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**CHARACTERISTICS AND NEEDS OF NAVY
FAMILIES: POLICY IMPLICATIONS**



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**CHARACTERISTICS AND NEEDS OF NAVY FAMILIES:
POLICY IMPLICATIONS**

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A stratified random sample of 2,126 Navy men and women with dependents was surveyed to assess the characteristics and needs of Navy families. Information was obtained concerning Navy family demographics, serious problems encountered by Navy families, differential problems of men and women, as well as officer and enlisted personnel, sources of social support and services, and the effects of family variables on reenlistment intentions. Family variables were found to have major impact on reenlistment intentions.		

FOREWORD

This effort was performed in support of task area Z1342-PN (Family Support Program) and work unit ZF55.521.021.03.03 (Personnel Assimilation and Supervision). Results are intended for use by Navy managers in the formulation of Navy family support policy. Preliminary results were presented at the Sixty-first Annual Meeting of the Western Psychological Association, Los Angeles, April 1981.

The questionnaire used in this study was developed under contract by the Advanced Research Resources Organization (ARRO), Washington, DC. The contracting officer's technical representative was Dr. Kathleen P. Durning.

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SUMMARY

Problem

Recently, the role of the Navy family in retention and mission readiness has been receiving increased attention. It is widely assumed that families have a strong impact on the reenlistment decisions and morale of service members. More research is needed to develop effective policies for Navy families.

Purposes

The purposes of this research were to: (1) provide Navy family demographic information, (2) identify serious problems encountered by Navy families, (3) compare differential problems of male and female officers and enlisted personnel, (4) evaluate sources of social support, (5) develop models of the relationships between job and family variables and reenlistment intention and stress, and (6) suggest potential policy changes for improving the support provided to Navy families.

Approach

A stratified random sample (N=2,126) from the 1979 Navy population of enlisted and officer men and women with dependents was surveyed on aspects of the service member and his/her family and job. Forty percent responded (the final sample size was 701). Survey results were analyzed using standard statistical techniques. Models for reenlistment intention and stress were developed.

Findings

1. More than 20 percent of the sample rated the following four areas as serious family problems: adequate housing, sufficient time for family, relocation, and family separation due to sea duty.
2. Residing in Navy housing rather than civilian housing was related to less community support, less spousal support, and less marital satisfaction.
3. Longer Navy workweeks were related to more job/family role conflict, less supervisory support, and more family pressure to leave the Navy.
4. Fewer hours to spend with spouse resulted in less spousal support, less marital satisfaction, more depression, and more job interference with family life.
5. High relocation rates were related to more job interference with family life, more anxiety, more family pressure to leave the Navy, and less spousal support. Obtaining good assignments for both individuals was a serious problem for relocating military couples.
6. High rates of both deployed and undeployed time away from home were related to more job interference with family life. Undeployed time away from home had more extensive effects than did deployed time. High rates of undeployed time away from family were related to less supervisory and co-worker support, more anxiety, and more family interference with the Navy job.
7. Problems more common to male service members included deployment separation and dependent care issues (medical and educational). Active duty females with

dependents, over half of whom were married to other military members, emphasized problems of common work assignment, career planning, and child care.

8. Enlisted personnel were more likely to rate economically driven problems as serious (e.g., housing and financial problems), while officers were more likely to emphasize as problems career planning for themselves and their spouse and sufficient time for family.

9. Officers, nonminority personnel, childless individuals, and those with higher total family incomes and working spouses were more likely to perceive family income as adequate and desirable. Perceptions of total family income as adequate and desirable were related to a lower incidence of serious family problems. Those who felt they had adequate and desirable incomes, as well as those with fewer serious problems, reported less job/family role conflicts, more social support, less depression and anxiety, and less family pressure to leave the Navy.

10. The best predictors of reenlistment intention were general satisfaction with life in the Navy, family pressure to leave the Navy, and sex (female service members expressed less intention to reenlist than did males). The best predictor of family pressure was the degree to which members perceived that the Navy job interfered with family life. Navy interference was related to the number of serious family problems, total time deployed during Navy career, number of hours per week with spouse, number of hours in Navy workweek, and the amount of social support received from supervisors.

Recommendations

1. The impact of recent pay increases on family stress reduction and increased retention should be evaluated.

2. The feasibility of providing affordable, quality child care 24 hours per day to meet the special needs of single parents and military couples should be investigated.

3. For Navy spouses who want to work, the feasibility of providing job-finding assistance and adequate child care to facilitate paid employment should be investigated.

4. The effects of the variable housing allowance instituted in 1980 should be assessed to see if it significantly reduces the number of personnel who cannot obtain safe and affordable housing.

5. The importance of supervisory support in reducing family stress should be emphasized.

6. Where feasible, every effort should be made to assign military couples to the same geographic area.

7. Methods for providing adequate support services to special populations likely to be underserved, such as interracial families and wives undergoing deployment separation, should be investigated.

8. Further family research should be performed in such critical areas as deployment and other family separations, relocation, housing, medical care delivery, and general provision of social support. This research should be directed toward developing cost-effective interventions to reduce family stress while increasing retention and readiness.

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INTRODUCTION

Problem

Recently, the role of the Navy family in the retention and mission readiness of service members has been receiving increased attention by the Navy. In 1978, support to families was included as part of the Chief of Naval Operation's number one command objective. In January 1979, the Family Program (OP-152) was established, as a branch of CNO's Human Resource Management Division, to provide leadership and coordination for the Navy's expanding efforts on behalf of families.

Unique problems related to the Navy's mission, coupled with emerging trends in family patterns and attitudes, may have a significant impact on the accomplishment of the Navy mission and the quality of Navy life. Family satisfaction and experiences with the Navy may have an increasing influence on the Navy's ability to recruit and retain personnel and maintain an active force ready for battle. Research is needed to understand these dynamics and provide a sound knowledge base for policy decision makers.

Background

Navy Family Demographics

Social trends have resulted in a military force whose members are more likely to be married than ever before (Goldman, 1976). Orthner and Nelson (1980), in documenting living and family patterns in the Navy, drew a one-percent random sample of Navy members to determine, from noncomputerized records, the household composition of Navy personnel. They found that a traditional family structure (service member husband and nonworking dependent wife and children) can no longer be assumed. Orthner and Nelson (1980), however, did not collect data to identify needs of Navy families or describe other important demographic information, such as the numbers of interracial/intercultural marriages or the employment status of dependent spouse.

Navy Family Needs

The advent of the all-volunteer force has necessitated attention by the services to family problems that could be ignored in the past. Orthner (1980) showed a correlation between personnel satisfaction with military life and family satisfaction/family functioning. He concluded that disharmony in either the family or military system would interfere with successful functioning of the other system.

Croan, Katz, Fischer, Smith-Osborne, and Dutton (1980) interviewed persons familiar with Navy problems. They identified four problem areas where research was needed to build a knowledge base required to design and implement effective family policies and programs: (1) deployment separation, (2) relocation, (3) information and referral systems, and (4) other priority services (including child/spouse abuse, medical/dental care, financial counseling, housing, and child care services).

Effect of the Family on Work Satisfaction and Retention

Nieva and Gutek (1981) have emphasized the importance of work and family interdependence in their literature review on combining work and family life: "The way in which one negotiates the interdependence of work and family affects satisfaction with each of the domains as well as overall life satisfaction" (p. 40).

Previous research on Navy families, taken as a whole, suggests that a significant relationship exists between family variables, work satisfaction, and intention to remain in the Navy (e.g., Derr, 1979; Grace, Steiner, & Holter, 1976; Malone, 1967; Stumpf, 1978; Thomas & Duming, 1980). Air Force and Navy personnel research suggests that attitudes of spouses are very important to the retention decisions of military members (Nice, 1981; Orthner, 1980). Mohr, Holzbach, and Morrison (1981) found that junior naval officers whose wives were supportive of their Navy career were more intent on remaining in the Navy than were those whose wives were neutral or antagonistic toward their career. Thus, family satisfaction with Navy life is related to intention to remain in the Navy, and efforts to enhance family satisfaction and reduce work/family conflict will benefit the Navy. The relationship between work and family life is, of course, bidirectional. For example, Pleck (1979) found that over one-third of a national sample of working people reported that work interferes with family life. Parents reported significantly more interference than did nonparents; among parents, working wives reported significantly more interference than did working husbands. In a study of married enlisted personnel deployed aboard four amphibious ships, Jones and Butler (1980) found that the level of incompatibility between family and work roles was the single best predictor of stated intent to leave the service.

Role of Social Support and Stress

Anxiety and depression are major symptoms of excessive life stress (Spielberger & Sarason, 1975; Mahoney, 1980). Service members experiencing family problems, work problems, or difficulty in combining work and family roles will experience some stress, which can seriously impact both readiness and morale.

Social support (supervisory, co-worker, and family support systems) can protect the worker from the negative outcomes of life and job stress (Pardine, Higgins, Szeglin, Beres, Kravitz, & Fotis, 1981). Cobb (1976) views social support as information exchanged at the interpersonal level that provides (1) emotional support that leads individuals to believe they are cared for and loved, (2) esteem support that leads them to believe they are esteemed and valued, and (3) network support that leads them to believe they belong to a network of communication involving mutual obligation and understanding. Specifically, it has been shown that a wife's support of the husband's work mediates the relation between job-induced strain and marital satisfaction (Mortimer, 1979) and that family support limits the impact of work role stressors (Voydanoff, 1980).

Furthermore, social and, particularly community support contribute to the successfully coping family (McCubbin, Joy, Chubbe, Comeau, Patterson, & Needle, 1980), which makes the family less vulnerable to crisis. Recent suggestions for professional/institutional interventions have emphasized utilization of social networks to assist families under stress (Unger & Powell, 1980). For example, Navy wives cope with the problem of husband-father absence by developing social supporting networks (McCubbin, Boss, Wilson, & Lester, 1980).

Purposes

The purposes of this research were to:

1. Provide information on Navy family demographics.
2. Identify serious problems encountered by Navy families.

3. Compare differential problems of male and female officers and enlisted personnel.
4. Evaluate sources of social support.
5. Develop models of the relationships between job and family variables and reenlistment intentions and stress.
6. Suggest potential policy changes for improving support to Navy families.

