDER THE CURRENT CONTROL OF:

	Families	The Army	Neither
Hardships			
All	Optimistic Attitude	Providing Accurate Information	Lower Civilian Education
	Acceptance of Deployment	Pre-Deployment Briefings	Loss of Spouse's Job When Local Military Economy Falters During Deployment
	Keeping Active	Family Support Groups	Presence of Children
	Involvement in Family Support Group	Family Assistance Centers	No Prior Experience with Previous Deployments
	Communication with Soldier by Telephone or Mail	Rear Detachment Commands	Recently Relocated
	Getting Support from Friends	Supportive Unit Climate	Lower Rank
		Newcomer Policies	Spouse's Pregnancy
		Unit and Post Briefings	
Financial Problems (Expenses, Loss of Income and/or Spouse's Job)	Cash Reserves	Child Care	
	Control Phone Costs	Phone Subsidies	
		Provide Storage	
		Provide Combat Pay and Tax Exemption	

FIGURE 4. Matrix of danger stressors and stress reducers.

to call-up for special missions or extra duty on a round the clock, 24 hour a day basis, which poses a constant threat to ongoing family activities, without any remuneration for overtime (Stoddard & Cabanillas, 1976; Butler, 1988). Finally, besides long hours and a perpetual "on call" status, the soldier's family is faced with the unpredictability of working hours (Woelfel & Savell, 1978).

Woelfel & Savell (1978) found in their 1975 survey of 116 soldiers from three installations that nearly 60% reported their working conditions as disruptive to family life. Using data from the 1987 DoD survey of Army families, Griffith et al. (1988) reported that 14% of the Army spouses surveyed described the demands the Army made of family members as a "serious problem," with 56% describing the demands as a slight or moderate problem. Styles et al. (1990) found in their pilot survey of 184 soldiers at three installations that long hours at low pay and demands on families were among the

major disadvantages of Army life (in addition to poor quality of housing and medical care). Using data from the 1985 DoD survey of Army spouses, Bowen & Neenan (1989) found that spouse satisfaction with the military as a way of life was strongly correlated with spouse satisfaction with the time the soldier had available to spend with family. A similar result held true for both male and female single parents in the 1989 AFRP survey, in which work stress predicted family adjustment to the Army (Bowen et al., 1992).

Kohen (1984) claimed that what might be most regular about military duty could be its irregularity or unpredictability. Indeed, her idea was supported empirically by data from the 1989 AFRP survey (Scarville, 1991) in which a variety of measures of unpredictability were used (agreement with the issue is assumed if the problem was stated by the soldier to occur often, very often, or always):

- * Not knowing when the workday would end - from 44% (single enlisted soldiers living off-post) to 60% (single officers living on-post) agreement.
- * Being kept at work beyond normal hours - from 33% (single enlisted soldiers living off-post) to 58% (married officers living off-post) agreement.
- * Being called back into work for extra details - from 6% (single enlisted living off-post) to 12% (single enlisted living on-post) agreement.
- * Procedures being changed often, without reason - from 13% (single officers living on-post) to 36% (single enlisted living on-post) agreement.

Another aspect of unpredictability raised by Styles et al. (1990) was mentioned by an NCO who participated in their focus groups, saying that you never know when you're going to get orders. In other words, not only are daily duties unpredictable but so are longer term issues such as relocation.

While relatively little work has correlated work predictability with family adaptation, four recent reports are suggestive. Using McCubbin and Patterson's (1983) data from 1,000 Army couples in Germany, Bowen (1989a) found that predictability of work schedules was strongly related to family adaptation for both officers and enlisted soldiers. Teitelbaum (1990) from field interviews has reported that Army spouses are upset by unpredictable work hours and unpredictable timing of field duty. Bowen et al. (1992) have found in the AFRP data that family adjustment of single parents is correlated with work predictability. Griffith & Helms (1992) using 1989 AFRP survey data found that soldiers accepted long working hours but disliked not knowing when their day would end, having to be called back to work in the evening or on weekends, or having to cancel plans or leave. Notably, officers reported working longer days and being more vulnerable than enlisted personnel to call backs or cancellation of plans/leave. However, officers enjoyed higher morale and satisfaction, presumably because they felt a greater sense of "ownership" in their unit and mission than did enlisted personnel.

Spouse contributions. Soldiers and spouses are often pressured to attend "mandatory" social functions or to participate in volunteer activities (Military Family Resource Center, 1984; Stoddard, 1978). Segal (1988) observes how wives are expected to participate in a wide variety of social functions. In their analysis of spouses in the 1987 DoD survey, Griffith et al. (1988) noted that 24% of spouses had done volunteer work in the past three months, but that the rate was much higher for spouses of officers (52%) than for enlisted (18%). Moskos & Wood (1988) claim that no other western military expects as much of the military spouse as does the U. S. military. However, Griffith et al. (1988) found that some of the volunteer work is for one's own children, such as scouting activities; indeed, the third most popular reason for volunteering was to support activities used by the respondents' own children (p. 136). Although there is not much evidence that mandatory social functions influence job satisfaction or retention for the soldier (Woelfel & Savell, 1978 found that less than ten percent of their soldiers strongly objected to attending mandatory social events and found no correlation between such attendance and job satisfaction or retention), such normative pressures are definitely troubling when imposed on some spouses. Hunter (1982), as well as Stoddard (1978), has written eloquently about the ways in which the role of the military spouse can become "dysfunctional" or "destructive to her self esteem (pp. 10-11)." Styles et al. (1990) found that mandatory attendance at social functions was perceived as a stressor by many spouses in their focus group study. During Operation Desert Storm, however, even though volunteer work for family support groups by family support group leaders was often seen as interfering a lot with personal life, at least 80% of such leaders said they enjoyed their volunteer role (Vaitkus & Johnson, 1991). Bowen & Neenan (1989) found that satisfaction with demands on civilian spouses was correlated with satisfaction with the military as a way of life for both enlisted and officers, with or without children in their analysis of 1985 DoD survey data. If in the future, as Moskos and Wood (1988) believe, wives are less likely to accept a status as an adjunct member of the Army, pressures may increase on those spouses still available for the more traditional role or may seem more onerous than before for those wives who don't accept the traditional role of the Army wife.

Loss of personal freedom. In a variety of ways, military life deprives the soldier of freedoms he or she might take for granted as a civilian. The loss of these freedoms largely distinguishes Army culture from civilian culture, a situation that many soldiers take pride in, while others may resent. For example, soldiers must wear specified uniforms rather than whatever they want; clearly, the uniform sets the soldier apart from civilian society (Segal, 1988). Soldiers are not allowed to resign, strike, or negotiate working conditions and are tied to fixed terms of enlistment (Butler, 1988; Stoddard & Cabanillas, 1976). Soldiers are required to maintain a minimum level of physical fitness and are not allowed legally (yet) to engage in some forms of sexual behavior. Many Army units foster a spirit of dedication to the mission rather than to personal pleasure, in opposition to a more hedonistic norm prevalent in civilian culture. Since salary is based on rank and seniority rather than market worth, soldiers can only improve their financial condition through promotion and patience rather than, as a civilian might, by demanding higher pay lest they transfer to a different organization (although re-enlistment and other incentive bonuses are used by the Army to help compete with market forces). Even after retirement, soldiers are not free - they can still be

involuntarily recalled to active duty at the government's decision. In the context of the Army's masculine culture (Segal, 1988), sexual harassment is a continuing problem for female soldiers (Woelfel & Savell, 1976) who are thereby deprived of some of their personal freedom. Though less of a problem recently, part of the masculine culture tended to encourage social alcoholism, creating thereby a health problem that ultimately limited the personal freedom of its victims.

