DOCUMENT RESUME

ED 278 487 PS 016 286

AUTHOR Ozkaptan, Halim; And Others
TITLE Receptiveness of Army Families in USAREUR to Incentives for Extension. Research Report 1376. Final Report.
INSTITUTION Army Research Inst. for the Behavioral and Social Sciences, Alexandria, Va.
REPORT NO ARI-RR-1376
PUB DATE Aug 84
NOTE 69p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Costs; *Family Attitudes; *Incentives; *Labor Turnover; *Military Personnel; *Personnel Needs; Personnel Policy; Spouses; Surveys; Tables (Data)
IDENTIFIERS *Army; Europe; Military Reenlistment

ABSTRACT

This study investigates the relative effects of financial and other incentives on the willingness of Army families to extend overseas tours of duty in Europe and touches on some of the underlying reasons why families choose not to extend. A survey was prepared to assess the relative effects of a $50, $100, or $200 per month bonus or a one-time $1,000, $2,000, or $3,000 bonus on the willingness of families to extend in USAREUR (United States Army--Europe) for 12 months). In addition, the incentive value of a space-required trip to point of embarkation or home of record, with 30 days noncharged leave, was assessed. The option of a different job was also offered as an incentive for a 12-month extension. The survey was administered in May 1983 to more than 1,000 Army families, including both the service members and their spouses. Families were representative of service members in combat arms, combat support, and combat service support organizations which were distributed over large, medium, and small military communities. A representative distribution of married and accompanied families in each rank grade was obtained. Findings indicated that service members were distributed in three groups: those who would extend without incentive, those who might extend with incentive, and those who would not extend for any inducement. Findings are intended for use by Army planners to determine the most cost-effective incentives for a desired extension rate. Data for enlistees, noncommissioned officers, and officers are presented separately. (RH)

Research Report 1376

Receptiveness of Army Families in USAREUR to Incentives for Extension

Halim Ozkaptan, William Sanders, and Robert F. Holz

USAREUR Field Unit

Manpower and Personnel Research Laboratory

U. S. Army

Research Institute for the Behavioral and Social Sciences

August 1984

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

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

EDGAR M. JOHNSON
Technical Director

L. NEALE COSBY
Colonel, IN
Commander

Technical review by

Hyder Lakhani
Shelley A. Thomas

NOTICES

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

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

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

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER ARI Research Report 1376	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) RECEPTIVENESS OF ARMY FAMILIES IN USAREUR TO INCENTIVES FOR EXTENSION		5. TYPE OF REPORT & PERIOD COVERED Final Report 6. PERFORMING ORG. REPORT NUMBER --
7. AUTHOR(s) Halim Ozkaptan, William Sanders, and Robert Holz		8. CONTRACT OR GRANT NUMBER(s) --
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Avenue, Alexandria, VA 22333-5600		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 2Q263743A794 5111 100
11. CONTROLLING OFFICE NAME AND ADDRESS --		12. REPORT DATE August 1984 13. NUMBER OF PAGES 55
14. MONITORING AGENCY NAME & ADDRESS(if different from Controlling Office) --		15. SECURITY CLASS. (of this report) Unclassified 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE --

16. DISTRIBUTION STATEMENT (of this Report)

Approved for public release; distribution unlimited

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

--

18. SUPPLEMENTARY NOTES

--

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Incentives
Families
Adjustment
Tour Extension

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

The cost of moving Army families into and out of USAREUR represents a major financial burden to the Army. Significant cost savings can be realized if the current families in USAREUR can be induced to extend their tours. This research assesses the relative effects of a range of financial and other incentives on the willingness of Army families to extend tours in USAREUR for 12 additional months. It also touches on some of the underlying reasons why families choose not to extend. Surveys were administered to more (continued)

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

i SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ARI Research Report 1376

20. (continued)

than 1,000 Army families, including both the service members and their spouses. The data obtained permit Army planners to determine the most cost-effective incentives for a desired extension rate. Data for enlistees, noncommissioned officers (NCOs), and officers are presented separately.