PROCEDURE

Sample

A stratified random sample (N = 2,126) from the Navy population of men and women enlisted and officer personnel with dependents was selected from the February 1979 Enlisted Master Tape and the March 1979 Officer Master Tape. Due to the small number of female warrant officers and admirals, these ranks were not sampled. Other pay grade and rank categories were collapsed to increase the uniformity of category sizes. Some categories were disproportionately sampled to yield subgroups of relatively uniform size and large enough to permit within subgroup analyses. The formal sampling plan is shown in Table 1.

Table 1
Sampling Plan

Pay Grade/ Rank	Navy Men with Dependents			Navy Women with Dependents		
	Population N	Sample N	Sampling Ratio	Population N	Sample N	Sampling Ratio
E-1--E-3	26,683	135	.005	2,592	180	.069
E-4	32,292	135	.004	2,571	180	.070
E-5	51,186	133	.002	2,215	180	.081
E-6	58,349	135	.002	286	135	.472
E-7--E-9	40,863	134	.003	32	32	1.000
O-1--O-2	8,921	129	.014	405	176	.434
O-3--O-4	23,431	131	.006	729	134	.183
O-5--O-6	<u>10,597</u>	<u>132</u>	<u>.012</u>	<u>45</u>	<u>45</u>	<u>1.000</u>
Total	252,322	1,064	.004	8,875	1,062	.120

Measure

The questionnaire developed for use in the study consists of 180 items, under the following eight sections:

1. Background. Covers demographic and background characteristics of the sample.
2. Questions for married people. Covers demographic and background characteristics of spouses of sample members, employment status of spouse, problems of dual-career couples, and willingness to work outside the home and volunteerism of civilian spouses.
3. Questions about children. Covers demographic characteristics of children of sample members, patterns of and satisfaction with child care, interferences of child care demands with Navy job performance.
4. Family problem areas. Covers areas of Navy life causing serious personal or family problems and sources of help available to handle these problems.
5. Work and your family. Covers relationship between the sample member's Navy job and his/her family.
6. Your job in the Navy. Covers aspects of the Navy job.
7. Your family and your community. Covers relationship between sample member's Navy job and the community within which he/she lives.
8. Personal reactions. Covers mood and related somatic reactions.

Analyses

To reduce the large number of questionnaire items to a more manageable set of basic variables, five principal component factor analyses with varimax rotation were performed on the items of sections 5 through 8 above. These analyses accounted for 81.7 to 93.7 percent of the variance in these five sets of items, with a median percent of 87.6. Twelve factors were isolated, as shown in Table 2, all but one of which had eigenvalues of 1.0 or greater. Response scales were constructed for these 12 factors using the following procedure:

1. Any item with a factor loading of .35 or more was included in the scales.
2. Any item loading higher than .35 on more than one factor was included in the scale on which it had the highest loading.
3. The scoring of any item with a negative factor loading was reversed before being averaged with other items to produce a scale score for each individual.

Questionnaire results were analyzed using standard statistical techniques: chi-squares, t-tests, and analyses of variance.

Several stepwise multiple regression analyses were performed to develop a model relating demographic and family variables with the intention of the service member to reenlist. The initial pool of potential variables consisted of 20 demographic, work, and

Table 2
Factors Derived from Sets of Items

Item Set^a	Factor Scale
Work and family (Section 5)	1. Family pressures to leave the Navy 2. Job interferes with family life 3. Family interferes with job
Job in the Navy (Section 6)	4. Work hard on job 5. Co-worker support 6. Supervisor support
Family and community (Section 7)	7. Satisfaction with marriage 8. Community support 9. Spousal support 10. Religious support
Personal reactions (Section 8)	11. Depression 12. Anxiety

^aItems included in each factor scale and their factor loadings are shown in Appendix A.

family measures,¹ and 7 of the 12 factorially derived response scales shown in Table 2 (scales Nos. 1, 2, 5, 6, 8, 9, and 10). Subsequently, scale No. 1 was divided into two variables: a revised, three-item "Family Pressure to Leave the Navy" scale (see Appendix A) and a single item, "All Things Considered, I am Satisfied with My Life in the Navy," which was used as a measure of general satisfaction with life in the Navy. Thus, the pool consisted of 28 variables.

Variables that entered the prediction equation but had nonsignificant zero-order correlations with intention or a beta weight that differed in sign from that observed for its zero-order correlation were deleted from the pool. The analysis was then rerun on the restricted pool of variables. The final prediction equation consisted of those variables with significant beta weights equal to or greater than 0.10.

After identifying the best predictors of the intention to reenlist in the primary analysis, the complex predictor variables of the intention (i.e., the factor scales) were also subjected to stepwise multiple regression to find their best predictors. The primary analysis identified the best predictors of the intention; and the secondary analyses, the

¹The variables were pay grade/rank (15-level variable that ranged from E-1 to O-6), number of serious problems, rate of relocation, years of service, age, family type (military couple vs. military-civilian, two-pay check vs. traditional), status (officer vs. enlisted), race, sex, education level, location of residence, percent deployed time away from family, hours in Navy work week, total family income, adequacy of total family income, desirability of total family income, number of children, weekly hours with spouse, and percent undeployed time away from family.

best predictors of the complex predictors of intention. Since some of the best predictors of these complex variables were also complex, tertiary analyses were performed to find their best predictors. The results of the primary, secondary, and tertiary analyses were then combined to produce a general model for reenlistment intentions.

It should be noted that the 20 demographic, work, and family variables were included in all of the analyses as potential predictors. In the secondary and tertiary analyses, however, some of the remaining eight complex variables were excluded. These exclusions were based on a common sense analysis of what variables might be "causes" of other variables. For example, it was assumed that "Family Pressure to Leave the Navy" might causally affect "General Satisfaction with Life in the Navy," but not vice versa. It should also be noted that, while certain causal assumptions guided the selection of potential predictor variables, the general model for reenlistment intentions is the result of exploratory regression analyses. It is not, in a strict sense, a path analysis.

Additional stepwise multiple regression analyses were performed to develop models relating demographic, work, and family variables with the amount of anxiety and depression reported by service members. The same initial pool of 28 potential predictor variables plus scale No. 7 (Satisfaction with marriage) were used. Primary, secondary, and tertiary analyses, similar to those for the reenlistment intention, were performed, and the best predictors were combined to produce general models for anxiety and depression.

RESULTS

Of the 2,126 questionnaires mailed to sample members, 200 were returned as undeliverable and 814 were completed, for a return rate of 42 percent. The 814 who returned questionnaires were further culled to eliminate 88 without dependents and 25 with missing data about current family situations. This left a final sample of 701.

Demographics

Demographic characteristics of the total sample are presented in Table B-1 (Appendix B). Somewhat more enlisted personnel than officers (58% vs. 42%) were in the sample. Although the sample contained approximately the same number of men and women (51% vs. 49%), the males tended to be older and more senior than females. Only 13 percent of the females, vice 44 percent of the males, were assigned to deployed units. Females with dependents were more likely to be single, divorced/separated, or widowed than were males. Males were more likely to be married than were females, and 56 percent of the females and 2 percent of the males had a spouse currently in the military. Females were much more likely than males to be childless (64% vs. 22%).

As to family types, 96.7 percent of males with dependents had a civilian spouse, 1.8 percent had a military spouse, and 1.5 percent were single, compared to 36.5, 56.1, and 7.3 percent respectively for females with dependents. Eighty-five percent of the civilian spouses of female service members had previous military experience (nearly 75% with the Navy). This suggests that many of these women were formerly part of dual-career-military couples.

Table C-2 compares the present sample to the demographic profile of Navy personnel and families presented by Orthner and Nelson (1980), based on a one percent sample of the entire Navy. Dual-career-military couples were somewhat overrepresented in the present sample, while service women with civilian spouses are somewhat underrepresented. For males, the percentages of single parents, military couples, and traditional families in the

sample are quite close to overall Navy demographics, and the number of children is reasonably close. Childless enlisted men were somewhat underrepresented, while enlisted men with four or more children were somewhat overrepresented. Childlessness among active duty married women in the sample was quite close to the Navy profile estimates.

Demographic characteristics of civilian wives are presented in Table C-3. Such data are not available in the Orthner and Nelson (1980) profile. Nineteen percent of the enlisted personnel and seven percent of the officers had wives who were foreign born. Sixteen percent of enlisted personnel and five percent of officers had a spouse of a different race. Half of the wives of enlisted personnel and 38 percent of the wives of officers were employed full-time outside of the home (averaging 35 hours per week). Seventy-eight percent of the wives of enlisted personnel who were not employed stated they would like to work outside the home for pay, as did 55 percent of unemployed officers' wives. Navywide, there are nearly ten military-civilian two-paycheck families for every dual-military couple.

Serious Family Problems

Serious family problems reported are listed in Table 3. As shown, more than 20 percent of the overall sample rated obtaining adequate housing (e.g., safe and affordable), having sufficient time for family, moving and relocation, and sea duty (e.g., separation, communication) as serious problems. More than 15 percent rated common work assignments, medical care, and career planning as serious problems.

Enlisted personnel were significantly more likely than officers to rate housing, transportation, financial problems, and child care costs as serious problems, while officers were significantly more likely than enlisted personnel to rate sufficient time for family, career planning, and spouse work/education as serious problems. Males were significantly more likely than females to rate moving and relocation, sea duty, medical care, financial problems, and children's schooling as serious problems, while females were significantly more likely than males to rate common work assignment, career planning, emergency child care, and daily child care as serious problems.

Chi-square tests calculated to determine whether the number of serious problems an individual listed was related to demographic variables (i.e., family income, status (officer/enlisted), sex, race, location of residence, moonlighting, presence of children in the family, and spouse working outside of the home) revealed that multiproblem families cannot be characterized in terms of these variables.