Benefits. At the same time that we are considering hardships of the institution, our discussion would be unbalanced were we to not consider the special benefits the institution accords its members. The military has virtually always believed that it should compensate for some of its hardships by "taking care of its own (Butler, 1988; Hunter, 1982; Hunter, McEvoy, & Selman, 1981)." Kohen (1984, p. 401) notes that "The military, perhaps more than any other employing institution in the United States, has established a variety of services and facilities for use by the families of its members." Free medical care is available for all soldiers and their families on installations; through the CHAMPUS program, the Army will pay for 80% of most care obtained in civilian medical agencies. A relatively inexpensive dental plan is available for family members, though the dental care of the soldier is free. Satisfaction with benefits (housing, dental care, medical care, etc.) was a significant predictor of satisfaction with the military as a way of life in Bowen & Neenan's (1989) analysis of the 1985 DoD survey of spouses. Griffith et al. (1988) found that over half of the Army spouses in the 1987 DoD survey had used Army Community Services in the past year and that 80% were satisfied with those services, although more were used overseas than in CONUS (68% versus 45%). Even higher percentages of spouses had used the commissary or post exchange (97%) and medical care (90%).

A minority of observers might view these benefits as a hardship in themselves since they could tend to foster an unhealthy dependence on the institution, leaving members less able to function on the outside in a civilian marketplace should they be displaced from the Army.

What Helps

There is relatively little information on what can help families adapt to the institutional aspects of the Army. The lack of information may reflect a sense that work stress and loss of personal freedom are inevitable problems that must simply be accepted. It might even be argued that they are good training procedures. A famous quotation has been passed around in U. S. Army Reserve units, supposedly from a World War II German general, to the effect that the U. S. Army knows how to fight in the confusion and chaos of war because it is, even in peacetime, accustomed to chaos and confusion (translate long, unpredictable duty hours, etc.).

Things families can do. Perhaps the most detailed research to date on what families can do was reported by Styles et al. (1990), who summarized the focus group comments of soldiers and spouses who said that couples should work together as a team, should communicate well, and maintain a positive outlook, while the spouse should cultivate the ability to function independently when needed. Bowen (1985) thought the Families in

Blue data on Air Force families suggested that employed wives would fare better in terms of not feeling deprived of couple time by the demands of the Air Force. Stoddard and Cabanillas (1976) found that role strain and conflict were greatest in families when the soldier was striving for promotion and that once the soldier had "peaked out," the pressure was greatly reduced on the family since there was no longer the same need to please one's superiors. That result may suggest that keeping one's career goals reasonable may help one to be more assertive in limiting what workloads one will accept. When possible, living off-post may help to limit the number of details that one is called back for after duty hours, even if it is more inconvenient to return from a farther distance if called in (Scarville, 1991). Griffith & Helms (1992) found in their analysis of 1989 AFRP survey data that social support (being able to contact another military wife for assistance) helped reduce institutional stress, a result they had observed previously in the research of Rosen, Moghadam, & Vaitkus (1988). Griffith & Helms (1992) also found that support for families from unit leaders helped reduce stress significantly.

Things the Army can do. In terms of the Army as an institution, units by themselves cannot do much to assist soldiers and their families; that is, they need the support of higher headquarters and/or the installation.

Moskos & Wood (1988) comment that soldiers can accept difficulties if their leaders are wholly involved in the Army system and genuinely concerned about the mission and their soldiers as opposed to merely their own personal advancement and benefits. Moskos and Wood (1988) add that a clear vision of what the Army is about and how its parts relate to the overall mission are important for leaders to motivate their soldiers to accept the institutional aspects of Army life. Certainly, it seems logical that one would be more willing to sacrifice personal freedom for a worthwhile goal than for a lesser goal. Commanders at all levels need to supply this sort of vision.

A common sense phrase that has been used occasionally in the Army is to "work smarter, not harder." If applied at all levels, greater efficiency can be achieved. Recently, one headquarters eliminated a report that required the unit commander to report each month on the status of pay problems. If a leader is concerned about his or her soldiers, they will check on such things for intrinsic reasons not simply because of the report; if they aren't concerned, they will inquire lightly if at all and send in a report that means little (if a pay problem does turn up later that should have been detected, the leader will say the soldier didn't mention it). The danger of using reports to bring about compliance is that learning how to do the report, doing it, xeroxing it, and sending/filing it takes time away from doing what the report is trying to enforce. The best enforcement is for the higher commander or his/her staff to check personally on the priority issues rather than trying to exercise "xerox commandership." The point is that if soldiers do more training rather than simply send in reports about training, more time will be available for them and their families once the training is done.

At some posts, "family time" - letting all soldiers off at 3 or 4 o'clock on a weekday (e.g. Thursday) has been instituted to promote family welfare. However, as Blankinship (1990) observed, the practice is not without its drawbacks - surges in customers at shopping and recreational facilities, refusal of superiors to grant leave for family reasons

on other days of the week, and requirements to make up the time with weekend duty or longer hours on other days. In spite of such problems, "family time" can promote more family time and compensate for longer duty hours experienced at other times (Griffith & Helms, 1992).

Uncontrolled factors. Griffith et al. (1988) in their analysis of 1987 DoD survey data found that more volunteer work was done by OCONUS spouses than by CONUS spouses, which may be one example of how the institutional aspects of the military may be more apparent in overseas tours or sites - in addition to the relevance of the benefits (post exchange, commissary, medical care) that may be available on post but either not available or available only for much higher prices on the civilian economy overseas. As noted previously (Griffith et al., 1988) military services are used more often in OCONUS locations than in CONUS. Griffith & Helms (1992) observed in their analysis of 1989 AFRP survey data that MTOE rather than TDA units⁶ and units more often involved in FTX/deployments appeared to be involved in less predictable workdays and that OCONUS units appeared to experience more call backs than CONUS units.

Figure 5 shows the relationships of institutional stressors and helps in the same format as with the previous three figures.