Research Report 1376

Receptiveness of Army Families in USAREUR to Incentives for Extension

Halim Ozkaptan, William Sanders, and Robert F. Holz

USAREUR Field Unit
Robert F. Holz, Chief

Manpower and Personnel Research Laboratory
Joyce L. Shields, Director

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333-5600

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

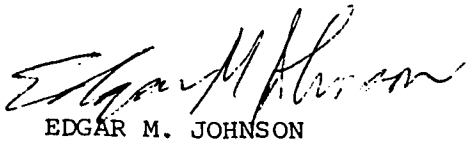
August 1984

Army Project Number
2Q263743A794

Education and Training

ARI Research Reports and Technical Reports are intended for sponsors of R&D tasks and for other research and military agencies. Any findings ready for implementation at the time of publication are presented in the last part of the Brief. Upon completion of a major phase of the task, formal recommendations for official action normally are conveyed to appropriate military agencies by briefing or Disposition Form.

The financial costs associated with a permanent change of station (PCS) represent one area in which possible cost savings can be realized without a negative impact on Army operations and readiness. The largest of these costs occur during the transfer of Army families to overseas assignments such as USAREUR. This research investigates the relative effects of financial and other incentives on the willingness of Army families to extend tours in USAREUR. It also touches on some of the underlying reasons why families choose not to extend. The obtained data provide the necessary information for Army planners to determine the most cost-effective incentives for a desired extension rate of enlistees, noncommissioned officers (NCOs), or officers. The research was conducted by ARI's USAREUR Field Unit, under the Manpower and Personnel Research Laboratory.



EDGAR M. JOHNSON
Technical Director

EXECUTIVE SUMMARY

Requirement:

The costs associated with a permanent change of station (PCS) of Army families to USAREUR are in the range of $22,686 per family. The aggregate PCS cost of some 61,000 married and accompanied service members in USAREUR, rotated on a periodic basis, imposes a large financial burden on Army resources. Significant cost savings can be realized if financial or other incentives can induce the current families in USAREUR to extend their tours. This research was conducted to determine the present extension plans of Army families and the percentages that would be willing to extend their tours for various incentives.

Procedure:

A survey was prepared to assess the relative effects of a $50, $100, or $200 per month bonus or a one-time $1,000, $2,000, or $3,000 bonus on the willingness of families to extend in USAREUR for 12 months. In addition, the incentive value of a space required trip to point of embarkation or home of record, with 30 days noncharged leave, was assessed. The option of a different job was also offered as an incentive for a 12-month extension. This survey was incorporated into a larger survey that was designed to determine the factors that help Army families adjust in USAREUR. The combined survey was administered in May 1983 to more than 1,000 Army families, including both the service members and their spouses. The families sampled were representative of service members in combat arms, combat support, and combat service support organizations that were distributed over large, medium, and small military communities. A representative distribution of married and accompanied families in each rank grade was obtained.

Findings:

Service members fall into three clear groups with respect to their plans for extension: those who would extend without incentive, those who might extend if offered an incentive, and those who would not extend even for an incentive.

The service members who would not extend even for incentives (the "no" decision group) represent about one-third of the sample surveyed and are equally divided among all rank groups.

The service members who would extend without incentives (the "yes" decision group) represent 20% of the total sample. The service members who are unsure or who may consider extending for incentives (the "maybe" decision group) represent 50% of the total sample.

There is a direct positive relationship between increasing rank and willingness to extend without incentives. Conversely, as rank decreases the uncertainty about extending and the need for incentives increases.

Service members in the "yes" decision group are relatively more satisfied with their family and Army life and their housing than personnel in the other decision groups. Their experiences in USAREUR exceeded their expectations, and they see a USAREUR assignment as good for their careers.

Service members in the "no" decision group are dissatisfied with almost all facets of their USAREUR tour, including almost all the family and community support variables surveyed. In particular, their experiences did not meet their expectations with respect to life in Europe and travel opportunities.

Service members in the "maybe" decision group fall midway between the other two groups, and could be considered as viewing the financial and other incentives offered as compensation for any hardships they may experience. In this group, as in the others, reasons cited for dissatisfaction are family and job related rather than financial. This decision group can be considered the target of opportunity for any incentive program to increase extensions.

A relatively larger percentage of the service members in the lower ranks fall in the "maybe" decision group and are attracted by the incentives. This group includes 61% of the enlistees, 48% of the noncommissioned officers (NCOs), and 39% of the officers. However, the actual percentages of the married and accompanied service members within these same rank categories in USAREUR are 10%, 44%, and 52%. This is due to the fact that the number of married service members increases as rank increases. The married and accompanied service members represent 27.8% of the total USAREUR population.

