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<p>→ This report analyzes the effect of economic, psychological, and sociological variables on soldiers' satisfaction with relationships with their spouses or children. It uses data from the Army Experience Survey, 1985. The results reveal that variables from all of the three disciplines play a role in determining satisfaction with family life in the Army. In particular, black and older soldiers and soldiers with more children showed more satisfaction, and attritees showed less satisfaction with relationships with their spouses or children.</p>			
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The Determinants of Satisfaction With Family Life: An Interdisciplinary Analysis of the U.S. Army

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Personnel Utilization Technical Area
Manpower and Personnel Research Laboratory



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

July 1988

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**U.S. ARMY RESEARCH INSTITUTE
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**A Field Operating Agency Under the Jurisdiction
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Technical Report 800

**The Determinants of Satisfaction With Family Life:
An Interdisciplinary Analysis
of the U.S. Army**

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FOREWORD

The Personnel Utilization Technical Area of the Army Research Institute (ARI) performs multidisciplinary research in the areas of family, retention, and readiness. Questions have recently arisen regarding the Army's ability to increase family satisfaction to improve soldier retention, performance, and readiness.

This research was conducted in the Personnel Utilization Technical Area of the Manpower and Personnel Research Laboratory; it was sponsored by MG Robert Joyce, Commander, Community and Family Support Center (CFSC), under his Letter of Agreement (LOA), titled "Sponsorship of ARI Army Family Research," dated 18 December 1986. The sponsorship was continued according to Annex A to the LOA between BG Thomas Rhame, CFSC, and COL Wm. Darryl Henderson, Commander, ARI, dated 7 January 1988. Results of this research were briefed to Ms. Emily Cato of CFSC in November 1987. The sponsor will use the results to improve family programs that increase soldiers' satisfaction with relationships with their spouses and children.

The research presented in this report quantifies several of the economic, psychological, and sociological variables thought to affect satisfaction with family life of enlisted soldiers in the Army.



EDGAR M. JOHNSON
Technical Director

THE DETERMINANTS OF SATISFACTION WITH FAMILY LIFE: AN
INTERDISCIPLINARY ANALYSIS OF THE U.S. ARMY

EXECUTIVE SUMMARY

Requirement:

The U.S. Army Research Institute (ARI) conducts research on manpower, personnel, training, and family issues of particular significance and interest to the U.S. Army. ARI was tasked by MG Robert Joyce, Commander, Community and Family Support Center (CFSC), to conduct family research that determines variables influencing soldiers' satisfaction with relationships with their family members.

Procedure:

The author uses data from the Army Experience Survey, 1985, which asked enlisted veterans about recollections of their levels of satisfaction with relationships with spouses and children if they were married during their Army service. An exploratory factor analysis technique is used to reduce about 50 variables from economics, psychology, and sociology to eight factors. These factor scores and other control variables are then used as predictors to explain satisfaction with relationships with spouse and children in a multivariate, nonlinear, logit model.

Findings:

The results suggest that variables from all of the three disciplines are significant in increasing job satisfaction in the Army. The levels of satisfaction with relationships with spouses and children are positively correlated with (i) positive impact on soldiers produced by Army experience, (ii) increase in the number of black or older soldiers, (iii) increase in the number of occupational soldiers, or (iv) number of children. The probability of satisfaction with relationships with spouse and children is related negatively with an increase in family problems.

Utilization of Findings:

This research shows that policy makers should consider economic variables, such as adequate military pay, as well as psychological and sociological variables for increasing overall satisfaction with family life in the Army. The results can be used to reallocate CFSC's resources to programs that enhance soldiers' satisfaction with relationships with their spouses and children (e.g., spouse employment and youth services programs).