CONCLUSIONS AND RECOMMENDATIONS

Stressors

This review has focused on four major stressors: separation, relocation (including overseas mobility), danger, and institutional aspects of Army life. However, we have not considered if these stressors interact with each other to influence how much families must adapt or how well families adapt. Separation and relocation can occur together for short periods of time (e.g. a soldier moves to Germany ahead of the family that arrives later) or longer periods under unusual circumstances (e.g. inasmuch as the soldier has gone to Korea on an unaccompanied tour, the family moves back home to mother) but by our definition, they normally occur independently. Relocation and danger can occur together (e.g. an accompanied tour to Korea) but normally danger is tied to accidents (that occur in all locations) or to war (which involves separation more than relocation). Separation and danger do occur together in war; however, while separation can occur without great danger, danger almost always occurs with separation (except perhaps for Explosive Ordnance Duty (bomb squad) personnel or other high risk specialties). Since the institutional aspects of Army life permeate the entire system, it may be difficult to isolate the effects of those aspects from the effects of separation, relocation, and danger. It may be possible with retrospective life course analysis to analyze family adaptation

⁶ Units are authorized to own and hold equipment by either Modified Tables of Organizational Equipment (MTOE) or by Tables of Distribution and Allowances (TDA). Tactical units are usually equipped on the basis of an MTOE whereas administrative, non-tactical units are authorized equipment based on a TDA.

ACTIONS/SITUATIONS UNDER THE CURRENT CONTROL OF:

	Families	The Army	Neither
Hardships			
All	"Team" approach in marriage Positive Attitude	Leader Vision Unit Leaders Support Families	"Bucking for Promotion" Stage of Soldier's Career Spouse Unemployed Living Off-Post if OCONUS
Soldier Work Stress		Reduce Call Backs, Cancelled Leaves, etc. "Family Time"	MTOE Over TDA Units CONUS Location Higher Rank Living On Post (more extra duty) Living Off-Post (call backs more irksome)
Mandated Spouse Volunteer Work		Child Care	OCONUS Location Higher Rank Decreased Normative Support for the "Volunteer" Spouse
Loss of Freedom		Prevention and Punishment of Sexual Harassment	

FIGURE 5. Matrix of Army relocation stressors and stress reducers.

through families that have experienced all of the key factors and assess which factors have had the most impact.

Without such research, what can we speculate about the relative impact of separation, relocation, danger, and the institution and/or their interaction effects? We think that the combination of long-term separation and danger probably represents the greatest

challenge for family adaptation, perhaps most for families with more children, as the remaining parent has become a de facto single parent during the separation or for single parents, who must safeguard their children in the custody of a guardian during the separation. For both of the latter groups, danger poses particular problems since the death that can result means a temporary loss is made permanent, with the future of the family up for grabs.

The second greatest challenge is probably separation by itself with longer separations placing the greatest burdens on families, as has been seen from the AFRP survey results and previous research. The institutional aspects of Army life probably represent the third greatest challenge because of the competing demands of the two "greedy" institutions of family and Army, each laying claim to priority from family members. While relocation appears to be a major problem for families with adolescents, it is on average less of a challenge and is even enjoyed by some Army families.

The future. How will the future change the challenge of the four stressors? What we have described as the least problematic in general - relocation - will probably occur with less frequency in a downsized, more home based Army. It might even be possible for the Army to attempt to avoid relocations for families with adolescents. It may be more possible for employed spouses to develop their own careers in the future Army and thus lessen one of the other major detrimental factors associated with relocation. We think that long term separations will decrease, but short term separations (a few days to a few weeks) may increase; however, the net effect of such a change will probably be positive for families since the long term separations seem to be the most problematic in general. The actual threat of danger will probably decrease, if the relatively low percentage of battle casualties in Desert Storm is any indication of the future. However, the perceived threat of danger may increase if media attention is able to bring war "into the living room" as it did during Desert Storm. Thus, the overall effect is probably neutral to positive for families with respect to danger.

The Army, of course, is a system within a system, the large macrosocial system of our society. As our society changes, the Army as a system will be confronted with change. Dealing with the institutional aspects of the Army is more difficult as the institution confronts such change - admitting women into combat positions, admitting homosexuals, perhaps becoming even more of an occupation rather than an institution. Yet downsizing may allow the services to select only those who believe in the most traditional institutional values to remain and forestall such changes. If the latter occurs, the gravest threat may not be to families or to the Army, but to our political system, if the Army becomes too unrepresentative (and therefore less of a citizen Army and more misunderstood) of the American public. On the other hand, how much can the Army change without losing its warfare fighting mission capability?

What Works

Families. Several characteristics of families appear to be important for more than one of the four major stressors. Being well informed and prepared for the stressors appears to be important. In addition, a certain type of marital relationship appears to be

important, one in which there is good communication and a sense of being a "team" but a team made up of players who have the maturity and independence to function adequately on their own if necessary, as themselves, as a parent, and as an employee.

The Army. Our review points to some obvious things the Army can do in all areas, such as reimbursing soldiers for justified expenses (as in relocation), maintaining benefits, dealing with sexual harassment, and providing quality child care. Allowing families as much control as possible over their situation is a general factor that shows up in specific areas such as allowing communication from soldier to spouse (long distance telephone), allowing families some leeway in choice and timing of relocations, ensuring soldiers have time off for personal business, or giving families advance knowledge about future assignments so they can take charge and plan ahead. The perception that Army leaders at all levels care about families appears to be important. Army leaders can ensure that soldiers' time is well used and scheduled so as to avoid call backs or unnecessary weekend duty. The Army can facilitate informal support networks and effective sponsorship of new arrivals. With the drawdown occurring, it may be possible to provide for more stabilized tours that will facilitate social support and spouse employment. However, the most important factor probably is ensuring that leaders at all levels appreciate the true value of caring about families as a worthwhile investment that pays for itself rather than being simply another training distractor.

The Army is doing many things well that it should continue to do. Community support programs, unit welcoming programs, informal family support groups, family advocacy programs, family life centers on post, Army emergency relief, and many other programs have been and continue to serve Army families well. Some programs need to be executed well more consistently, such as the sponsorship programs and medical services. Some programs probably need to be expanded, notably the availability of sufficient high quality child care. New initiatives may be needed in some areas, such as full financial support for relocation and family life programs that focus on building family teamwork within the Army system and its particular demands.

Uncontrolled factors. Factors that cannot be changed immediately by families or the Army include family composition or type and spouse employment. There may be a temptation to deal with such factors through selection (not recruiting single parents, for example) or local policy (discouraging marriage among junior enlisted), but any approach based on demography per se will reduce the quality of the Army by eliminating high quality soldiers for superficial reasons. However, the Army may well work at eliminating non-performing soldiers, regardless of their demographic characteristics. The Army might succeed more by taking advantage of complimentary demographic characteristics and involve families in helping each other; for example, it might be more productive to subsidize home day care by "stay at home" Army spouses than to expand funding for formal child development centers. Aside from family factors, there are factors such as belonging to an MTOE versus a TDA unit or serving OCONUS rather than in CONUS that influence family adaptability, but these factors can be taken into account even if they cannot be changed.