While the number of serious family problems listed was not related to total family income, it was related to perceptions of income as being inadequate ($\chi^2 = 21.6$, $df = 5$, $p < .05$) and undesirable ($\chi^2 = 21.9$, $df = 5$, $p < .05$). Seven percent of the sample considered their income inadequate to meet family needs and 60 percent considered it undesirable (i.e., insufficient for the family to live as comfortably as it would like). For sample members listing six or more problems, 30 percent considered their income as inadequate; and 79 percent, as undesirable.

Income perceptions were, in turn, related to several variables. Respondents who are enlisted, are nonwhite, have lower total family incomes, have children, or have nonworking spouses were more likely to perceive their total family income as inadequate and undesirable. In addition, desirability (but not adequacy) of income was related to gender: Females were much more likely than men to consider their income as desirable. Finally, respondents who lived in military rather than civilian housing and those who moonlighted

Table 3
Serious Family Problems Reported

Problem	N	Total Sample (%)	Enlisted (%)	Officer (%)	χ^2	Female (%)	Male (%)	χ^2
Adequate housing	134	23.6	28.6	17.4	9.119*	20.4	26.9	2.944
Time for family	130	22.9	17.8	29.2	9.821*	22.8	22.9	.000
Moving and relocation	124	21.8	19.0	25.3	2.855	16.6	27.2	8.789*
Sea duty	123	21.7	22.5	20.6	.220	16.3	27.2	9.446*
Common work assignment	110	19.4	18.7	20.2	.103	33.2	5.0	70.498*
Medical care	92	16.2	16.5	15.8	.012	10.7	21.9	12.164*
Career planning	89	15.7	11.7	20.6	7.583*	20.4	10.8	9.312*
Family separation	72	12.7	12.7	12.6	.000	13.1	12.2	.048
Spouse work and education	67	11.8	8.9	15.4	5.133*	11.1	12.5	.171
Transportation	67	11.8	15.6	7.1	8.814*	10.7	12.9	.454
Financial problems	65	11.4	16.2	5.5	14.690*	7.6	15.4	7.769*
Emergency child care	52	9.2	9.5	8.7	.038	11.8	6.5	4.201*
Navy policy information	47	8.3	8.3	8.3	.000	9.0	7.5	.234
Daily child care	39	6.9	6.0	7.9	.504	10.4	3.2	10.273*
Navy exchanges	38	6.7	7.9	5.1	1.340	6.6	6.8	.000
Recreation	35	6.2	6.3	5.9	.001	6.9	5.4	.349
Child care costs	34	6.0	8.3	3.2	5.592*	5.5	6.5	.080
Family problems	24	4.2	4.8	3.6	.249	4.5	3.9	.015
Children's schooling	20	3.5	4.1	2.8	.416	1.4	5.7	6.681*

Note. Those who were not living with their families or had not indicated their sex and pay grade/rank were excluded from the analysis (N = 568).

*p < .05.

were more likely to perceive their income as inadequate. (These variables were not related to pay desirability.)

Role Conflict, Social Support, and Navy Outcomes

Table 4 presents variables having significant effects on role conflict, social support, and individual and Navy outcomes. Adequacy of income affected 11 of the 12 dependent variables; and desirability of income, 6. Respondents who perceived their income as adequate and desirable reported less job/family role conflicts, more social support, less anxiety, and less family pressure to leave the Navy than did those who did not. Those who perceived their income as adequate also reported more marital satisfaction, less depression, and working harder on the job.

A higher number of serious family problems was related to job/family role conflict, less perceived support from supervisors and co-workers, more depression and anxiety, and more family pressure to leave the Navy.

Residing in Navy rather than civilian housing was related to less perceived community and spousal support and less marital satisfaction. In this regard, it is important to note that two-thirds of those in Navy housing were enlisted personnel, vs. half of those in civilian housing. Also, more low income families lived in Navy housing. Seventy-nine percent of those in Navy housing, versus 55 percent of those in civilian housing, had total annual family incomes of less than \$10,000.

Longer Navy workweeks were related to more job/family role conflict, less perceived supervisory support, more family pressure to leave the Navy and working hard on the job. Fewer hours to spend with spouse resulted in more job interference with family life, less perceived spousal support, less marital satisfaction, and more depression. High geographic relocation rates were related to more reported job interference with family life, less perceived spousal support, more anxiety, and more family pressure to leave the Navy.

Appendix C lists the effects of selected variables on role conflict, social support, and Navy outcomes.

Dual-career Couples

The families in which both husband and wife worked were asked additional questions on relocation. Respondents married to military spouses ($N = 129$) perceived relocation pressures due to their spouse's job and difficulties in finding good jobs/joint assignments in the same locale as greater problems than did members of military-civilian dual-career couples ($t = 5.9, p < .01$ and $t = 2.3, p < .05$ respectively). Respondents married to civilian working spouses ($N = 222$) reported more problems with pressure from their own job to move often than did members of dual-career-military couples ($t = 4.8, p < .01$).

Thirty-seven percent of dual-career-military couples responded that either one or both would leave the Navy if the partner were assigned to another location and suitable arrangements for both could not be made. Significantly fewer (15%) of the Navy members with civilian working spouses would leave the Navy if the spouse's career called for a relocation. Thirty-three percent of Navy members with civilian working spouses responded that the civilian partner would refuse the job assignment versus two percent of those with military spouses.

Approximately 20 percent of both types of dual-career couples stated they would move with their spouses if they could arrange a desirable job in the same vicinity. An

Table 4

Variables Having Significant Effects on Role Conflict, Social Support, and Individual and Navy Outcomes

Variables	Relationship with:							
	Adequacy of Income	Desirability of Income	Number of Serious Problems	Navy vs. Civilian Housing	Hours in Navy Work-week	Hours with Spouse	Rate of Relocation ^a	
							Time Away from Family ^b	
							Deployed	Undeployed
<u>Role Conflict</u>								
Job interference with family life	*	*	*	—	*	*	*	*
Family interference with Navy job	*	*	*	—	*	—	—	*
<u>Social Support</u>								
Spousal support	*	*	—	*	—	*	*	—
Supervisory support	*	—	*	—	*	—	—	*
Co-worker support	*	—	*	—	—	*	—	*
Religious support	—	—	—	—	—	—	—	—
Community support	*	*	—	*	—	—	—	—
<u>Individual and Navy Outcomes</u>								
Satisfaction with marriage	*	—	—	*	—	*	—	—
Depression	*	—	*	—	—	*	—	—
Anxiety	*	*	*	—	—	—	*	*
Family pressures to leave Navy	*	*	*	—	*	—	*	*
Work hard on the job	*	—	—	—	*	—	—	—

^aThis analysis was performed only on those who were currently married and only married once, since they were the only ones for whom a rate of relocation could be calculated (N=461).

^bThese analyses were performed only on males (271 deployed and 267 undeployed).

*p < .05, using an analysis of variance or student's t-test.

additional 8 percent of respondents married to working civilians and 27 percent of those married to military spouses would move with the partner even if they could only arrange less desirable jobs for themselves. The remainder of both groups stated either that the partner would not be offered a job in another location or endorsed none of the alternatives. Members of dual-military-career couples reported significantly more difficulty in arranging a common work site than did respondents married to working civilians ($\chi^2 = 15.3$, $df = 2$, $p < .01$), with nearly 90 percent reporting some difficulty.

On the other items asked of respondents with working spouses, no differences emerged between types of dual-career couples on problems with incompatibility of work/family roles (e.g., child raising), competition between spouses, or importance of spouses' respective careers (both groups reported only slight problems). Civilian working spouses objected more to the service member's job duties than did spouses who were also in the service ($t = 14.7$, $p < .01$).

Female members of dual-career couples were much less likely than were men with working wives to give their career more importance than their partner's in making decisions (16 vs. 75%, $\chi^2 = 121.8$, $p < .001$). Fifty-four percent of women respondents gave equal precedence to both careers, while 30 percent placed their spouse's career first (vs. 35 and 1% respectively for males). Navy women married to civilians were more likely to put their careers first (31%) than were women married to service members (5%).

Time Away from Home

Table 4 shows that for men, high rates of both deployed (at sea) and nondeployed time away from home were related to more job interference with family life. Nondeployed time away (e.g., temporary duty at another shore station, training, or serving on a ship in dry dock for repairs) had more extensive effects than deployed time. High rates of nondeployed time away from family were related to more family/job role conflict, less supervisory and co-worker support, more anxiety, and more family pressure to leave the Navy. Family separation due to deployment affected only one of the dependent variables, interference with family life.

Child Care

While less than 20 percent of traditional families (nonworking civilian spouse plus children) incur child care costs, approximately 80 percent of single parents and dual-career military, and 60 percent of dual-career military/civilian couples must pay for child care. Not surprisingly, the cost of child care constituted the greatest problem for single parents.

Overall, all family types reported satisfaction with child care. However, traditional families were consistently most satisfied, while single parents tended to be least satisfied. Most problematic for dual-career and single parents was child care when children become ill or have unexpected problems during working hours.

Reenlistment Intention

A general model for reenlistment intention is shown in Figure 1. Three variables emerged in the primary analysis as significant predictors of intention: general satisfaction with life in the Navy (.26), family pressure to leave the Navy (-.26), and the sex of the service member (.16). Male service members reported more intention to reenlist than did female service members. Taken together, these three variables accounted for 22.5 percent of the variance in the reenlistment intention ($R = .474$).