THE DETERMINANTS OF SATISFACTION WITH FAMILY LIFE: AN
INTERDISCIPLINARY ANALYSIS OF THE U.S. ARMY

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THE DETERMINANTS OF SATISFACTION WITH
FAMILY LIFE: AN INTERDISCIPLINARY ANALYSIS
OF THE U.S. ARMY

In the past, work and family roles were viewed as separate, independent, worlds, with males occupying the work world, and females responsible for the family. This separation of roles is accentuated by the split in academic disciplines specializing in specific subjects. Labor economists, industrial psychologists and occupational sociologists concentrate on work behavior whereas family behavior is relegated to child and marriage specialists. As a result of this compartmentalization, there are three major limitations of the existing research on the relationships between work and family life. First, most of the research in this area has been restricted to either the work side or the family side of the work-family equation. Also, most of this research is restricted to theoretical formulations instead of empirical validation. Second, most of the research has been applied to private sector organizations. Finally, almost all of the research in work behavior is restricted to variables of a single academic discipline; interdisciplinary studies are conspicuous by their absence. The variables of other disciplines are assumed away in bivariate relationships and are implicitly included in the error term of an estimated equation in multivariate studies.

An objective of this paper is to analyze the effect of work life on family life in the Army, while controlling for other variables. Appropriate variables from psychology, sociology and economics are combined to explain satisfaction with family life. The next section reviews selected literature from each of these disciplines. In section 2, we discuss the Army Experience Survey, 1985, which collected the required interdisciplinary data. It also outlines the results of factor analysis used to reduce these data. Section 3 deals with the estimation of the effect of job satisfaction on satisfaction with family life. The last section summarizes the conclusions and policy implications.

Literature Review

It is virtually impossible to review the literature on interactions of work and family of any one academic discipline, let alone that of other disciplines. Hence we will only attempt to overview the major relevant studies, relying largely on survey papers in these disciplines.

Labor economists analyze either the work side or the family behavior side of the work-family interactions as two separate systems. The work side is emphasized in the organizational production side and the family life is recognized in the consumption side of the literature. The work side deals with

work performance or labor productivity. Labor productivity is generally measured in terms of value of output per unit of labor input. In empirical estimation of labor productivity, other economic variables, such as, capital, technology, etc., are included as explanatory variables in the equation. Success in this area is, however, restricted to industries in which output is concrete and hence can be measured relatively easily, such as in agricultural and manufacturing industries. (Hildebrand and Liu, 1965; Walters, 1968; Kendrick, 1977; Gollop and Jorgenson, 1980; Norsworthy and Zabala, 1985). In service industries, in general, and in such government organizations as defense, in particular, where output or performance is difficult to measure, research on productivity is virtually conspicuous by its absence. Also, there has been an absence of the inclusion of such family variables as satisfaction with family life in explaining productivity.

Family behavior is analyzed by economists on the consumption side or in the household sector of the economy. The relevant research includes the economics of marriage (Becker, 1981), divorce (Becker et al., 1977; Duncan and Hoffman, 1985; Peters, 1986; Weiss and Willis, 1985), and the demand for (requirements) and supply (birth rates) of children (Becker and Lewis, 1974; DeTray, 1974; Heckman and Walker, 1986; Rosenzweig and Schultz, 1985). The economics of marriage is based on economic gains associated with maximization of utility by family members as a unit. Becker (1981) theorized that the gains to marriage arise because of gains to the division of labor in household production, i.e. specialization by marriage partners according to the values of their time. The economics of divorce is explained in terms of decreased specialization (decrease in child-bearing roles of women) in a household, together with reduced demand for children, both caused by the rising market value of female time. This resulted in reduced gains to marriage and hence an increase in probability of divorce (Becker, et al., 1977; Duncan and Hoffman, 1985; Peters, 1986; Weiss and Willis, 1985). The demand for children is explained in terms of income levels of the young adults relative to the living standards they were used to when they were growing up. Easterlin (1973) explained the post war baby boom by reference to an increase in income relative to the lower income during the great depression when they were growing up. It is extended by other economists from the quantity (the number of children) to the quality (dollar expenditure per child) of children (Becker and Lewis, 1974; DeTray, 1974). The supply of children is related to socio-biological fertility theories (Heckman and Walker, 1986; Rosenzweig and Schultz, 1985) that are generally outside the realm of economics. It is noted by Willis (1986) that fertility is controlled indirectly by actions such as coital frequency, contraception, breast feeding, abortion, etc.