Future Research

There are at least two immediate needs for research on Army families. First would be to immediately begin work on the effects of downsizing, since a delay here will mean missing the ability to see what is happening. Secondly, multivariate analyses of the AFRP survey and other large data sets should proceed in order to be sure that we are not misattributing the effect of one factor to another. This second approach can be done relatively inexpensively since the data has already been collected. A third consideration would be to assess family adaptability in terms of both the family's satisfaction and its responsiveness to the demands of the Army, as discussed in the introduction to this report.

Other needs are for more qualitative research, such as that by Styles et al. (1990) which should help us learn more about the processes families use to adapt to Army life. Short term longitudinal research can also help assess how families deal with the stressors of Army life and determine which approaches (by the Army and/or by families) work best at overcoming difficulties. Many of these sorts of studies could be carried out with small samples of approximately 100 families or so and be relatively inexpensive compared to worldwide random sample surveys. Some projects can be carried out using the biannual Sample Survey of Military Personnel if the limited number of questions that can be included in this short survey can be sufficiently justified relative to the other needs of the survey sponsors.

The life course perspective may prove to be very useful in understanding how Army families adapt to different demands and at different stages of their life cycle. Likewise, as society becomes more diverse ethnically and the Army mirrors that diversity in its composition, it will be important to understand diversity in process, not just diversity in basic descriptive data. For example, how can we take advantage of diversity to maximize problem solving effectiveness? How can Army leaders of diverse backgrounds best work together to produce the most effective combination of leadership styles to get the mission accomplished? Qualitative studies and longitudinal research may help us in that regard.

References

- Ammons, P., Nelson, J., & Wordarski, J. (1982). Surviving corporate moves: Sources of stress and adaptation among corporate executive families. Families Relations, 31, 207-212.
- Archer, R. P. The effects of deployment on Navy personnel and their spouses. Unpublished manuscript, Eastern Virginia Medical School, Department of Psychiatry and Behavioral Sciences, Norfolk, VA.
- Archer, R. P., & Cauthorne, C. V. (1986). A final report on an investigation of deployment related factors on performance and psychosocial adjustment (Technical Report 86-1). Arlington, VA: Office of Naval Research.
- Barrett, C. L., & Noble, H. (1973). Mothers' anxieties versus the effects of long distance moves on children. Journal of Marriage and the Family, 35, 181-188.
- Barton, M. F., & Chin, C. P. (1989). Evaluation of contracted relocation assistance. Arlington, VA: Systems Research and Application Corporation.
- Beckman, K., Marsella, A. J., & Finney, R. (1977). Depression in wives of nuclear submarine personnel. Honolulu: University of Hawaii, Department of Psychology.
- Bell, D. B. (1990). Family factors in Operation Desert Shield. Unpublished manuscript. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bell, D. B. (1991, November). The impact of Operations Desert Shield/Desert Storm on Army families: A summary of findings to date. Paper presented at the 53rd annual conference of the National Council on Family Relations, Denver.
- Bell, D. B. (1992). Script for ARI's family support during ODS/S: Research briefing (Unpublished manuscript). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Bell, D. B., & Iadeluca, R. B. (1987). The origins of volunteer support for Army family programs (ARI Research Report 1456). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (DTIC AD A190 587)
- Bell, D. B., Tiggle, R., & Scarville, J. (1991). The Army Family Research Project: Select preliminary findings on Army family support during Operation Desert Shield (ARI Research Product 91-20). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A242 754)

- Benson, D., McCubbin, H. I., Dahl, B. B., & Hunter, E. J. (1974). Waiting: The dilemma of MIA wife. In H. I. McCubbin, B. B. Dahl, P. J. Mettles, E. J. Hunter, & J. Plag (Eds.), Family separation and reunion (pp. 157-167). Washington, DC: U.S. Government Printing Office.
- Benson, D., & Van Vranken, E. (1977). Family responses to a study of available support systems during separation (Technical Report). San Diego: Naval Health Research Center, Family Studies Branch. (DTIC AD A100 230)
- Bermudez, R. W. (1973). Ministry to the repeatedly grief-stricken. Journal of Pastoral Care, 27, 218-228.
- Bermudez, R. W. (1977). Separation: Its effects and adaptations. The Chaplain, 34, 18-34.
- Bey, D. R., & Lange, J. (1974). Waiting wives: Women under stress. Journal of Psychiatry, 131(3), 283-286.
- Blanchard, L. (1982). Willing deportees. Journal of Canadian Military Social Work, 3, 9-19.
- Blankinship, D. (1990). The role of installation leaders in creating a supportive family environment (ARI Research Report 1558). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A223 799)
- Bowen, G. L. (1985). Families in Blue: Insights from Air Force families. Social Casework, pp. 459-466.
- Bowen, G. L. (1989a). Family adaptation to relocation: An empirical analysis of family stressors, family resources, and sense of coherence (ARI Technical Report 856). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A212 805)
- Bowen, G. L. (1989b). Satisfaction with family life in the military. Armed Forces and Society, 15, 571-592.
- Bowen, G. L. (1989c). The relationship of family satisfaction to satisfaction with the military way of life among soldiers (ARI Technical Report 864). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A219 901)
- Bowen, G. L. (1990a). Identification of strong/well families and the mechanism to support them (ARI Research Note 90-69). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A225 740)

- Bowen, G. L. (1990b). The family adaptation model: A life course perspective (ARI Technical Report 880). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A221 058)
- Bowen, G. L. (1991). Navigating the marital journey. New York: Praeger Publishers.
- Bowen, G. L., & Neenan, P. (1989). Organizational attitude toward families and satisfaction with military as a way of life: Perceptions of civilian spouses of U.S. Army members. Family Perspective, 23, 3-13.
- Bowen, G. L., Orthner, D. K., Zimmerman, L. I., & Meehan, T. (1992). Family patterns and adaptation in the U.S. Army (ARI Technical Report 966). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A259 880)
- Bower, E. (1967). American children and families in overseas communities. American Journal of Orthopsychiatry, 37, 787-796.
- Brett, J. M. (1982). Job transfer and well-being. Journal of Applied Psychology, 67, 450-463.
- Brown, A. C., & Orthner, D. K. (1980). Relocation and personal well-being among early adolescents. Unpublished paper prepared for the Office of Family Matters. U.S. Air Force.
- Burnam, M. A., Meredith, L. S., Sherbourne, C. D., Valdez, R. B., & Vernez, G. (1992) Army families and soldier readiness (Technical Report R-3884-A). Santa Monica: RAND Arroyo Center.
- Butler, J. S. (1988). Race relations in the military. In C. C. Moskos & F. R. Wood (Eds.), The military family: More than just a job? (pp. 279-299). Washington, DC: Pergamon-Brassey's.
- Caplan, R. D. (1983). Person-environment fit: Past, present, and future. In C. I. Cooper (Ed.), Stress research. New York: Wiley Publishers.
- Carlson, E. (1981). Naval deployment and marriage stress: Summary. Unpublished paper, Office of Naval Research, Arlington, VA.
- Carlson, E. (1982). Naval deployment and marriage stress. Unpublished paper, Office of Naval Research, Arlington, VA.
- Catalyst. (1983). Human factors in relocation: Practices and attitudes from the corporate and employer points of view. New York. Cited in Army Spouse Employment Literature Review.