As the financial value of the incentives offered increases, the percentage of service members who would consider extending increases in a proportional manner.

There were statistically significant differences among the three decision groups in terms of their willingness to extend for any of the financial incentives. As would be expected, the "yes" decision group has the highest percentage of service members who would accept a financial incentive, and the "no" decision group has the lowest percentage of service members who would accept such incentives.

A similar percentage of service members in each of the three rank groups (enlisted, NCO, and officer) is attracted by each of the financial incentives offered.

For the "maybe" group certain incentives (e.g., $200 a month or $2,000 a year) could increase the potential extension rate above the estimated financial break-even point (2 x base rate). Although the estimated base rate in this survey is approximately 16% for all ranks, the actual base rate must be determined and the break-even point calculated separately for each rank group.

A space-required airline ticket for the family to either (1) the point of embarkation or (2) the home of record plus 30 days of noncharged leave for each of these options has an incentive value for the service members in the "maybe" group equivalent to the financial incentives.

A job change has an incentive value for enlisted and NCO service members in the "maybe" group comparable to the financial and travel home incentives.

The most desirable incentive of those offered for both the service members and spouses in the "maybe" groups is $3,000 a year. A trip to the home of record is the second priority for the spouse regardless of the service member's rank.

Among the spouses of the service members, 44.6% indicated they would support a decision by their spouse to extend. However, only 20% of the service members fall in the "yes" decision group.

Service members in each of the three decision groups have the same background characteristics. In particular, there are no differences with respect to age, time in service, education, or distribution of grades within each rank group.

Service members in the "yes" decision group are more satisfied with their family life, Army life, and housing in USAREUR. The least satisfaction with respect to these factors is reported by the "no" decision group. The spouses in each decision group report a similar satisfaction level.

When compared to their assignment before coming to USAREUR, members of the "yes" decision group are more satisfied than the other decision groups with their family life. The "no" and "maybe" decision groups, however, are more dissatisfied with their family life and community support services in USAREUR, with the responses of the latter group being less extreme than those of the former group.

Service members in the "yes" decision group found their experiences in USAREUR to exceed their expectations. The expectations of the service members in the "no" group with respect to living and traveling in Europe and increased chances of promotion were not met.

There is a small relationship between the size of the military community and the decision to extend, with service members being less willing to extend as community size decreases. However, the smaller communities contain more enlisted personnel, which may account for this relationship.

More of the service members in the "yes" decision group see USAREUR as being good for an Army career. The smallest number of service members reporting this viewpoint are in the "no" group. Enlisted personnel within the "no" group have the most negative view in this regard.

Family- and job-related reasons are seen by service members in each of the three decision groups as the two major obstacles to an extension in USAREUR. More officers indicate family reasons, and more enlisted and NCO personnel indicate job-related reasons. The data also suggest that improvement in these areas of personal satisfaction will be more cost-effective in increasing extensions than improvement in community support services.

None of the decision groups or rank groups sees money as an obstacle to extending in USAREUR.

Conclusions:

Two relatively extreme family groups exist in USAREUR. First, the "yes" decision group can be characterized as being satisfied with almost all facets of USAREUR life and life in Europe. Second, the "no" decision group is dissatisfied with life in USAREUR and Europe. This attitude generalizes to almost every facet of life in USAREUR. These two groups represent 20% and 30% of the USAREUR family population, respectively, and appear "set in their views" toward a possible tour extension regardless of any incentive the Army may offer.

The "maybe" decision group represents the target of opportunity for the incentives offered. Money problems are not the predominant reason for their uncertainty, and they may instead consider money as compensation for the difficulties they experience. Personnel in this group, as in the other groups, cite family reasons and job-related reasons as the most important factors that would prevent them from extending, with the officers being more influenced by family reasons and the enlisted and NCO personnel being influenced by job-related reasons. This information supports the attractiveness of the incentives related to a job change and a trip home. However, the degree a job change would increase intratheater turbulence and cost must be assessed.

The financial incentives offered do not directly address the underlying problems that influence a service member's decision to extend. An equal or greater return in extensions may be achieved by changes in present practices or new policies that affect job and family satisfaction.