A limitation of the research in economics of the family is a virtual lack of empirical verification of the theories. For

instance, in a recent survey paper, Willis (1986,:25) rightly concludes, "We do not have, as yet, a body of empirically tested, quantitatively stable estimates of the major behavioral relationships suggested by the theory." Also, it must be noted that there is no linkage between the two sides of an equation on work and family. A survey article on the impact of mother's work on satisfaction with family life notes that the results are either inconclusive or contradictory (Ferber and Birnbaum, 1982). Finally, there is undue concentration on economic variables and a virtual absence of non-economic aspects of work and family life.

Industrial and organizational psychologists have also analyzed each side of the equation, albeit separately. The industrial psychologists emphasize the work side for increasing productivity by increasing job satisfaction (Schwab and Cummins, 1970). Most of these studies obtain positive relationships between job satisfaction and productivity (Parker and Kleemeir, 1951; Vroom, 1964; Strauss, 1968; Herzberg, 1968; Lawler, 1967 and Porter and Lawler, 1968). The lower correlations between productivity and job satisfactions obtained in earlier studies were due to absence of control for confounding environmental variables. When the later studies controlled for these efforts, considerably higher coefficients were obtained (Lawler, 1967; Vroom, 1968). The organizational psychologists emphasize work side for increasing organizational commitment and reducing absenteeism, turnover, etc. Dubin et al. (1976) noted that the idea of attachments to work underlies all theories of motivation to work and is of central concern in the analysis of work satisfaction. The person-work linkages are derived from organizational programs to reduce turnover, improve individual productivity or increase loyalty. Blair and Phillips (1983) analyzed job satisfaction in the Army relative to that in the civilian sector and concluded that the satisfaction level was lower in the Army. Some of the limitations of their paper include a lack of control for confounding variables that explain job satisfaction and an exclusion of appropriate interdisciplinary variables. Fraunce and Dubin (1975) suggest that when a person is sufficiently satisfied with either the family life or work setting, he/she does not continue to seek the same level of satisfaction in the other. This appears to suggest the theory of independence between work and family life instead of the interdependence discussed below.

Occupational sociologists appear to be the only discipline that has attempted to relate work life to family life. The studies include the effects of: time and schedule (Pleck et al., 1978); separation and travel (Culbert and Renshaw, 1972); job demands and gratification (Piotrowski, 1981); work schedules (Bohen and Viveros-Long, 1981) and maternal employment (Hofferth and Moore, 1981) on family life. Kanter (1977) reviewed several of these studies and concluded: "most analyses of work

and family in the modern American context have settled into a and tested framework exists for reversing the relationship and looking at the effects of family patterns on work system ..." (p.53). Similarly, Pleck et al. (1978) concluded that for most workers, work-family conflicts imply the interference of work on the family rather than the reverse. Finally, it must be noted that research in this discipline is restricted to sociological variables and confined to the private sector of the economy.

Bowen (1985) recently reviewed the sociological literature on the work-family interactions. He classified all the studies into what he calls three theories: (i) spillover, (ii) compensatory, and (iii) an independence or no-relationship model. The spillover theory predicts positive interdependence, that is, if a person is satisfied with work experience, he/she is also likely to be satisfied with his family life. The compensatory theory suggests a negative correlation, that is, if a person is not satisfied with his/her work experiences, he/she will try to compensate it by increasing satisfaction level in the family relationship. The no-relationship model suggests that there is no correlation, either positive or negative, between work and family experiences. Since Bowen did not calibrate these theories empirically, we will attempt to test them in Section 3. We, however, postulate that the spillover theory is likely to be valid for the Army because of a conceptual Army-family cooperative partnership model postulated by Bowen (1985).