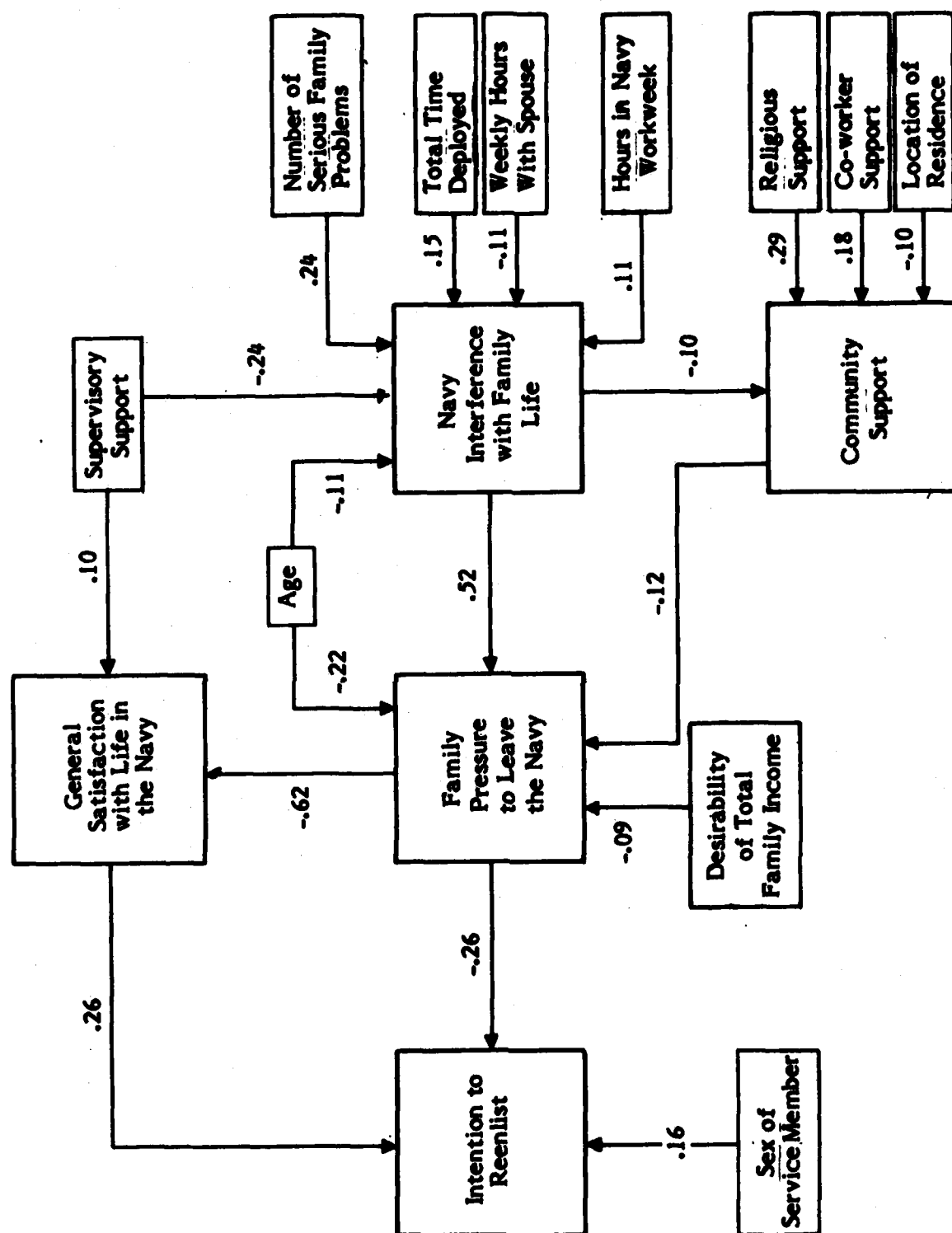


Figure 1. General model for predicting the intention to reenlist and other variables.

The secondary analyses sought the predictors of general satisfaction and family pressure to leave the Navy. Two variables emerged as predictors of general satisfaction: family pressure to leave the Navy (-.62) and perceived supervisory support (.10). Those service members who reported less family pressure and more supervisory support also reported more satisfaction with life in the Navy. These two variables accounted for 54 percent of the variance in general satisfaction ($R = .773$). It should be noted that family pressure has both a direct and an indirect (through general satisfaction) effect on the reenlistment intention.

Four variables emerged as predictors of family pressure to leave the Navy: Navy interference with family life (.52), age (-.22), community support (-.12), and desirability of total family income (-.09). These four variables accounted for 51 percent of the variance in family pressure to leave the Navy ($R = .714$). Service members who were older, who felt their total family income was desirable, who perceived more community support, and, most importantly, who reported less interference with their family lives also reported less family pressure to leave the Navy.

The tertiary analyses sought the predictors of Navy interference with family life and the perception of community support. Six variables emerged as predictors of interference with family life: supervisory support (-.24), the number of serious problems (.24), the percent of deployed time away from family (.15), age (-.11), the number of hours per week spent with spouse (-.11), and the number of hours in the Navy workweek (.11). These six variables accounted for 32 percent of the variance in perceived Navy interference with family life ($R = .564$). Service members who were older, and who reported more supervisory support, fewer serious problems, less deployed time away from their families, more hours per week with their spouse, and a shorter Navy workweek also reported less Navy interference with family life.

Only four variables emerged as predictors of community support: religious support (.29), co-worker support (.18), Navy interference with family life (-.10), and location of residence (-.10). These four variables accounted for 21 percent of the variance in community support ($R = .458$). Service members who reported a stronger belief in God, perceived more co-worker support, lived in civilian housing, and reported less interference with their family lives also reported perceiving more community support. It should be noted that Navy interference with family life has both a direct and an indirect (through community support) effect on family pressure to leave the Navy.

Anxiety and Depression

General models for predicting anxiety and depression are shown in Figure 2. Three variables emerged in the primary analysis as significant predictors of anxiety: Navy interference with family life (.35), sex (-.25), and rank (-.14). These three variables accounted for 28 percent of the variance in anxiety ($R = .526$). Service members reporting more interference with their family lives, female service members, and lower ranking service members also reported more symptoms of anxiety. Five variables emerged as significant predictors of depression: marital satisfaction (-.29), Navy interference with family life (.19), general satisfaction (-.17), community support (-.12), and co-worker support (-.10). These five variables accounted for 36 percent of the variance in depression ($R = .598$). Service members who reported less marital satisfaction, more Navy interference with their family lives, less general satisfaction with life in the Navy, less community support and less co-worker support also reported more depression.

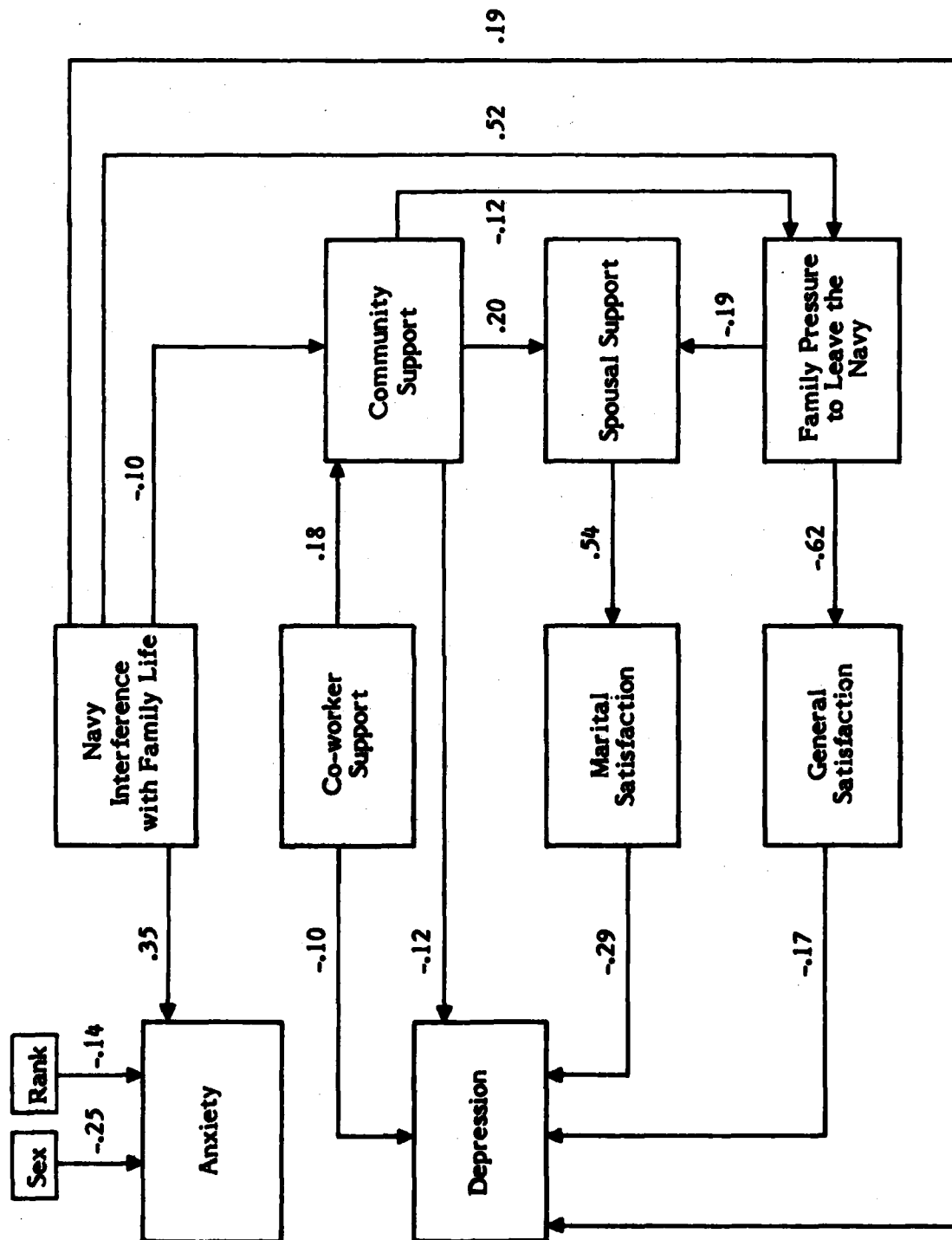


Figure 2. General models for predicting anxiety and depression.

Since the secondary or tertiary analyses for predictors of general satisfaction, Navy interference with family life, and community support have already been shown, only the secondary analysis of marital satisfaction is presented. A single variable, spousal support (.54), emerged, accounting for 28 percent of the variance ($R = .528$). Service members who reported more spousal support also reported more marital satisfaction.

A tertiary analysis performed to find the best predictors of spousal support resulted in two significant predictors: community support (.20) and family pressure to leave the Navy (-.19). These two variables accounted for 19 percent of the variance ($R = .435$). Service members who reported more community support and less family pressure to leave the Navy also reported more spousal support. Since the best predictors of family pressure to leave the Navy and community support have already been shown, no further analyses were performed. It should be noted that Navy interference with family life has direct effects on anxiety and depression, as well as several indirect effects through other variables.