The data reinforce the importance of family support programs and initiatives related to job assignment, rather than improvement of community support services alone.

Recommendations:

The financial break-even point should be calculated for each rank category in the "maybe" decision group relative to PCS costs saved, compared with the cost of incentives that would be paid to these service members who would extend without incentives.

The incentive to be offered should be selected in terms of the financial value that corresponds to the extension rate desired for each rank category, assuming that the desired gain in extensions falls above the financial break-even point.

A trip home should be offered as an alternative option if its financial cost is equivalent to or less than the financial value associated with the desired rate of extension.

A job change, when feasible, should also be considered as an alternative option.

The degree to which the data in this research can be extrapolated to the unmarried population and the married, unaccompanied population should be determined, taking into account the base extension rates and PCS costs for these groups.

A comprehensive survey that samples the entire USAREUR population (including unmarried, married, and unaccompanied) is warranted. It should address changes in existing policies and procedures and new policies with respect to their potential impact on extensions. Such a survey should focus on family support as well as job assignment and enrichment issues. The cost of such changes should be compared with financial incentives alone in terms of the potential gain in extensions.

RECEPTIVENESS OF ARMY FAMILIES IN USAREUR TO INCENTIVES FOR EXTENSION

CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

RECEPTIVENESS OF ARMY FAMILIES IN USAREUR TO INCENTIVES FOR EXTENSION

INTRODUCTION

It costs the U.S. Army about $22,686 to move a military family to USAREUR for a permanent change of station (PCS). A family willing to extend its tour amortizes this cost over a longer period of time. A family that extends from 3 to 4 years, for example, will yield a net savings for the Government of $1,890 for each of the 4 years. In addition to these cost savings, turbulence and new training costs associated with personnel changes are reduced. There are approximately 61,000 married and accompanied service members stationed in USAREUR. If 40-50% of these families can be attracted to extend, the cost savings would be significant. Such savings, however, would be reduced by the cost of any incentives that are used.

In March 1983 the growing concern about the magnitude of PCS costs among the Army leadership led MG C. Rogers, DCSPER, USAREUR to ask the USAREUR Field Unit of the Army Research Institute to prepare a survey to estimate the willingness of Army families to extend for a range of financial and other incentives. At that time, the USAREUR Field Unit was working in conjunction with the University of Minnesota to prepare a survey to identify the factors that enable Army families to cope with the demands of an overseas assignment. MG Rogers asked that the survey for his objectives be added to this larger effort.

The following objectives were established to determine the receptiveness of Army families in USAREUR to incentives for extension:

- Obtain data on the estimated gain in extensions for a variety of financial and other incentives to enable the conduct of cost/benefit analyses.
- Determine the relative value of incentives for enlisted personnel, NCOs, and officers.
- Determine the relationship of demographic variables (e.g., education, time in service, age) on the decision to extend.
- Determine the relationship between USAREUR experiences and the decision to extend.

The larger survey instrument, to which the survey instrument on incentives was attached, was designed to assess predeployment, arrival, and quality-of-life issues in USAREUR relative to a CONUS assignment. Two complementary versions of this survey were prepared for administration to the service member and his or her spouse. The survey was administered in May 1983 to over 1,000 Army families representing service members in combat arms, combat support, and combat service support units distributed over large, medium, and small military units in USAREUR.

Data were obtained on the present plans of the families to extend, and the relative attractiveness of the incentives for extension for enlisted, NCO, and officer families. The data provide a basis for determining the most

cost-effective incentives to attract the desired percentage of Army families in each rank group. Comparable data for unmarried service members and married unaccompanied service members were not collected.

METHOD

Survey Instrument

Based on the goals as stated in the preceding section, a series of 14 questions were prepared to elicit the reaction of the family members to the following incentives:

- o $50 per month for 12 months
- o $100 per month for 12 months
- o $200 per month for 12 months
- o A one-time bonus of $1,000 at the end of 12 months
- o A one-time bonus of $2,000 at the end of 12 months
- o A one-time bonus of $3,000 at the end of 12 months
- o Space-required airline tickets for family to point of embarkation and 30 days noncharged leave
- o Space-required airline tickets for family to home of record and 30 days noncharged leave
- o A different job for 12 months.