Army Experience Survey, 1985 and Factor Analysis

The Army Experience Survey, 1985, collected interdisciplinary information on satisfaction with family and work life of veterans while they served in the Army. The information on family satisfaction included soldiers' satisfaction of relationships with spouses and with their children. A stratified random survey of Army enlisted veterans and attritees who separated between 1 October 1981 and 30 September 1984 was conducted in 1985 (The Army Experience Survey, 1986). The sample was systematically randomly selected by separation status and selected demographic/service categories from administratively maintained Enlistment Master Files (EMF). Since the sampling rates varied according to the size of the separation groups, sample adjustment weights were calculated in order to obtain unbiased population estimates from the data. The 2-year enlistment option soldiers were over-represented due to the time frame involved. For example, the 2-year enlistment program is of a recent origin so that there were not enough observations of these soldiers in the unweighted sample. Because these soldiers fell in the Category I-IIIA (those who had scores in the upper half of the Armed Forces Qualification Test) to be eligible for the option, this resulted in over-representation of Category I-IIIA in the sample. The selected weighting methodology reduced

the bias due to both "no finds" of veterans sorted from the EMFs and nonresponse of the surveyed individuals. The weighting technique also reduced sampling errors (Army Experience Survey, 1985). The mail survey (with telephone follow-up) contacted 8,000 veterans and nearly 4,500 of them responded. The respondents included four groups of veterans: (i) attritees who did not complete their initial enlistment term, (ii) separatees who had completed their first term of service (of 2, 3 or 4 years), (iii) midcareerists who had served more than one term but left before retirement, and (iv) careerists who had retired after 20 or more years of service.

As there were considerable missing variable values, we sorted the data to select veterans with minimal missing values, and had variables with key behavioral attitudes that could be used as interdisciplinary explanatory variables. A limitation of our sorting the data is an assumption that the missing values were distributed randomly. To the extent that this distribution is not random, our results are likely to be biased. We have, however, not tested for the distribution of these missing cases.

Our selection provided 100 variables for 2,232 veterans. In order to further reduce the number of variables, an exploratory factor analysis is conducted. Ten factors were specified for extraction using the maximum likelihood method with eigen values of one or above. The data are rotated to obtain an orthogonal factor structure by the Varimax rotation procedure. Orthogonality or independence of a factor from another factor was desired for the second stage of the analysis where factor scores are used as predictor variables to explain satisfaction of relationship with spouses and children. The variables on satisfaction with spouses and children are excluded from factor analysis in order to ensure their independence from factor scores which were used as predictors for explaining satisfaction of relationships with spouses and children. Eight factors consisting of 50 variables with significant variable loadings ($r > .25$) are identified. We used an $r = .25$ from tables of statistical significance at the 0.01 level for $n = 100$ of the correlation coefficients. The factor structure is shown in Table 1.

TABLE 1
 ROTATED FACTOR STRUCTURE OF VARIABLES

Variable Name	Factor 1: Positive Army Impact	Factor 2: Exit - Dissatis- faction with environment	Factor 3: Exit - Family Problems
Enlisted for Self- improvement	.35	-.01	-.01
<u>Army Impact:</u> Development of job skills	.49	-.11	.02
Self-confidence	.74	-.09	-.03
Leadership ability	.70	-.08	.00
Ability to work with others	.72	-.07	.01
Respect for authority	.61	-.22	.04
Pride in self	.77	-.06	-.02
Openness to new ideas	.62	-.09	-.02
Pride in serving country	.52	-.16	.00
Ability to make friends	.60	-.05	.01
Establishing Independence	.63	-.02	-.00
Self-discipline	.70	-.08	-.01

TABLE 1 (continued)

ROTATED FACTOR STRUCTURE OF VARIABLES

Variable Name	Factor 1: Positive Army Impact	Factor 2: Exit - Dissatis- faction with environment	Factor 3: Exit - Family Problems
<u>Exit Reasons:</u>			
Apathetic Officers	-.03	.66	.05
Failed to get promoted	.01	.48	.10
Poor NCO leadership	-.05	.66	.03
Pay was too low	-.04	.35	.30
Long working hours	-.07	.39	.40
No credit for good work	-.04	.73	.15
Lacked training wanted	-.08	.32	.14
Didn't get along with NCOs	-.16	.51	.09
Too many rules	-.21	.39	.21
Didn't get along with peers	-.12	.27	.19
Too much unfair treatment	-.11	.78	-.01
Uninteresting work	-.15	.51	.11