- Chaskel, R. (1964). Effect of mobility on family life. Social Work, 9, 83-91.
- Chief of Staff, U.S. Army. (1983). White paper 1983: The Army family. Washington, DC: Department of the Army, Headquarters.
- Coolbaugh, K. W., & Rosenthal, A. (1992). Family separations in the Army: Selected findings from the Army Family Research Program (ARI Technical Report 964). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A258 274)
- Croan, G. M., Levine, C. T., & Blankinship, D. A. (1992). Family adjustment to relocation (ARI Technical Report 968). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A259 392)
- Curran, D. J., Jr. (1981). Father absence effects on military children. Thesis presented to the Naval Postgraduate School, Monterey, CA. (DTIC AD A112 635)
- Darnauer, P. (1976). The adolescent experience in career Army families. In H. I. McCubbin, B. B. Dahl, & E. J. Hunter (Eds.), Families in the military system (pp. 42-66). Beverly Hills: Sage Publications.
- David, J. R., & Orton, J. W. (1981). Parent absence in a military family. Military Medicine, 145(6), 431-434.
- Day, R. W. (1979). Navy pilots are bailing out. U.S. Naval Institution Proceedings, 107/944, pp. 61-65.
- Decker, K. B. (1978). Coping with sea duties: Problems encountered and resources utilized during periods of family separation. In E. Hunter and D. Nice (Eds.), Military families: Adaptation to change (pp. 8-18). New York: Praeger Publishers.
- Den Dulk, D. E. (1980). Severe job-related stress: Military enforced separations and readjustment. Paper presented at Groves Conference, Gatlinburg, TN.
- Derr, C. K. (1979). Marriage/family issues and life styles across Naval officer career success (Technical Report #N0028-79-C-J314). Arlington, VA: Organizational Effectiveness Research Program, Office of Naval Research.
- Devine, P., Bishop, S., Perrine, H., & Bullman, S. (1988). Evaluation of the implementation of selected Army Family Action Plan issues: Training for chain of command, second class citizen, overseas orientation, and AFAP issues (MDA 903-87-C-0748). Alexandria, VA: Army Community and Family Support Center.

- Devine, P., Bishop, S., & Perrine, H. (1987). Assessment of Army action plans: Final report (MDA 903-86-C-0381). Alexandria, VA: Army Community and Family Support Center.
- Dickieson, R. W. (1968). Retention of enlisted men. U.S. Naval Institute Proceedings, May, pp. 140-142.
- Dinwiddie, L. L., & Ingram, L. (1980). The military sponsorship program and its relationship to family adjustment during relocation process. Tuscaloosa: University of Alabama, School of Social Work.
- Doering, Z. D., Hutzler, W. P., Francisco, C. M., & Sanchez, M. J. (1982). Description of officers and enlisted personnel in the U.S. Armed Forces (Technical Report N-1458-MRAL). Santa Monica, CA: RAND Corporation.
- Eastman, E., Archer, R. P., & Ball, J. D. (1990). Psychosocial and life stress characteristics of Navy families: Family Environment Scale and Life Experiences Scale findings. Military Psychology, 2, 113-127.
- Farkas, A. J., & Durning, K. (1982). Characteristics and needs of Navy families: Policy implications (Technical Report NPRDC SR 83-1). San Diego, CA: USN-Personnel Research and Development Center.
- Fentress, M. E. (1987). A support program for military family separation. Military Chaplains' Review, 16, 41-47.
- Frank, M., Shanfield, S. B., & Evans, H. E. (1981). The in-and-out parent: Strategies for managing reentry stress. Military Medicine, 146, 846-849.
- French, J. R. P., Jr., Caplan, R. D., & Harrison, R. V. (1982). The mechanism of job stress and strain. Chichester, England: Wiley.
- Furukawa, T. (1977). Mental health of American military in Iran: Implications for screening and preparing for our overseas emissaries. Paper presented at Military Family Research Conference, San Diego.
- Glisson, C. A., Melton, S. C., & Roggow, L. (1980). The effect of separation on marital satisfaction, depression, and self-esteem. Journal of Social Service Research, 4, 61-76.
- Goffman, E. (1961). Asylums. Chicago: Aldine.
- Goldman, N. I., & Segal, D. R. (1976). The social psychology of military service. Beverly Hills: Sage Publications.

- Gonzales, V. (1970). Psychiatry and the Army brat. Chicago: C. C. Thomas.
- Griffith, J. D., & Helms, R. F., II. (1992). Unit demands on soldiers and families (Unpublished manuscript). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Griffith, J. D., Stewart, L. S., & Cato, E. D. (1988). Annual survey of Army families: A report on Army spouses and families in 1987. Alexandria, VA: U.S. Army Community and Family Support Center.
- Guiliano, S. A. (1988). The impact of permanent change of station moves on Air Force enlisted family income for avionics and non-avionics personnel. Unpublished master thesis submitted to the School of Systems and Logistics of the Air Force Institute of Technology.
- Howell, J. R. (1980). Why mid-grade surface warfare officers are resigning from Naval Service. Thesis presented to the Naval Postgraduate School, Monterey, CA. (DTIC AD A097 303)
- Hunter, E. J. (1977). Changing families in a changing military system. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.
- Hunter, E. J. (1977). Family role structure and family adjustment following prolonged separation. In E. J. Hunter and D. S. Nice (Eds.), Military family research conference (pp. 185-193). New York: Praeger Publications.
- Hunter, E. J. (1982). The military child: Pressure or privilege. In E. J. Hunter (Ed.), Families under the flag (pp. 43-57 and 127-137). New York: Praeger Publications.
- Hunter, E. J. (1983). The seven year study of Vietnam POW/MIA families: Implications for psychotherapists. San Diego: Academy of San Diego Psychologists.
- Hunter, E. J., & Benson, D. (1977). Family separation and reunion: Preliminary findings. Unpublished manuscript, USN-Naval Health Research Center, Center for POW Studies, San Diego.
- Hunter, E. J., Gelb, B. M., & Hickman, R. A. (1981). Military wife adjustment: An independent dependent (Technical Report USIU-TR-81-05). San Diego: U.S. International University, Family Research Center. (DTIC AD A108 937)
- Hunter, E. J., & Hickman, R. A. (1981). As the parents go, so go the children: The adjustment and development of military children (Technical Report USIU-81-01). San Diego: U.S. International University.