Two other basic types of questions were asked. The first of these dealt with the service member's (SM) present plans to extend. "Do you plan to extend---?" and "Would you extend---if given the chance?" The latter question was asked to capture those individuals who were being reassigned for reasons beyond their control. A third question asked was "Would you extend---if the Army gave you enough money?"

The second set of basic questions dealt with the perception of whether a tour in USAREUR was seen as "---good for your Army career." Another question was asked to determine the "one thing that would prevent you from extending" (e.g., financial reasons). These questions were attached to a larger survey that was underway. This survey instrument, "Army Family Profile Strengths and Coping," was designed to assess family adaptation and adjustment in USAREUR. The preparation of this instrument was a collaborative effort between personnel from the University of Minnesota and the ARI USAREUR Field Unit.

The survey instrument contains specific scales prepared by the University of Minnesota and questions added by Field Unit members based on a model of the factors influencing family adaptation to USAREUR. Two complementary versions of the survey were prepared. One was for administration to the SM, and the other to his or her spouse. Most of the questions were asked of both family

members. Others were asked of one or the other, primarily to reduce the total number of questions on each survey. The two instruments were packaged together and provided as a set to the SM, who in turn took them home, completed the survey with the spouse, and returned them to the ARI researchers the next day.

The questions pertaining to extensions were asked of both family members. The addition of these questions to the larger survey permitted relating the resulting responses to a larger set of issues such as "expectations" before coming to USAREUR, community size, satisfaction, etc.

Sampling Plan

The sampling plan was designed to meet the requirement of surveying 1,000 families in USAREUR during a 3-week period in May 1983. The sampling approach was based on the premise that a representative slice of USAREUR families would be related to the type of military unit to which they are assigned (i.e., combat arms, combat support, and combat service support), and that their experiences would be influenced by the type of military community in which they were located (small, medium, and large). The latter would also be influenced by whether they are in a relatively urban or rural German area.

Consequently, two related and overlapping layers of stratification--type of unit and size of military community--were involved. These layers recognized that combat units would typically be found near smaller military communities as well as rural German areas. In addition, a proportionate stratified sample was desired, where the ratio of combat unit types in the sample would be similar to their ratio in USAREUR. Expert military judgment was used to select such units. The final unit/communities selected from those that were recommended was based on unit availability in the required time frame (month of May 1983). The units and communities are described below.

Unit 1.	Combat arms	Community is small; surrounding German environment is rural.
Unit 2.	Combat arms	Community is small; surrounding German environment is rural.
Unit 3.	Combat arms	Community is moderate in size; surrounding German environment is relatively urban and industrial.
Unit 4.	Combat support and combat service support	American community is moderate in size; surrounding German environment is urban.
Unit 5.	Combat service support	American community is large; surrounding German environment is urban.
Unit 6.	Combat service support	American community is moderate in size; surrounding German environment is urban.

Unit 7. Combat arms	American community is small to moderate in size; surrounding German environment is relatively rural.

As can be seen from the above, four of the seven units were combat units located in small to moderate military communities and in rural or relatively rural German areas. The remaining three combat units were predominantly combat service support located in moderate or large military communities and in relatively urban German areas.

After the selection of the above unit/communities, we departed from the usual stratified random sampling approach and elected to sample the entire population of married families in each of the unit/communities selected (less those families with two married service members and single-parent families). This was easier and more practical, and eliminated any sampling errors related to random sampling.

At each unit the service members were assembled at the same place and time and asked to take a survey set home, to fill out the survey independently from spouses, and to return the completed surveys within 24 hours. The number of survey sets administered in each community, the number returned, and the number of usable survey sets are shown in Table 1. As can be seen in this table, a total of 1,227 sets of surveys were administered and 1,052 were returned; of these only 1,036 sets were in sufficiently completed form to serve as data for purposes of overall analysis. The number of usable survey item responses varies slightly due to individual omissions. The above number of usable survey sets represented an 84.4% return rate.

Table 1

The Number of Survey Sets Administered and Returned for Each Community

Community	Survey sets administered	Survey sets returned	Usable survey sets
Unit 1	189	143	143
Unit 2	260	223	223
Unit 3	160	134	129
Unit 4	181	180	169
Unit 5	138	113	113
Unit 6	132	118	118
Unit 7	167	141	141
Total	1,227	1,052	1,036

Each survey set contains one survey for the service member and one for his or her spouse.