TABLE 1 (continued)

ROTATED FACTOR STRUCTURE OF VARIABLES

Variable Name	Factor 1: Positive Army Impact	Factor 2: Exit - Dissatis- faction with environment	Factor 3: Exit - Family Problems
Inadequate family services	-.01	.28	.48
Not given respect	-.14	.79	.08
Too many PCS moves	.05	.15	.49
Pay was too low	-.05	.35	.31
Long working hours	-.06	.39	.40
<u>Type of Family Problem:</u>			
Too much family separation	-.01	.11	.66
Family problems at home	.00	.04	.51
Family wanted out	.01	.03	.49
Inadequate family services	-.01	.28	.49

TABLE 1 (continued)

ROTATED FACTOR STRUCTURE OF VARIABLES

Variable Name	Factor 4: Education Levels	Factor 5: Schooling/ Training Motive	Factor 6: Personal Improve- ment
Pre-enlistment education	.66	-.05	.01
Education level when left Army	.97	-.02	.04
Current education level	.68	-.09	.06
<u>Enlistment Reasons:</u> Money for college	-.09	.59	-.07
Exit Reasons: To go to school/college	-.08	.88	-.02
Exit Reasons: Lacked training wanted	.02	.51	.03
Exit Reasons: To use service benefits	-.04	.57	.05
Unemployed	.04	.00	.33
Prove I could do it	.05	-.04	.51
To be on my own	.01	.02	.66
To earn more money	.04	.08	.47
Travel	.01	.04	.37
Personal problems	-.01	-.00	.37

TABLE 1 (continued)

ROTATED FACTOR STRUCTURE OF VARIABLES

Variable Name	Factor 7: Institutional Soldier	Factor 8: Occupational Soldier
<u>Enlistment Reasons:</u>		
To serve my country	.79	.11
Family Tradition	.29	-.06
Pride in serving country	.51	.02
Self-improvement	.14	.46
Develop a skill	-.01	.69
Earn more money	-.05	.36

The eight factor solution is indicated by the eigen values (>1) as well as by the scree test. The scree test is the determination of a point after which the factors become unstable. The unweighted eigen values of the eight factors are 5.26, 4.34, 2.00, 1.89, 1.85, 1.81, 1.15, and 1.09. Together these factors explain 58.85 percent of the total variance in the correlation matrix. Even though the last two factors did not add much to the variance, we retained them because of their theoretical importance, namely, the importance of institutional versus occupational soldier in contributing to the satisfaction with family life.

The first factor is labelled by us as the "positive Army impact". It is comprised of twelve related variables. This cluster consists of variables from economics, psychology and sociology. For instance, it includes the human capital variable of economics given by "development of job skills" as an Army impact. The psychological variables are "self-confidence", "leadership ability" and "ability to work with others". The sociological variables are "pride in serving country" and "self-discipline". The second factor represents Army separatees and attritees who were dissatisfied with their environment. This factor includes such economic variables as "relative pay" as a reason for separation from the Army; psychological variables like "apathetic officers", "poor NCO leadership", "no credit for good work", "did not get along with NCOs or peers" and such sociological variables as "inadequate family services" and "long working hours". The third factor, ("exit for family problems") includes seven interdisciplinary variables. The fourth and the fifth factors respectively denote "educational progress" achieved by soldiers while in the Army and "schooling/training" motivations for joining the Army. The sixth factor is comprised of soldiers who enlisted for "personal improvement" reasons. The last two factors respectively represent the two conflicting motives of "institutional" (or patriotic soldiers who view military service as a calling) and the "occupational" (or the economically motivated) soldiers. The latter group views military service as a job rather than a calling (Moskos, 1977; Stahl, et al., 1978, 1980; Segal, 1986; Tremble and Brosvic, 1986).