DISCUSSION AND CONCLUSIONS

Characteristics of Navy Families

The distribution of different family types in this sample was representative of that in the Navy as a whole. The lack of demographic information on Navy spouses available from previous research suggests areas of possible need. For example, this study found that there is a high rate of interracial/intercultural marriage, particularly among enlisted males. These families may be at risk due to cultural conflict and adjustment problems and language difficulties. Special outreach may be needed to service such families.

Many of the civilian spouses of active-duty female service members had previous military experience (85%), suggesting that these couples were previously dual-career-military families. This implies that military couples may have a poor prognosis for long-term retention.

The desire of most Navy wives who are homemakers to work outside the home for pay may not be realized due to the difficulty in finding jobs or the lack of affordable, quality child care. Helping homemakers find paying jobs by providing job-finding assistance and child care may provide families with a desirable income at less expense to the government than giving large pay raises to service members. It may also affect retention indirectly by reducing family pressure on the service member to leave the Navy.

Serious Family Problems

Three of the first four areas rated as serious personal or family problems by the total sample were also identified as priority areas in need of research by Croan et al. (1980). These were adequate housing, moving and relocation, and deployment (sea duty). The problems more likely to be considered serious by enlisted personnel rather than officers have an economic basis (i.e., housing, transportation, finances, and child care cost). Since officers are less likely to be experiencing financial hardship, they rated other kinds of issues as serious problems; namely, sufficient time for family, career planning, and work and educational opportunities for spouses.

There are several reasons, all based on demographic differences, why males are more likely than females to consider the following areas as serious problems:

1. Sea duty. Most of the males will go, or have gone, to sea and have experienced this form of family disruption. By contrast, very few females are eligible for sea duty and 45 percent are currently married to a civilian spouse. Thus, only 55 percent have the possibility of experiencing family disruption due to sea duty.

2. Financial problems. About half of the males head traditional families (non-working civilian spouse plus children), while three percent of the females head families analogous to the traditional type. Since the traditional family type potentially has the greatest economic requirements but the fewest resources, it is reasonable to expect that males would report more financial problems than would females. Further, total family income was lower for males than females, especially among the enlisted personnel.

3. Medical care and relocation. Since more males than females in this sample have civilian dependents (99% vs. 61%), it seems reasonable that males would be more likely than females to consider medical care (a major benefit for dependents) and relocation (a major stress experienced by dependents) as serious problems.

4. Children's schooling. Since 80 percent of the males but only 33 percent of the females have children, it is reasonable that more males than females would consider children's schooling a problem.

Primarily because females were more likely than males to be members of dual-military-career couples, they were more likely to rate the following areas as serious problems:

1. Career planning and common work assignment. As over half of the females were trying to accommodate two military careers, career planning and obtaining common work assignments were important concerns. (Only about 2% of the males were members of dual-military-career couples.)

2. Emergency and daily child care. While nearly twice as many males as females are parents, 60 percent of the males with children (compared to 8% of females with children) have a nonworking spouse to look after the children. Clearly, female service members would report more problems with child care.

Income Perceptions

The number of serious family problems experienced by a Navy family was related to perceptions of the adequacy of family income to meet family needs and desirability of the income, which, in turn, were related to demographics. Respondents who were nonwhite, enlisted, had children, had nonworking spouses, or had lower actual incomes had more negative income perceptions. Those who moonlighted and lived in military housing (which may reflect the inability to afford preferred civilian housing) were more likely to report income inadequacy. Finally, females were more likely than were males to consider their total family income desirable. This may be due to the larger number of two paycheck (military and military-civilian) couples among female personnel or to the higher rate of pay received by females relative to their civilian counterparts.

Role-Conflict, Social Support, and Navy Outcomes

Adequate and desirable income levels buffered the effects of interference and conflict between Navy job and family life. Those with adequate and desirable incomes reported less perceived interference and, also, more social (spousal and community) support, less anxiety, and less family pressure to leave the Navy. Adequate incomes are

further related to more perceived supervisory and co-worker support, marital satisfaction, absence of depression, and working hard on the job.

Income adequacy apparently allows families more flexibility in dealing with job/family interference and in maintaining marital and other social relationships that support the family. Higher paid individuals doubtless sense more co-worker and supervisory support, partly because they are likely to be at higher levels in the organization. Finally, stress symptoms reported by the individual (anxiety, depression) and family pressure to leave the Navy would be expected to vary inversely with perceptions of adequacy of income to meet family needs.

It is not surprising that those with more family problems are likely to report more job/family role conflict, depression, anxiety, and family pressure to leave the Navy and less perceived supervisory and co-worker support. The relationship between the number of family problems and on-job social support may imply the presence of family problems. The accompanying demands on the service member might bring him or her into conflict with supervisors and co-workers, thereby generating the perception of lack of support. Conversely, those with few problems may have supportive supervisors and co-workers, which may be a factor in their successful coping with family problems, allowing them to keep problems at low levels. For example, supervisors and co-workers can provide support through sympathetic listening, information and referral, and/or direct help. Supervisors can also allow service members to alter their work schedule or to take time off to attend to family problems.

Those in enlisted military housing reported less perceived community and spousal support and less marital satisfaction. The community can provide help by caring what happens to Navy families, as well as by helping directly. The transient nature of the community occupying Navy housing may contribute to lowered perceptions of community support. Further, Navy housing is a "fish bowl," where being perceived as a troubled family in need of support may have a negative impact on the service member's career. This may make Navy families less likely to seek help from Navy neighbors. These family stresses, as well as the lower incomes of the families in Navy housing, may lead to less marital satisfaction and spousal support, as reported.

The detrimental effects of long Navy workweeks suggest that reducing long hours away from home would reduce perceived interference of the job with family life and, indirectly, the family pressure to leave the Navy.

Relocating families less frequently would also reduce perceived job interference with family life, anxiety, family pressure to leave the Navy, and lack of spousal support. Relocation and arranging good joint assignments are special problems for dual-military-career couples. In other areas, military couples reported no more problems than did those married to working civilians. In fact, they were more understanding of the military demands on the spouse. Attempting to provide favorable job assignments in the same locale for dual-military-career couples would doubtless increase retention for these service members.

Family separations due to deployment had less impact on service members than did separation for other reasons. Deployment separations may have less effects since they are expected, prepared for, and last long enough to allow family members to adapt. Further work is needed to identify why separation for other reasons appear to cause more family stress.

Child Care

The availability and quality of child care need to be improved. In 1980, the Air Force had a pilot program providing 24-hour child care at one site (Nida, 1980). The Navy needs to consider similar service-wide programs, in view of the role child care plays in the mission readiness of personnel. Presently, child care centers must be self-sustaining because of their nonappropriated funding status. This status needs to be reevaluated (Brende, 1977). Subsidizing child care as a basic benefit may have payoffs to the Navy in reduced lost time and attrition. At the least, better centralized planning, guidance, and technical assistance for child care centers could increase the availability and quality of care, even if parents must bear most of the costs.

Reenlistment Intention

The best predictor of reenlistment intention for the present sample was general satisfaction with life in the Navy. At least 50 years of research has identified general satisfaction as a major determinant of turnover (for reviews of this literature, see Brayfield & Crockett, 1955; Mobley, Griffith, Hand, & Meglino, 1979; Porter & Steers, 1973). Among Navy personnel, turnover is usually higher for those who are less satisfied with life in general in the Navy, as well as with specific aspects of Navy life (Bowers, 1973; Bruni, Jones, & James, 1975; Drexler, 1975; Drexler & Bowers, 1975; La Rocco, Pugh, & Gunderson, 1977; Lockman, Stoloff & Allbritton, 1972; Orend, Stroad, & Michaels, 1976).

The second best predictor of reenlistment intention was family pressure to leave the Navy. Even though family pressure was the second variable to enter the prediction equation, it accounts for as much variation in intention as did general satisfaction. Previous research (e.g., Derr, 1979; Grace et al, 1976; Malone, 1967; Nice, 1981; Orthner, 1980; Stumpf, 1978; Thomas & Durning, 1980) suggested that a significant link exists between family variables and retention. The present findings are the clearest and strongest evidence to date that such a link exists.

The third best predictor of reenlistment intention was the gender of the service member. Male service members reported a stronger intention to reenlist than did female service members. This difference may reflect the greater difficulty women have in integrating both work and family roles. Nieva and Gutek (1981) note that, in the civilian sector, family responsibilities for men are usually sequentially related to their work responsibilities. Men have no family responsibilities until their work tasks are complete. Working women, on the other hand, usually have simultaneous work and family role demands. Women traditionally have been available during the day to do housework, care for the children, and run errands, among other things. Thus, working women are more likely to suffer role overload. The tendency to overload may be even stronger among married or single parent military women since a military career is probably more demanding than many civilian jobs. Furthermore, many of the women in this sample are members of dual-career-military couples who have the added problem of coordinating two military careers. Thus, many military women with families may face insurmountable problems that can be resolved only by leaving the service.

General Satisfaction and Family Pressure to Leave the Navy

The best predictor of dissatisfaction with life in the Navy was family pressure to leave the Navy. Thus, family pressure has both a direct and an indirect effect on the reenlistment intention. The indirect effect is mediated through general satisfaction.

The strong relationship between family pressure and general satisfaction requires comment. Historically, studies of job satisfaction have not examined the effects of family variables on satisfaction (Locke, 1976; Nieva & Gutek, 1981). Rather, they have focused on characteristics of the work itself (e.g., challenge, autonomy, etc.), work-related supervisory and co-worker relations, and compensation (e.g., pay, rate of promotion, etc.). Since much of this work has been done in the civilian sector, this lack of research on the impact of family pressure may be partly due to differences between the civilian and military sectors. In contrast with many civilian occupations, a Navy career is much more than just a job. The service member's obligations to the Navy extends far beyond the 40-hour week of most civilian employees. The Navy, to a much greater degree than does a typical civilian job, determines the life-style of service members and all of their dependents. Also, service members, in contrast with many civilian employees, are unable to leave the Navy at will without paying a penalty. Thus, the strong relationship between family pressure and satisfaction seems quite reasonable.