- Hunter, E. J., McCubbin, H. I., & Metres, P. J., Jr. (1974). Religion and the POW-MIA family. In H. I. McCubbin (Ed.), Family separation and reunion (pp. 70-74). San Diego: Naval Health Research Center, Center for POW Studies.
- Hunter, E. J., McEvoy, P., & Selman, B. (1981). Support systems for military families: The military takes care of its own--sometimes (Technical Report TR-USIU-81-08). San Diego: U.S. International University, Family Research Center. (DTIC AD A104 427)
- Hunter, E. J., & Plag, J. A. (1972). An assessment of the needs of POW/MIA wives residing in the San Diego Metropolitan Area: A proposal for establishment of family services (Technical Report #73-39). San Diego: Naval Health Research Center, Center for POW Studies.
- Hunter, E. J., & Plag, J. A. (1977). The longitudinal studies of prisoners of war and their families: An overview. San Diego: Naval Health Research Center, Center for POW Studies. (DTIC AD A051 325)
- Hunter, E. J., & Sheldon, R. (1981). Family adjustment to geographic mobility: Military families on the move (Technical Report USIU-81-06). San Diego: Organizational Effectiveness Research Program, Office of Naval Research.
- Jacobson, L. (1983). Research to quantify the effect of permanent change of station moves on wives' wages and labor supply. Alexandria, VA: Center for Naval Analyses.
- Jensen, P. S., Lewis, R. L., & Xenakis, S. N. (1986). The military family in review: Context, risk, and prevention. Journal of American Academy of Child Psychiatry, 25, 225-234.
- Keith, D. W., & Whitaker, C. A. (1984). C'est la guerre: Military and family therapy. In F. W. Kaslow & R. I. Ridenour (Eds.), The military family: Dynamics and treatment (pp. 147-166). New York: Guilford.
- Khlief, B. B. (1978). The military dependent as a stranger in public schools. Sociologia Internationalis, 16, 153-162.
- Kirtland, F. R., & Katz, P. (1989). Combat readiness and the Army family. Military Review, April, pp. 63-74.
- Klein, H. A. Tatone, C. L., & Lindsay, N. B. (1989). Correlates of life satisfaction among military wives. The Journal of Psychology, 123, 465-475.

- Knudson, K. H. M., Jellen, L. K., Harris, J., Schneider, R. J., & Oldakowski, R. (1982, August). Health and family problems related to short term Army deployments. Paper presented at the annual convention of the American Psychological Association, Washington, DC.
- Koehler, N. (1980). Re-entry shock. Ladycom, May, 39-40 and 70.
- Kohen, J. A. (1984). The military career is a family affair. Journal of Family Issues, 5, 401-418.
- Kurlander, L., Leukel, D., Palevsky, L., & Kohn, F. (1961). Migration: Some psychological effects on children--a pilot study. Paper presented at the annual meetings of the American Orthopsychiatric Association, New York.
- Lagrone, D. M. (1978). The military family syndrome. American Journal of Psychiatry, 135, 1040-1043.
- Lahkani, H. (1991). Retention cost-benefit analysis of U.S. Army junior officers--a multidisciplinary analysis. Journal of Political and Military Sociology, 19, 1-27.
- Lavee, Y., McCubbin, H. E., & Patterson, J. M. (1985, November). The double ABCX model of family adaptation: An empirical test by analysis of structural equations with latent variables. Journal of Marriage and Family, pp. 811-825.
- Leider, R. (1970). Why they leave: Resignations from the United States Military Academy Class of 1966 (Technical Report). Washington, DC: USA-OFC Department Chief of Staff for Personnel. (DTIC AD A778 755)
- Lewis, C. S. (1984a). Grenada waiting wives. Unpublished manuscript, Walter Reed Army Institute of Research, Department of Military Psychiatry, Washington, DC.
- Lewis, C. S. (1984b). A supportive structure for waiting wives. Unpublished manuscript, Walter Reed Army Institute of Research, Department of Psychiatry, Washington, DC.
- Lyon, W. B. (1967). Some reactions of children from military families to family mobility and father absence. In N. L. Goldman & D. R. Segal (Eds.), The social psychology of military service. Beverly Hills: Sage Publications.
- Lyon, W., & Oldaker, L. (1967). The child, the school, and the military family. American Journal of Orthopsychiatry, 37, 269-270.
- MacIntosh, H. (1968). Separation problems in military wives. American Journal of Psychiatry, 125, 260-265.

- Manley, T. R., McNichols, C. W., & Stal, M. J. (1977). Quality of Air Force life: A report on the attitudes and perceptions of Air Force commanders (Technical Report AFIT-77-2). Wright-Patterson AFB, OH: USAF-Institute of Technology, School of Engineering.
- Manning, F. J., & De Routin, E. M. (1981). Employed wives of the U.S. Army members in Germany fare better than those unemployed. Military Medicine, 146, 726-728.
- Marchant, K., & Medway, F. (1985). Effects of geographic mobility on the military family. Unpublished manuscript, University of South Carolina, Department of Psychology, Columbia.
- Marchant, K., & Medway, F. (1987). Adjustment and achievement associated with mobility in military families. Psychology in the Schools, 24, 289-294.
- Marriott, B. (1982). A study of culture shock and cultural stress as determined by levels of satisfaction and perceived coping skills of three American wives groups living in England. Europe: HUMANRESMANSYS.
- Marsh, R. M. (1970). Family disruption during moving process. Boston: Brandeis University, Florence Heller School. (DTIC AD A709 857)
- Marsh, R. M. (1976). Mobility in the military: Its effects upon family system. In H. I. McCubbin, B. B. Dahl, & E. J. Hunter (Eds.), Families in the military system (pp. 92-111). Beverly Hills: Sage Publishers, Inc.
- Martin, J. A., Vaitkus, M. A., Johnson, M. D., & Mikolajek, L. M. (1991). Desert Storm: The well-being of Army families in Europe. Unpublished manuscript, Department of Psychiatry, Walter Reed Army Institute of Research.
- McCormick, M. (1982, November 22). Sense of homelessness is an unfading ache. Army Times, 43, No. 15.
- McCubbin, H. I. (1977a). Predictors of adjustment to separation and reunion. Paper presented at the Military Family Research Conference, San Diego.
- McCubbin, H. I. (1977b). The military wife and women in the military: Enslaved or liberated. In E. J. Hunter (Ed.), Changing families in a changing military system. San Diego: Naval Health Research Center.
- McCubbin, H. I. (1979). Integrating coping behavior in family stress theory. Journal of Marriage and the Family, 41, 237-244.