Analysis of intersections of variables across factors reveals that there are only three such variables out of 50. For instance, variables "Exit because pay was too low" and "Exit for long working hours" are included in only two factors: "Factor 2: Dissatisfaction with environment" and "Factor 3: Exit for family problems". Similarly, variable "Exit for inadequate family services" is included in both "Factor 2: Dissatisfaction with superiors" and "Factor 3: Exit for family problems". Hence we tend to conclude that the factor structure is orthogonal and hence the factor scores can be used to relate them to satisfaction with family life in the U.S. Army.

Logit Model of Satisfaction with Family Members During Army Service

Veterans' satisfaction with family life while they were in Army service is determined by us from separate questions on satisfaction of relationship with spouse and children. The veterans were asked, "What type of effect, if any, did your Army service have on your relationship with (your) spouse? (Answer this question if you were married during your Army service)". A similar question was asked about their relationship with children. The response scale varied from 1 for "strong positive effect" to 5 for "strong negative effect". The scale was reversed by multiplying the response values by (-1). This resulted in a relatively positive scale that increased with an increase in positive relationship. We combined the "strong positive effect" and the "positive effect" responses to denote satisfaction of relationship with spouse and represented it by the binary value of 1; we used zeros for "negative effect" and "strong negative effect"; and excluded the responses with "no effect". This binary variable is used as a criterion (dependent, endogenous, predicted) variable to explain satisfaction with family life. We used a non-linear logistic regression model to explain job satisfaction because the criterion variable is discontinuous so that ordinary least squares equations are ill-advised (McKelvey and Zavolina, 1975; Amemiya, 1981; Maddala, 1983; Ben-Akiva, 1986). Separate equations are estimated for relationships with spouse and children. A maximum likelihood procedure is used to obtain the model parameter estimates. The weighted data developed in the Army Experience Survey discussed in the preceding section are used to estimate logistic regressions. The available literature in statistics indicates that the use of weighted data in regression analysis yield unbiased, albeit less efficient, estimates of the population relative to the use of unweighted data (Smith, 1976; Choi, 1982).

Satisfaction of soldiers' satisfaction of relationship with spouses is postulated as a function of the eight factor scores derived above and fifteen other explanatory variables that were not constituted in the factors. Factor scores like positive Army impact, soldiers who achieved formal educational progress while in the Army, those that enlisted for schooling/training motive, or for personal improvement reasons as well as institutional soldiers are predicted to be positively related to satisfaction of relationship with spouses because of the proposed theory of spillover of job satisfaction with family satisfaction. The factor scores predicted to explain satisfaction of relationships with spouses negatively include soldiers who separated from their jobs for such reasons as dissatisfaction with job environment, and family problems. The hypothesized relationships of several other explanatory variables with the dependent variable cannot be determined a priori because there is no theory to predict the nature of expected relationships. The development of the other

explanatory variables and hypothesized signs of some of them are as follows:

(i) **Satisfaction with Army Service.** This variable is developed from responses to the question, "How satisfied are you with your Army service?". The responses were coded on a four-point Likert scale: very satisfied, satisfied, dissatisfied and very dissatisfied. We combined the first and the second responses to represent veterans who are generally satisfied with their Army service or jobs and the last two responses to indicate job dissatisfaction. It must be noted that we are using the concept of job satisfaction in the context of an overall satisfaction with Army service instead of satisfaction with specific occupation. The job-satisfied veterans are assigned a binary value of one and the job-dissatisfied veterans are denoted by the zero values. The spillover theory suggests that those who are satisfied with their jobs are also likely to be satisfied with relationships with their spouses and children.

(ii) **Satisfaction of Relationship with Children** is postulated to relate to satisfaction of relationships with spouse positively because these two family facets of satisfaction are likely to reinforce each other. The relationships of the remaining variables, namely, occupational soldiers, age, race, the number of enlistment terms served, gender (male), the recipients of enlistment bonuses, the number of children of the soldier, etc. cannot be postulated, *a priori*, because there is no theory to do so. These variables are, however, included in the analysis in order to control for them while examining the effects of job satisfaction, etc., on satisfaction of relationship with spouse.