Since perceived family pressure to leave the Navy is strongly related to both reenlistment intentions and general satisfaction with the Navy, the Navy ought to understand the sources of this perception. The best predictor of family pressure was the degree to which the Navy job is perceived as interfering with family life. Service members who perceived more interference also reported more family pressure to leave. While several factors influenced the amount of perceived interference, two factors emerged as most important--supervisory support and the number of serious family problems. These findings suggest that efforts to increase supervisory support and to decrease the number of serious problems encountered by Navy families might reduce the amount of perceived Navy job interference with family life. Such a reduction should reduce family pressure to leave the Navy and ultimately increase both retention and morale.

Anxiety and Depression

The best predictor of anxiety for the present sample was job interference with family life--the more role conflict in combining work with family life, the more anxiety. Moderate to severe anxiety can have a negative impact on the performance of the service member. For high levels of conflict and for lower levels in susceptible individuals, the resulting anxiety may reach clinically significant levels requiring psychiatric intervention. As noted previously, increased supervisory support should reduce job interference with family life, which in turn should reduce anxiety.

The second best predictor of anxiety was the gender of the service member, a finding that requires comment. Since women are typically more self-disclosing than men, they are more likely to express anxiety on self-report measures such as those used in the present study. Whether the greater anxiety reported by women reflects a real difference in symptoms or merely a greater willingness to admit symptoms is unclear. It should be noted that female service members reported the same amount of role conflict as did male service members. This suggests that higher anxiety levels reported by the female service members in this sample reflects a greater willingness to report symptoms rather than a real difference in anxiety level.

The third best predictor of anxiety was rank, which was measured on a 15-point scale ranging from E-1 to O-6. Enlisted personnel, especially those in the lower ranks, who are more likely to experience higher levels of role conflict and to possess fewer resources for dealing with this conflict than do the higher ranking enlisted personnel and officers, reported the most anxiety.

The best predictor of the amount of self-reported depressive affect was the level of marital satisfaction. Service members who reported higher levels of marital satisfaction also reported less depressive affect. The level of marital satisfaction was strongly influenced by the amount of social support received from spouse, a finding that is consistent with previous research (Burke & Weir, 1975, 1977). Spouses were perceived as supportive when they expressed interest in the service member's job, helped the service member carry out his/her Navy duties, engaged in career-enhancing activities, and were understanding when things on the job were not going well. The best predictors of spousal support were the amounts of community support and family pressure (mostly from spouse) to leave the Navy. It appears that service members whose spouses are not pressuring them to leave the Navy perceive their spouses as more supportive, report more marital satisfaction, and experience less depressive affect. Since family pressure to leave is strongly influenced by how much the job interferes with family life, reducing the job interference should reduce anxiety and depression. This would simultaneously improve morale, readiness, and retention.

RECOMMENDATIONS

Since these data were collected, a large pay raise and a variable housing allowance (VHA) have been instituted. These changes may mitigate some of the family problems identified by the present study, especially for the lower income enlisted personnel.

1. The impact of recent pay increases on family stress reduction and increased retention should be evaluated.
2. The feasibility of providing affordable, quality child care 24 hours per day to meet the special needs of single parents and military couples should be investigated.
3. For Navy spouses who want to work, the feasibility of providing job-finding assistance and adequate child care to facilitate paid employment should be investigated.
4. The effects of the variable housing allowance instituted in 1980 should be assessed to see if it significantly reduces the number of personnel who cannot obtain safe and affordable housing.
5. The importance of supervisory support in reducing family stress should be emphasized.
6. Where feasible, every effort should be made to assign military couples to the same geographic area.
7. Methods for providing adequate support services to special populations likely to be underserved, such as interracial families and wives undergoing deployment separation, should be investigated.
8. Further family research should be performed in such critical areas as deployment and other family separations, relocation, housing, medical care delivery, and general provision of social support. This research should be directed toward developing cost-effective interventions to reduce family stress while increasing retention and readiness.

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APPENDIX A
FACTORIALLY DERIVED SCALES

Table A-1
Factorially Derived Scales

Factor	Component	Loading
Work and Your Family (Section 5) (N = 593)		
I. Family pressure to leave Navy ($\alpha=.88$)	My family encourages me to stay in the Navy. (1)	-.76
	All things considered, I am satisfied with my life in the Navy. ^a (24)	-.74
	Because the Navy provides so many benefits for my family, I plan to stay in the Navy. ^a (3)	-.72
	My concern for my family makes it more likely that I will leave the Navy soon. ^a (9)	.68
	My family wants me to leave the Navy because its demands interfere with family life. (11)	.62
	All in all, I am satisfied with the way the Navy treats my family. (20)	-.59
II. Job interference with family life ($\alpha=.81$)	The demands of my Navy job interfere with my family life. (14)	.63
	The demands of the Navy are frequently hard to combine with the demands of my family. (18)	.61
	Many times the Navy and my family pull me in opposite directions. (4)	.52
	When I have conflicts between my Navy duties and my family duties, I usually feel frustrated and can't do anything about it. (16)	.51
	After I get home, I spend a lot of time thinking about the problems and frustrations of my job. (3)	.48
	When I run into conflicts between my Navy responsibilities and my family responsibilities, I usually find a way to handle it all right. (2)	-.42

Note. Numbers in parentheses refer to questionnaire item numbers. Analyses based on responses of subjects (N) who completed all items.

^aThese items were deleted from the scale for the multiple regression analyses, because they either contained the intention to reenlist that the analyses were attempting to predict or were used as a general satisfaction measure.

Table A-1 (Continued)

Factor	Component	Loading
Work and Your Family (Continued)		
III. Family interference with Navy job ($\alpha=.62$)	My family stands in the way of my career in the Navy. (8)	.57
	The demands placed on me by my family interferes with my work. (6)	.50
	I would work more if I were not married. (12)	.46
	Often I am confused as to whether I should put the Navy ahead of my family or my family ahead of the Navy. (10)	.42
Your Job in the Navy (Section 6) (N = 584)		
I. Work hard on job ($\alpha=.81$)	I work very hard on my job. (5)	.81
	My job needs a lot of attention from me. (2)	.72
	I put in a lot of effort at my job beyond what is normally required. (7)	.67
	My job is a breeze. (11)	-.63
	I have to spend a lot of energy in thinking about or doing things for my job. (14)	.60
	I have too much work to do most of the time. (20)	.52
	I hardly ever have to worry about my job. (18)	-.38
II. Co-worker support ($\alpha=.83$)	I can count on the people at work to help me out, if they can, when I have family problems. (13)	.73
	All in all, I am satisfied with the helpfulness of my co-workers. (22)	.65
	It's easy to talk over family or personal problems with the people I work with. (12)	.64

Note. Numbers in parentheses refer to questionnaire item numbers. Analyses based on responses of subjects (N) who completed all items.

Table A-1 (Continued)

Factor	Component	Loading
Your Job in the Navy (Continued)		
III. Supervisor support ($\alpha=.83$)	The people I work with help me figure out where to go or who to talk to when I have a personal or family problem. (16)	.61
	My supervisor often knows who I should see or where I should go to solve personal or family problems. (21)	.50
	My supervisor gives me some leeway at work if he/she knows I am having a personal or family problem. (10)	.66
	My supervisor is a sympathetic listener when I have a personal or family problem. (6)	.62
	My supervisor lets me take time off when necessary to do things for my husband/wife and children. (15)	.62
	All in all, I am satisfied with the helpfulness of my supervisor. (24)	.58
	The people I work with make it easy to make changes in work routines to make things easier for my family. (4)	.49
Your Family and Your Community (Section 7) (N = 578)		
I. Satisfaction with marriage ($\alpha=.85$)	In general, I am happy with my marriage. (1)	.88
	All things considered, I am satisfied with my marriage. (7)	.81
	In general, I am happy with my family life. (4)	.69
	Taking everything together, I am satisfied with my family life. (10)	.63
	I am very much personally involved in my family. (2)	.56

Note. Numbers in parentheses refer to questionnaire item numbers. Analyses based on responses of subjects (N) who completed all items.

Table A-1 (Continued)

Factor	Component	Loading
Your Family and Your Community (Continued)		
II. Community support ($\alpha=.79$)	The most important things that happen to me involve my family. (9)	.37
	There are people in the community where we live who really care about our family. (20)	.88
	There are people in the community who help me and my family out when Navy demands conflict with family needs. (21)	.82
	My family has no one to turn to in the community where we live when they are upset. (16)	-.55
	All in all, I am satisfied with the community where I live with my family. (6)	.41
III. Spousal support ($\alpha=.77$)	My husband/wife is not interested in my work. (14)	-.66
	My husband/wife does many things that help me carry out my Navy duties. (11)	.61
	My husband/wife hardly ever gets involved in activities that are helpful to my Navy career. (17)	-.57
	I get a lot of understanding from my husband/wife when things are not going well on the job. (5)	.54
IV. Religious support ($\alpha=.87$)	My family's faith in God helps us go through rough times. (15)	.90
	Our family does not look to religion for support in troubled times. (19)	-.82
Personal Reactions (Section 8)		
I. Depression ($\alpha=.86$) (N = 606)	I find a good deal of happiness in life. (6)	.77
	I am very satisfied with life. (9)	.74
	I feel that my life is worthwhile. (10)	.71

Note. Numbers in parentheses refer to questionnaire item numbers. Analyses based on responses of subjects (N) who completed all items.

Table A-1 (Continued)

Factor	Component	Loading
Personal Reactions (Continued)		
II. Anxiety ($\alpha=.77$) (N = 597)	I feel I am useful and needed. (8)	.68
	I feel hopeful about the future. (3)	.55
	Becoming very tired in a short time. (b)	.69
	Feeling nervous or fidgety and tense. (f)	.64
	Having trouble getting or staying asleep. (c)	.58
	Finding it difficult to get up in the morning. (d)	.56
	Upset stomach. (e)	.53
	Spells of dizziness. (g)	.41
	Eating more or less than I used to. (j)	.41
	Pains in my back or spine. (a)	.40

Note. Numbers in parentheses refer to questionnaire item numbers. Analyses based on responses of subjects (N) who completed all items.