- McCubbin, H. I., & Patterson, J. M. (1983). One thousand Army family. St. Paul: University of Minnesota.
- McCubbin, M. A., & Lavee, Y. (1986). Strengthening Army families: A family life cycle stage perspective. Evaluation and Program Planning, 9, 221-231.
- McCubbin, M. A., & McCubbin, H. I. (1987). Family stress theory and assessment: The T-double ABCX model of family adjustment and adaptation. In H. I. McCubbin & A. I. Thompson (Eds.), Family assessment inventories for research and practice. Madison: University of Wisconsin-Madison.
- McEvoy, P. T. (1982). Navy wives' knowledge of, interest in, and willingness to utilize Naval and civilian support services during deployments. Dissertation presented to the School of Human Behavior, U.S. International University, San Diego.
- McGee, P. (1991, October). Impact of Operation Desert Shield/Storm on Reserve Component families. Paper presented at the convention of the Inter-University Seminar on the Armed Forces and Society, Baltimore.
- McKain, J. L. (1973). Relocation in the military: Alienation and family problems. Journal of Marriage and the Family, 35, 205-209.
- McKain, J. L. (1976). Alienation: A function of geographical mobility among families. In H. I. McCubbin, B. B. Dahl, & E. J. Hunter (Eds.), Families in the military system (pp. 69-91). Beverly Hills: Sage Publishers, Inc.
- Military Family Resource Center (1984). Review of military family research and literature. Springfield, VA.
- Mohr, D. A. (1981). Surface warfare junior officers' retention: Spouses' influence on career decisions (Technical Report NPRDC TR 81-17). San Diego: USN-Naval Personnel R&D CMD. (DTIC AD A103 425)
- Mohr, D. A., Holzbach, R. L., & Morrison, R. F. (1981). Surface warfare junior officers' retention: Spouses' influence on career decisions (Technical Report NPRDC TR 81-17). San Diego: USN-Naval Personnel R&D CMD. (DTIC AD A103 425)
- Moskos, C. C., & Wood, F. R. (1988). Institution building in occupational world. In C. C. Moskos & F. R. Wood (Eds.), The military family: More than just a job? (pp. 279-299). Washington, DC: Pergamon-Brassey's.
- National Military Wives Association. (1983, April). PCS moves (Fact Sheet). Arlington, VA.

- Nice, D. S. (1980). Navy family separation and physical illness: A failure to confirm. In D. K. Orthner & B. Chandler (Eds.), Quality of family life in the military. San Diego: National Council on Family Relations Pre-Conference Workshop on Military Family.
- Nice, D. S. (1981). A longitudinal analysis of Navy family separation (Technical Report NPRDC TR 82-15). San Diego: Naval Health Research Center. (DTIC AD A108 381)
- Nice, D. S. (1983). The course of depressive effect in Navy wives during family separation. Military Medicine, 148, 341-343.
- Nice, D. S., & Beck, A. L. (1978). Cross-cultural adjustment of military families overseas (Technical Report 78-58). San Diego: Naval Health Research Center.
- Nice, D. S., & Beck, A. L. (1980). Feelings of depression in Navy wives prior to family separation. Paper presented at the Western Psychological Association Convention, Honolulu, HI.
- Nida, P. (1980, April). What you should know about child care centers. Ladycom, pp. 18-46.
- Oliver, L. (1991). Family support and services in the Army's active component during early stages of Operation Desert Shield (ARI Research Note 91-22). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A231 886)
- Orthner, D. K., & Bowen, G. L. (1990). Family adaptation in the military (ARI Research Report 1559). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A225 085)
- Orthner, D. K., & Brown, R. (1978). Single parents fathers: Implications for the military families. In E. Hunter & D. Nice (Eds.), Military families: Adaptation to change (pp. 83-103). New York: Praeger Publishers.
- Orthner, D. K., Brody, G., Hill, W., Pais, J., Orthner, B., & Covi, R. (1985). Family in Green at Fort Benning. Washington, DC: Department of the Army.
- Orthner, D. K., Giddings, M. M., & Quinn, W. H. (1986). Youth in transition: A study of adolescents from Air Force and civilian. Washington, DC: Office of Family Matters, Department of the Air Force.

- Orthner, D. K., Zimmerman, L. I., Bowen, G. L., Gaddy, G., & Bell, D. B. (1991). Development of a measure of family adaptation to the Army (ARI Technical Report 925). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A240 842)
- Ozkaptan, H., Sanders, W., & Holz, R. (1986). A profile of Army families in USAREUR: Results of the 1983 families in Europe survey (ARI Research Report 1428). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A175 454)
- Partin, G. R. (1967). A survey of the effect of mobility on dependent military children. Washington, DC: The American University, School of Education. (University Microfilms #67-10727)
- Peck, B. B., & Schroeder, D. (1976). Psychotherapy with father absent military family. Journal of Marriage and Family Counseling, 2, 23-30.
- Pedersen, F. (1966). Relationships between father absence and emotional disturbance in male military dependents. Merrill-Palmer Quarterly, 12, 321-331.
- Pedersen, F., & Sullivan, E. J. (1964). Relationship among geographical mobility, parental attitudes, and emotional disturbances in children. American Journal of Orthopsychiatry, 34, 575-580.
- Pepin, R. (1966). A study of scholastic achievements and personal adjustments of military and non-military transitory high school students. Storrs: University of Connecticut. (University Microfilms)
- Perez, J. T. (1990). Operation homefront: For those left behind. Unpublished manuscript, LifePLUS Foundation, North Hollywood.
- Piotrkowski, C. S., & Gormick, L. K. (1987). Effects of work-related separations on children and families. J. Bloom-Feshbach, S. Bloom-Feshbach, & Associates, The psychology of separation and loss, pp. 267-299.
- Puskar, K. R., Wilson, G., & Moonis, L. J. (1990). The effect of group support on relocated corporate and military wives: A secondary analysis. Minerva: Quarterly Report, 8, 36-46.
- Rainey, M. C. (1978). Language learning of internationally mobile military youth: Some third culture comparison. In E. J. Hunter & D. S. Nice (Eds.), Children of military families: A part and yet apart (pp. 84-100). Washington, DC: Government Printing Office.

- Reinerth, J. G. (1976). Separation and female centeredness in the military. In E. J. Hunter & D. S. Nice (Eds.), Military families: Adaptation to change (pp. 169-184). New York: Praeger Publishers.
- Research Triangle Institute (1990). Army spouse employment literature review (ARI Research Note 90-124). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A226 885)
- Rosen, L. N. (1991, May). Human factors in Operation Desert Shield: The role of family factors. Paper presented at the Operation Desert Shield Task Force Meeting, Washington, DC.
- Rosen, L. N., Moghadam, L. Z., & Vaitkus, M. A. (1988). The military family's influence on soldiers' personal morale: A path analytic model. Military Psychology, 1, 201-213.
- Rosenfeld, J. M., Rosenstein, E., & Raab, M. (1973). Sailor families: The nature and effects of one kind of father absence. Child Welfare, 52, 33-44.
- Ross, T. P. (1986). Determining the impact of family programs upon retention: Why successful officers stay. Unpublished manuscript, U.S. Army War College, Carlisle Barracks, PA.
- Scarville, J. (1990). Spouse employment in the Army: A summary of research findings. In D. A. Blankinship, S. L. Bullman, & G. M. Croan (Eds.), Proceedings of the 1990 military family research review. Arlington, VA: Military Family Resource Clearinghouse.
- Scarville, J. (1991). The Army Family Research Program. Unpublished manuscript (briefing for LTC Hank Hodge). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Schneider, R., & Gilley, M. (1984). Family adjustment in USAREUR: Final report. Heidelberg, West Germany: U.S. Army Medical Research Unit-Europe.
- Segal, J., Hunter, E. J., & Segal, Z. (1980). Universal consequences of captivity: Stress reactions among divergent populations of prisoners of war and their families. International Social Science Journal, 28, 593-609.
- Segal, M. W. (1988). The military and the family as greedy institutions. In C. C. Moskos & F. R. Wood (Eds.), The military: More than just a job. New York: Pergamon-Brassey's International Defense Publishers, Inc.