The parameter estimates are shown in Table 2. Six of these parameters, discussed below, are statistically significant at the .01 or .10 level. First, an increase in the number of soldiers who said that the Army had a positive impact on them tend to increase satisfaction of relationship with spouse. Second, an increase in the number of soldiers who had joined the Army for schooling/training motive bear a positive correlation with satisfaction of relationship with spouse, perhaps because their expectations were realized. Third, an increase in satisfaction of relationship with children is positively correlated with satisfaction of relationship with spouse. Fourth, male soldiers are negatively related to satisfaction of relationship with spouses relative to female soldiers. Fifth, an increase in the number or children is positively related to satisfaction of relationship with spouse. Finally, career-intentional soldiers tend to be positively related to satisfaction of relationship with spouse, relative to soldiers who did not intent to make the Army a career when they enlisted.

The binary variable on satisfaction of relationship with

children is, in turn, used as a criterion variable in a separate equation. The predictor variables include eight factor scores as well as fifteen other predictor variables. The hypothesized relationships postulated above are assumed for this equation as well since "satisfaction of relationship with children" is observed to be positively and significantly related to "satisfaction of relationship with spouse" in Table 2.

Table 3 shows the estimated model coefficients with factor scores and several other explanatory variables. Seven coefficients, discussed below, are statistically significant. First, an increase in the "positive developmental impact" of the Army (factor 1) is positively related to satisfaction of relationship with children. Second, an increase in family problems (factor 3) during Army service is negatively related to satisfaction of relationship with children. It must be recalled that this factor was not significant in explaining satisfaction of relationship with spouse. Hence it appears that family problems are critical for satisfaction with children but not so crucial for satisfaction of relationship with spouse. Third, an increase in the number of "occupational soldiers" (factor 8) is positively related with satisfaction of relationship with children. Fourth, an increase in the satisfaction of relationship with spouse is related positively with satisfaction of relationship with children. Fifth, an increase in age is related positively with satisfaction of relationship with children. It might be recalled that age was not significant in explaining satisfaction of relationship with spouse. Sixth, black soldiers are related positively with satisfaction of relationship with children relative to non-black soldiers. It is interesting to recall that while black soldiers are positively related with satisfaction of their relationships with spouses, the relationship is not significant statistically. Finally, an increase in the number of children *per se* is positively related to an increase in the satisfaction of relationships with children. This result is similar to the one obtained for the satisfaction of relationship with spouse.

TABLE 2
 LOGIT REGRESSION RESULTS FOR VETERANS' SATISFACTION
 OF RELATIONSHIP WITH SPOUSES DURING ARMY SERVICE

Predictor Variable	Beta Coefficient	Chi Square
Factor 1: Positive Army Impact	.44*	18.14
Factor 2: Exit Due to Dissatisfaction with Environment	-.06	.49
Factor 3: Exit Due to Family Problems	-.01	.01
Factor 4: Educational Progress	.08	.62
Factor 5: Schooling/Training Motive for Enlistment	.24*	5.42
Factor 6: Personal Improvement Reason	.04	.16
Factor 7: Institutional/ Patriotic Soldier	.06	.39
Factor 8: Occupational/ Economic Soldier	-.16	2.19
Satisfied with Army Service/ Job	.32	2.01
Satisfied with Relationship with Children	2.48**	196.53
Age	.01	.66
Black	-.28	1.98
Number of Enlistment Terms Served	.11	1.08
Education at Enlistment	.06	1.41
Male	-.33*	2.79
Enlistment Bonus Recipients	.16	.87

TABLE 2 (continued)
 LOGIT REGRESSION RESULTS FOR VETERANS' SATISFACTION
 OF RELATIONSHIP WITH SPOUSES DURING ARMY SERVICE

Predictor Variable	Beta Coefficient	Chi Square
Number of Children	.25*	11.42
Veteran's Income	.00	.16
Family Income of Veteran	.00	.78
Attrited Soldiers	-.18	.65
Valuable Army Experience	.14	.22
Career-intentional Enlistees	.29*	3.60
Intercept	-4.09**	46.14