APPENDIX B
DEMOGRAPHIC CHARACTERISTICS

Table B-1

Demographic Characteristics of the Total Sample (In Percent)

Characteristic	Officer (%)		Enlisted (%)		Total (%)	
	Female (N=142)	Male (N=131)	Female (N=198)	Male (N=181)	Female (N=359)	Male (N=342)
Rank:						
O-1--O-2	45.8	28.2	NA	NA	NA	NA
O-3--O-4	43.0	40.5	NA	NA	NA	NA
O-5--O-6	11.3	31.3	NA	NA	NA	NA
Pay grade:						
E-1--E-3	NA	NA	7.6	6.6	NA	NA
E-4	NA	NA	24.2	13.3	NA	NA
E-5	NA	NA	29.3	21.0	NA	NA
E-6	NA	NA	30.8	28.7	NA	NA
E-7--E-9	NA	NA	8.1	30.4	NA	NA
Length of service^a in Navy (years):						
0-5	67.1	46.1	50.3	27.0	NA	NA
6-10	17.1	16.4	30.8	21.9	NA	NA
11-15	5.7	9.4	13.8	22.5	NA	NA
16-20	8.6	12.5	2.6	18.5	NA	NA
Over 20	1.4	15.6	2.6	10.1	NA	NA
Age (years):						
To 25	23.2	9.2	41.6	27.2	32.0	18.1
26-30	50.0	31.3	37.1	26.7	40.9	26.6
31-35	13.4	19.1	14.2	20.0	15.3	19.0
36-40	5.6	14.5	4.1	17.2	5.6	17.5
41-45	4.2	14.5	2.0	7.8	3.6	13.2
46-50	2.8	8.4	0.0	0.6	1.7	4.1
Over 50	0.7	3.1	1.0	0.6	0.8	1.5
Education level:						
Less than high school	1.4	0.0	1.0	3.4	1.1	1.8
GED	0.0	2.3	4.6	9.6	2.5	5.9
High school diploma	0.0	2.3	40.7	43.5	22.3	24.2
Some college	8.5	9.2	52.1	42.4	33.5	26.5
BA or BS	64.5	50.4	1.5	1.1	29.3	23.6
Master's degree	21.3	19.8	0.0	0.0	9.0	10.9
Doctorate	4.3	16.0	0.0	0.0	2.3	7.1

Note. Percentages do not always equal 100 due to rounding.

^aLength of service was calculated for officers from date of commissioning and for enlisted personnel from date of first enlistment.

Table B-1 (Continued)

Characteristic	Officer (%)		Enlisted (%)		Total (%)	
	Female (N=142)	Male (N=131)	Female (N=198)	Male (N=181)	Female (N=359)	Male (N=342)
Race:						
White	97.2	97.7	90.3	83.9	93.3	90.1
Black	1.4	0.0	4.6	3.3	3.1	2.3
Malayan	0.0	1.5	0.5	5.0	0.6	3.2
Oriental	0.0	0.0	1.0	2.2	0.6	1.2
Hispanic	0.0	0.8	2.6	3.3	1.4	2.0
Other	1.4	0.0	1.0	2.2	1.1	1.2
Current fleet assignment:						
Pacific Fleet	5.6	19.1	13.4	27.0	9.8	22.7
Atlantic Fleet	2.8	22.1	3.6	20.8	3.4	21.5
Ashore in U.S.	83.1	46.6	57.7	41.6	68.8	44.2
Overseas ashore	8.5	12.2	25.3	10.7	18.0	11.5
Type of duty:						
Surface force	86.7	51.8	62.5	59.8	72.2	55.2
Submarine force	1.9	7.1	4.0	10.9	3.4	9.2
Naval air	11.4	41.1	33.5	29.3	24.4	35.6
Percent currently deployed						
	0.0	11.6	2.1	15.9	1.4	14.3
Length of time at present duty station (month):						
Less than 6	14.1	17.6	9.3	14.5	11.8	15.2
6-11	18.3	26.0	24.2	19.0	21.6	22.0
12-23	32.4	32.1	29.4	32.4	31.2	32.6
24-35	29.6	15.3	23.2	21.8	25.3	19.4
36-47	4.9	5.3	10.8	7.8	8.1	6.7
More than 48	0.7	3.8	3.1	4.5	2.0	4.1
Place of residence:						
On base	14.1	14.6	21.8	18.3	18.6	17.0
Off base, military	7.7	4.6	11.9	13.7	9.9	9.3
Off base, civilian	78.2	80.8	66.3	68.0	71.5	73.7
Marital status:						
Single	0.7	0.0	2.0	0.6	1.4	0.3
Married	95.1	100.0	91.4	97.2	92.8	98.5
Divorced or separated	4.2	0.0	6.1	2.2	5.6	1.2
Widowed	0.0	0.0	0.5	0.0	0.3	0.0

Note. Percentages do not always equal 100 due to rounding.

Table B-1 (Continued)

Characteristic	Officer (%)		Enlisted (%)		Total (%)	
	Female (N=142)	Male (N=131)	Female (N=198)	Male (N=181)	Female (N=359)	Male (N=342)
Number of times married:						
1	94.9	92.2	79.3	86.5	86.4	87.8
2	5.1	7.8	17.9	11.8	12.2	10.9
3	0.0	0.0	2.8	1.8	1.5	1.2
Length of present marriage (years):						
1-5	79.7	33.1	84.6	52.3	80.2	41.6
6-10	16.5	23.1	11.5	21.0	15.6	21.3
11-15	3.8	16.2	2.2	14.2	3.3	15.6
16-20	0.0	13.8	0.5	9.1	0.3	12.9
Over 20	0.0	13.8	1.1	3.4	0.6	8.7
Percent of spouses currently in the armed forces						
	50.7	0.8	62.4	2.8	56.0	1.8
Number of respondent's children:						
0	71.1	25.2	59.9	20.6	63.8	21.9
1	21.1	19.1	27.4	23.9	24.8	20.5
2	6.3	28.2	9.1	33.3	8.9	32.2
3	0.7	15.3	2.0	15.0	1.4	15.8
4	0.7	7.6	0.5	6.1	0.6	7.0
More than 4	0.0	4.6	1.0	1.2	0.6	2.7
Family type:						
Civilian spouse, not employed:						
With children	3.5	52.7	1.5	43.0	2.8	47.3
Without children	6.3	7.3	3.6	4.5	4.7	5.6
Civilian spouse, employed:						
With children	9.2	23.3	8.2	32.4	8.9	29.0
Without children	25.4	15.5	15.3	14.5	20.1	14.8
Military spouse:						
With children	11.3	0.0	21.4	1.7	17.0	0.9
Without children	39.4	0.8	41.3	1.1	39.1	0.9
Single parent	4.9	0.0	8.7	2.8	7.3	1.5

Note. Percentages do not always equal 100 due to rounding.

Table B-1 (Continued)

Characteristic	Officer (%)		Enlisted (%)		Total (%)	
	Female (N=142)	Male (N=131)	Female (N=198)	Male (N=181)	Female (N=359)	Male (N=342)
Percent whose family live with them	90.8	95.4	83.9	86.0	86.9	90.0
Total family income:						
Under \$5,000	0.7	0.8	1.1	4.0	0.9	2.4
\$5,000-\$9,999	3.5	0.8	22.6	38.4	13.7	20.7
\$10,000-\$14,999	7.7	11.5	32.6	30.5	21.4	20.4
\$15,000-\$19,999	18.3	24.4	27.9	17.5	22.8	18.9
\$20,000-\$24,999	21.1	24.4	11.1	6.8	15.1	14.5
\$25,000-\$29,999	9.9	13.0	2.6	1.1	6.0	8.3
\$30,000-\$34,999	18.3	9.9	1.6	1.1	10.0	6.2
\$35,000-\$39,999	9.9	5.3	0.5	0.0	4.8	3.0
\$40,000 or more	10.6	9.9	0.0	0.6	5.4	5.6

Note. Percentages do not always equal 100 due to rounding.

Table B-2

**Comparison of Present Sample to Demographic
Profile of the U.S. Navy**

Characteristic	Demographic Profile (%)		Present Sample (%)	
	Male	Female	Male	Female
Family Types:^a				
Single parent	1.2	9.2	1.5	7.3
Dual-career-military couple ^b	2.4	41.3	1.8	56.1
Traditional (w/civilian spouse)	96.4	49.5	96.7	36.5
	Officer	Enlisted	Officer	Enlisted
Distribution of Children for Males:				
0	25	30	25	21
1	30	24	19	24
2	32	28	28	33
3	18	12	15	15
4 or more	5	6	12	7
Childlessness for Females:				
Dual-career-military couples	79		69	
Enlisted females with civilian husbands	68		66	
Officer females with civilian husbands	72		71	

^aThe data presented here (from Orthner and Nelson, 1980) have been renormalized for sample of families with dependents.

^bIn 91 percent of dual-career-military couples in the demographic profile, both spouses are Navy members, compared to 92 percent in the present sample.

Table B-3
Demographic Characteristics of Civilian Wives

Characteristic	Enlisted (%) (N=149)	Officer (%) (N=123)
<u>Race:</u>		
White	77.2	95.1
Black	2.0	0.8
Malayan	7.4	0.8
Oriental	6.7	3.3
Hispanic	5.4	0.0
Other	1.3	0.0
<u>Age:</u>		
To 25	37.2	14.6
26-30	23.0	30.9
31-35	18.2	17.1
36-40	16.2	18.7
41-45	3.4	8.9
46-50	0.7	6.5
Over 50	1.4	3.3
<u>Education Level:</u>		
Less than high school	17.0	1.6
GED	4.8	1.6
High school diploma	42.9	18.0
Some college	30.6	34.4
BA or BS	4.8	35.2
Master's degree	0.0	9.0
<u>Nationality:</u>		
American-born	81.2	92.6
Foreign-born	18.8	7.4
<u>Race of Husband and Wife:</u>		
Same	83.9	95.1
Different	16.1	4.9
<u>Work Outside Home for Pay:</u>		
Yes	49.0	38.2
No	51.0	61.8

Notes.