- Segal, M. W., & Harris, J. J. (1993, September). What we know about Army families (Special Report 21). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A271 989)
- Shaw, J. A., Duffy, J., & Privitera, C. (1978). The military child: A developmental perspective. In E. Hunter & D. Nice (Eds.), Children of military families: A part and yet apart (pp. 1-14). Washington, DC: U.S. Government Printing Office.
- Shaw, J. A., & Pangman, J. (1975). Geographical mobility and the military child. Military Medicine, 140, 413-416.
- Siebernaler, R. (1986, October). The family crisis: Relocation to the United States. Paper presented at Living-Adjustment and Crisis for American Psychiatric Association, Washington, DC.
- Sinaiko, W. H., & Marshall, T. K. (1980). How are we going to keep them from going back to the farm? Research on personnel loss in the Navy. MP&T Research Development & Studies Activities, 1, 3-13.
- Smith, D. L. (1975). An analysis of the relationship of selected variables to the self-concept of military dependent children. Washington, DC: George Washington University. (University Microfilms #75-23415)
- Snyder, A. I. (1978a). Midlife crisis among submariners' wives. In E. Hunter & D. Nice (Eds.), Military families: Adaptation to change (pp. 140-154). New York: Praeger Publishers.
- Snyder, A. I. (1978b). Periodic marital separation and physical illness. Unpublished manuscript, Organizational Effectiveness Research Program, Office of Naval Research, Arlington, VA. (DTIC AD A059 348)
- Snyder, A. I. (1978c). Sea and shore rotation: The family and separation Phase II (Technical Report NR170-835). Arlington, VA: Organizational Effectiveness Research Program, Office of Naval Research. (DTIC AD A059 928)
- Snyder, A. I. (1980). Separation and sexuality: The Navy case. Virginia Beach: Tidewater Research Associates.
- Snyder, A. I. (1981). Week-end husband, week-end dad. Norfolk, VA: Navy Families Services Center.
- Spjut, R. W., & Studer, W. A. (1975). Family adjustment problems associated with remote assignments: A survey of selected Air Force officers and wives. Paper presented at the Behavioral Science Consortium, Brooks AFB, TX.

- Statuto, C. (1984). Families in the eighties: Implications for employers (Part I). Washington, DC: Catholic University of America, National Center for Family Studies.
- Stoddard, E. R. (1978). Changing spouse roles: An analytical commentary. In E. J. Hunter & D. S. Nice (Eds.), Military Families: Adaptation to change (pp. 157-168). New York: Praeger Publishers.
- Stoddard, E. R., & Cabanillas, C. E. (1976). The Army officer's wife: Social stresses in a complimentary role. In N. L. Goldman & D. R. Segal (Eds.), Social psychology of military service (pp. 151-171). Beverly Hills: Sage Publications.
- Styles, M. B., Janofsky, B. J., Blankinship, D., & Bishop, S. (1990). Investigating family adaptation to Army life: Exploratory site visit findings (ARI Research Note 90-15). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A219 968)
- Tarzier, A. (1990). Mobile military lifestyle: A larger issue. Military Family, January, 3-6.
- Teitelbaum, J. M. (1990). Effective family supportiveness. In D. A. Blankinship, S. L. Bullman, & G. M. Croan (Eds.), The policy, program, and fiscal implications of military family research: Proceedings of the 1990 military family research review. Washington, DC: Walter Reed Army Institute of Research.
- Teitelbaum, J. M. (Ed.) (1991). Family factors in Operation Desert Shield: Phase I Report. Unpublished manuscript, U.S. Community and Family Support Center, Alexandria, VA.
- Teitelbaum, J. M., & Gifford, R. K. (1990). Deployment availability of soldiers for Operation Desert Shield. Unpublished manuscript, Walter Reed Army Institute of Research, Department of Military Psychiatry, Washington, DC.
- Teitelbaum, J. M., Wood, S., & Gravino, K. (1989). Adjustment and adaptation of enlisted family members to separation during long-term unit deployment. In R. J. Schneider & J. M. Teitelbaum (Eds.), Research progress report to the Community and Family Support Center. Washington, DC: Walter Reed Army Institute of Research.
- Upchurch, R. H. (1986). Personnel management--reduce PCS costs and family turmoil (Research Report AU-AWC-86-217). Maxwell Air Force Base, AL: U.S. Air Force, Air University.
- USAREUR ODCSPER (1991, May). USAREUR personnel opinion survey 1991: General findings report, Vol. 1 (Family) (USAREUR Pamphlet 600-2). Paper presented at the U.S. Walter Reed Army Institute of Research Professional Seminar, Forest Glen, MD.

- U.S. Army Personnel Integration Command, Army Personnel Survey Division (1990). U.S. Army report on equal opportunity and sexual harassment: Results of recent surveys. Alexandria, VA.
- U.S. Army Reserve (1990, November). Desert Shield special edition. Carnotes, IV(IV), 1-7.
- Vaitkus, M., & Johnson, M. (1991). USAREUR family support research Operation Desert Storm (Unpublished manuscript). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.
- Van Vranken, E. W., Jellen, L. K., Knudson, K. H. M., Marlowe, D. H., & Segal, M. W. (1984). The impact of deployment separation on Army families (Research Report). Washington, DC: Walter Reed Army Institute of Research.
- Vernez, G., & Zellman, G. (1987). Families and mission: A review of the effects of family factors on Army attrition, retention, and readiness. Santa Monica, CA: RAND Corporation.
- Voydanoff, P. (1987). Work and family life. Newbury Park, CA: Sage Publications.
- Warner, J. T., & Little, R. D. (1988). Permanent change of station moves, spousal earning losses and reemployment. Paper presented at Eastern Economics Association meetings, Boston.
- Weinstein, B. L., & Beach, L. R. (1984). Navy wives' views on the reenlistment decision: Reasons for and reasons against (Technical Report 84-2). Arlington, VA: Office of Naval Research. (DTIC AD A148 360)
- Winneke, M. S. (Ed.). (1991). The yellow ribbon. Fort Leavenworth, KS: U.S. Army Combined Arms Command.
- Woelfel, J. C., & Savell, J. M. (1978). Marital and job satisfaction and retention in the Army (ARI Research Memorandum 78-27). Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences. (AD A077 974)
- Wood, S., & Gravino, K. S. (1987, October). Waiting wives: "Suddenly we have so much to say." Paper presented at the Biennial Conference of the Inter-University Seminar on Armed Forces and Society, Chicago.
- Wood, S., & Gravino, K. S. (1988). Separation and reunion among Army wives of Sinai soldiers. Unpublished manuscript, Walter Reed Army Institute of Research, Washington, DC.

Yeatman, G. W. (1981). Paternal separation and the military dependent child. Military Medicine, 146, 320-322.