N=2,232; -2 log likelihood ratio = 1841.99;

Model Chi-square=532.90

* Significant at the 0.10 level

** Significant at the 0.01 level

TABLE 3
 LOGIT REGRESSION RESULTS FOR VETERANS' SATISFACTION
 OF RELATIONSHIP WITH THEIR CHILDREN DURING ARMY SERVICE

Predictor Variable	Beta Coefficient	Chi Square
Factor 1: Positive Army Impact	.48**	15.25
Factor 2: Exit Due to Dissatisfaction with Environment	.02	.07
Factor 3: Exit Due to Family Problems	-.18*	3.56
Factor 4: Achieved Educational Progress	.01	.01
Factor 5: Schooling/Training Motive for Enlistment	.00	.00
Factor 6: Personal Improvement Reason for Enlistment	.05	.26
Factor 7: Institutional Soldier	.06	.24
Factor 8: Occupational Soldier	.58**	20.51
Satisfied with Army Service/Job	.28	1.10
Satisfaction of Relationship With Spouse	2.56**	209.34
Age	.06**	6.20
Black	.58**	7.07
Number of Enlistment Terms Served	.03	.05
Education at Enlistment	-.02	.12
Male	.08	.12
Enlistment Bonus Recipients	-.01	.01

TABLE 3 (continued)
 LOGIT REGRESSION RESULTS FOR VETERANS' SATISFACTION
 OF RELATIONSHIP WITH THEIR CHILDREN DURING ARMY SERVICE

Predictor Variable	Beta Coefficient	Chi Square
Number of Children	.68**	76.04
Veteran's Income	.00	.10
Family Income of Veteran	.00	1.57
Attritee Soldiers	-.05	.04
Valuable Army Experience	.43	1.39
Career-intentional Enlistees	-.09	.23
Intercept	-5.95*	69.39

N = 2,232; -2 log likelihood ratio = 944.20; Chi square = 682.41

* Significant at the 0.10 level

** Significant at the 0.01 level

Conclusions and Policy Implications

Our review of selected of literature in labor economics, occupational sociology and industrial psychology reveals three major shortcomings of the interactions between work and family. First, the literature in most of these academic disciplines concentrates on only one side of the work-family equation--either the work side or the family side. Second, there is a dearth of empirical verification of the postulated theories, particularly for the public sector in general and for the Army in particular. Third, each academic discipline attempts to explain the work or family satisfaction in terms of variables of its own discipline. This paper attempts to bridge the gap by undertaking an interdisciplinary empirical analysis of the interdependence of work and family life satisfactions in the Army.

This paper analyzed survey data for 2,232 veterans on the satisfaction levels of their relationships with their spouses and children as well as their job satisfactions while they were in the Army. Data on several other variables in labor economics (relative pay, income, etc.), sociology (family problems, institutional versus occupational soldier) and psychology (satisfaction with: job, relationships with spouses or children, the environment, and the value of Army experience) are also included. The data are reduced by using factor analysis. Eight distinct factors are obtained from fifty interdisciplinary variables. The factor scores and other non-factor explanatory variables are used to relate to satisfaction levels of their relationships with spouses or children in a logit model. The results of our model revealed that variables from all the three disciplines were relevant in explaining satisfaction of relationships with spouses or children. For example, an increase in the positive impact generated by the Army is related positively with the increase in the soldier's satisfaction of relationship with his spouse as well as his children. The positive Army impact consists of variables from economics, psychology and sociology. It includes an economic variable called development of job skills. It also includes such psychological variables as self confidence, leadership ability, and the ability to work with others. The sociological variables in this factor comprises of pride in serving country, and respect for authority. A major implication of these results is that the Army's policies for increasing family satisfaction should concentrate on policy variables available from all of the three social sciences. The results also reveal that family problems tend to be related negatively to satisfaction of relationships with children significantly but there is no such significant relationship of family problems with satisfaction of relationship with spouse. Hence the Army's family programs to ameliorate family problems should be addressed more to families with children compared to families without children.

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