1. Enlisted and officer wives differed significantly on all demographic characteristics except outside employment (p for $\chi^2 \leq .05$).
2. Percentages do not always equal 100 due to rounding.

APPENDIX C

**EFFECTS OF SELECTED VARIABLES ON ROLE CONFLICT,
SOCIAL SUPPORT, AND NAVY OUTCOMES**

Table C-1
Effects of the Number of Serious Problems

Variable	Responses: Number of Serious Problems						F
	0 (N=168)	1 (N=72)	2 (N=73)	3 (N=62)	4-5 (N=89)	6-15 (N=67)	
<u>Role Conflict</u>							
Job interferences with family life	3.28	3.41	3.51	3.78	4.13	4.61	14.14*
Family interferences with Navy job	2.52	2.52	2.43	2.84	3.20	3.28	8.72*
<u>Social Support</u>							
Spousal	5.44	5.22	5.55	5.29	5.18	5.20	1.37
Supervisory	5.06	4.84	4.92	4.87	4.84	4.39	2.73*
Co-worker	4.71	4.55	4.64	4.62	4.61	4.06	3.08*
Religious	4.80	4.57	4.47	4.36	4.30	4.17	1.83
Community	4.97	4.75	4.92	4.67	4.67	4.62	1.27
<u>Individual and Navy Outcomes</u>							
Satisfaction with marriage	6.25	6.12	6.12	6.03	6.12	5.99	1.11
Depression	1.99	2.04	2.03	2.31	2.43	2.30	3.86*
Anxiety	1.90	1.96	1.97	2.01	2.11	2.28	5.02*
Family pressure to leave the Navy	3.21	3.36	3.58	3.74	4.19	4.52	10.70*
Work hard on job	5.03	5.03	5.06	4.92	4.91	4.95	0.78

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-2
Effects of Adequacy of Pay

Variable	Responses: Adequacy of Pay		t
	Yes (N=526)	No (N=86)	
<u>Relation Between Family Life and Navy Job</u>			
Job interferences with family life	3.58	4.15	-3.68*
Family interferences with Navy job	2.66	3.09	-3.12*
<u>Social Support</u>			
Spousal	5.44	4.60	6.09*
Supervisory	4.92	4.51	2.75*
Co-worker	4.61	4.30	2.24*
Religious	4.53	4.39	0.68
Community	4.87	4.37	3.27*
<u>Outcomes</u>			
Satisfaction with marriage	6.16	5.90	2.46*
Depression	2.12	2.40	2.62*
Anxiety	1.98	2.24	-3.91*
Family pressures to leave Navy	3.52	4.43	-5.07*
Work hard on job	5.00	4.83	2.14*

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-3
Effects of Desirability of Pay

Variable	Responses: Desirability of Pay		t
	Yes	No	
	(N=243)	(N=369)	
<u>Relation Between Family Life and Navy Job</u>			
Job interferences with family life	3.39	3.83	-4.05*
Family interferences with Navy job	2.54	2.83	-2.93*
<u>Social Support</u>			
Spousal	5.57	5.16	4.18*
Supervisory	4.85	4.87	-0.22
Co-worker	4.63	4.53	0.97
Religious	4.58	4.47	0.82
Community	4.99	4.68	2.87*
<u>Outcomes</u>			
Satisfaction with marriage	6.18	6.10	1.40
Depression	2.09	2.20	1.50
Anxiety	1.93	2.07	-2.94*
Family pressures to leave Navy	3.22	3.93	-5.61*
Work hard on job	5.04	4.94	1.81

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-4
Effects of Location of Residence

Variables	Responses:		t
	Location of Residence		
	Navy Housing (N=173)	Civilian Housing (N=436)	
<u>Relation Between Family Life and Navy Job</u>			
Job interferences with family life	3.65	3.66	-0.08*
Family interferences with Navy job	2.75	2.71	0.32
<u>Social Support</u>			
Spousal	5.15	5.38	-2.09*
Supervisory	4.88	4.86	0.15
Co-worker	4.64	4.54	0.94
Religious	4.43	4.55	-0.76
Community	4.52	4.89	-3.08*
<u>Outcomes</u>			
Satisfaction with marriage	6.01	6.17	-1.99
Depression	2.19	2.15	-0.54
Anxiety	2.07	1.99	1.65
Family pressures to leave Navy	3.52	3.70	-1.30
Work hard on job	5.03	4.95	1.27

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-5
Effects of Deployed Time Away from Family

Variable	Responses: Deployed Time Away from Family				F
	Never (N=34)	Hardly Any (N=47)	About 25% (N=93)	25% or More (N=97)	
<u>Relation Between Family Life and Navy Job</u>					
Job interferences with family life	3.38	3.52	3.79	4.00	2.70*
Family interferences with Navy job	2.70	2.72	2.68	2.77	0.12
<u>Social Support</u>					
Spousal	5.44	5.29	5.32	5.34	0.13
Supervisory	5.04	4.93	4.90	4.89	0.15
Co-worker	4.79	4.66	4.59	4.63	0.24
Religious	4.56	4.34	4.64	4.64	0.40
Community	4.80	4.83	4.90	4.82	0.07
<u>Outcomes</u>					
Satisfaction with marriage	6.22	6.05	6.08	6.13	0.33
Depression	2.00	2.18	2.24	2.16	0.52
Anxiety	1.86	1.84	1.90	1.93	0.37
Family pressure to leave the Navy	3.59	3.60	3.82	3.81	0.40
Work hard on job	5.15	5.02	4.90	5.09	2.13

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-6
Effects of Undeployed Time Away from Family

Variable	Responses: <u>Undeployed Time Away from Home</u>			F
	No Time/ Hardly Ever (N=152)	About 25% (N=71)	25% or More (N=46)	
<u>Relation Between Family Life and Navy Job</u>				
Job interferences with family life	3.50	3.83	4.53	12.30*
Family interferences with Navy job	2.56	2.85	3.05	4.03
<u>Social Support</u>				
Spousal	5.40	5.36	5.12	1.06
Supervisory	5.07	4.96	4.45	5.18*
Co-worker	4.75	4.70	4.26	3.31*
Religious	4.58	4.61	4.57	0.01
Community	4.93	4.84	4.66	0.67
<u>Outcomes</u>				
Satisfaction with marriage	6.18	6.05	6.01	1.02
Depression	2.09	2.18	2.37	1.65
Anxiety	1.86	1.84	2.09	3.43*
Family pressures to leave Navy	3.42	3.92	4.53	10.34*
Work hard on job	5.06	5.07	4.83	2.85

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-7
Effects of Hours in Work Week

Variable	Responses:				F
	Hours in Navy Work Week				
	40 (N=157)	41-50 (N=196)	51-60 (N=80)	60 (N=54)	
<u>Relation Between Family Life and Navy Job</u>					
Job interferences with family life	3.38	3.76	3.80	4.48	9.96*
Family interferences with Navy job	2.47	2.96	2.69	2.88	5.57*
<u>Social Support</u>					
Spousal	5.35	5.34	5.36	5.33	0.01
Supervisory	5.09	4.93	4.72	4.31	5.76*
Co-worker	4.69	4.60	4.65	4.22	2.23
Religious	4.49	4.46	4.52	4.79	0.53
Community	4.77	4.73	4.82	4.89	0.22
<u>Outcomes</u>					
Satisfaction with marriage	6.21	6.10	6.08	6.12	0.52
Depression	2.14	2.12	2.11	2.30	0.60
Anxiety	2.01	2.01	1.90	2.09	1.48
Family pressure to leave the Navy	3.58	3.63	3.63	4.42	4.57*
Work hard on job	4.83	5.09	5.05	5.05	5.53*

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-8
Effects of Weekly Hours Spent with Spouse

Variable	Responses: Hours with Spouse					F
	0-10 (N=89)	11-20 (N=121)	21-30 (N=93)	31-40 (N=72)	40 (N=89)	
<u>Relation Between Family Life and Navy Job</u>						
Job interferences with family life	4.20	3.75	3.65	3.62	3.56	3.40*
Family interferences with Navy job	2.87	2.84	2.89	2.68	2.50	1.82
<u>Social Support</u>						
Spousal	4.93	5.36	5.34	5.75	5.59	6.17*
Supervisory	4.62	4.80	4.86	4.98	5.13	2.07
Co-worker	4.16	4.51	4.83	4.61	4.76	4.59*
Religious	4.53	4.57	4.16	4.59	4.44	0.99
Community	4.42	4.69	4.85	5.02	4.85	2.37
<u>Outcomes</u>						
Satisfaction with marriage	5.78	6.16	6.08	6.50	6.34	8.81*
Depression	2.49	2.19	2.19	1.90	1.96	5.63*
Anxiety	2.05	2.08	1.98	1.89	1.95	1.57
Family pressure to leave the Navy	3.99	3.77	3.68	3.39	3.77	1.53
Work hard on job	5.06	4.94	4.94	4.98	5.05	0.81

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

Table C-9
Effects of the Rate of Relocation

Variable	Responses: Rate of Relocation			F
	Low (N=185)	Moderate (N=142)	High (N=134)	
<u>Relation Between Family Life and Navy Job</u>				
Job interferences with family life	3.41	3.60	3.94	7.24*
Family interferences with Navy job	2.68	2.63	2.82	1.09
<u>Social Support</u>				
Spousal	5.25	5.60	5.23	4.74*
Supervisory	5.05	4.91	4.77	2.12
Co-worker	4.75	4.58	4.49	2.23
Religious	4.66	4.52	4.49	0.42
Community	4.89	4.90	4.71	1.11
<u>Outcomes</u>				
Satisfaction with marriage	6.04	6.22	6.23	2.41
Depression	2.09	2.15	2.14	0.17
Anxiety	1.83	1.99	2.14	11.30*
Family pressures to leave Navy	3.36	3.65	3.99	7.08*
Work hard on job	5.04	4.96	4.93	1.04

Note. With the exception of anxiety, which was assessed on a four-point scale (1 = never to 4 = frequently), all other variables were assessed on a seven-point scale (1 = strongly disagree to 7 = strongly agree).

*p < .05.

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