85.7% surveys returned from those administered.

84.4% usable surveys from those administered.

Representativeness of Sample

Based on available data files in USAREUR, an analysis was conducted to determine the representativeness of the obtained sample relative to the total population of USAREUR married and accompanied families. The data are shown in Table 2. This table compares the number married in each rank category (E1 to O6) to the total number married of all ranks in terms of percentage for (1) our sample and (2) the USAREUR population. As can be seen from these data, our sample contains a roughly proportional percentage of married persons in each rank category relative to the percentage of the married USAREUR population in each rank category. The USAREUR data shown in this table however must be qualified as follows:

1. USAREUR married and accompanied population data are not precisely known, due to a combination of reasons such as normal delays in updating, the failure of service members to update their data, etc.

2. The reported USAREUR-wide data contain no information on single-parent families or families with two military members, which were also excluded intentionally from our sample.

3. USAREUR-wide data on accompanied families may include some cases where the service member is accompanied by a child but not a spouse.

4. Data on accompanied, non-command-sponsored families may be under-reported in the USAREUR data, due to lack of incentive on the part of service members to do so. The available data indicate that 6.3% of the 61,043 married and accompanied USAREUR families were not command sponsored. In our sample this percentage was 16.6%.

The number of married and accompanied service members in USAREUR is compared to the total number of service members in USAREUR in Table 3. This table shows the number of service members in USAREUR who are married and accompanied, relative to the total number of SMs in that rank category. As can be seen in this table, 52.3% of the officer population in USAREUR is married and accompanied. However, officers represent only 9.4% of the total USAREUR population. While enlisted personnel represent 51.7% of the total USAREUR population, only 10.7% are married and accompanied. Overall, married and accompanied service members represent 27.7% of the total USAREUR force.[1] Data were not available on how many service members in Europe are married and unaccompanied. The data available to us indicate, however, that at least 50% of the total Army population is married.[2]

The distribution of the sample's enlisted, NCO, and officer rank groupings by community size are shown in Table 4. As would be expected, the percentage of enlisted personnel is largest in the small communities, with the percentage

---

[1]This number may be underestimated. The USAREUR Personnel Opinion Survey (UPOS) conducted in December 1983 with 6,600 respondents obtained a figure of 43%.

[2]Raw data from Manpower Data Center (DOD), Arlington, VA, December 1980, as compiled by Family Resources Center, March 1982.

Table 2

Comparison of the Percent Married and Accompanied in Each Rank Category Between the Survey Sample and USAREUR Population Statistics

Rank	Total USAREUR married accompanied	% of total USAREUR married accompanied	USAREUR average married per sub group	USAREUR sample married accompanied	% of sample married accompanied	Sample average married per sub group
E1	86	0.1		1	0.1	
E2	212	0.3	19.9	3	0.3	20.7
E3	1,553	2.5		35	3.5	
E4	10,286	16.9		173	17.3	
E5	14,944	24.5		230	23.1	
E6	12,752	20.9		204	20.4	
E7	7,491	12.3	62.4	125	12.5	61.6
E8	2,336	3.8		44	4.4	
E9	574	0.9		12	1.2	
W1	329	0.5		3	0.3	
W2	1,140	1.9		9	0.9	
W3	762	1.2		5	0.5	
W4	228	0.4		0	--	
O1	333	0.5	17.7	5	0.5	17.7
O2	1,297	2.1		13	1.3	
O3	3,245	5.3		54	5.4	
O4	1,878	3.1		45	4.5	
O5	1,139	1.9		30	3.0	
O6	458	0.8		11	1.1	
	61,043*	100%	100%	1,002**	100%	100%

*6.3% of this figure are non-command sponsored.

**1,002 of the total 1,036 returned survey sets provided the rank information necessary for this analysis.

of officers being the largest in the large communities where the MACOMS are more typically located.

Table 3

Rank Distribution for Total USAREUR Force Compared to Married and Accompanied in Each Rank Category

Rank	Total USAREUR service members	% of total in each rank category	Total USAREUR married and accompanied	% of married within each rank category
E1	5,716		86	
E2	8,979	51.75	212	10.68
E3	34,570		1,553	
E4	64,346		10,286	
E5	42,843		14,944	
E6	24,712		12,752	
E7	13,016	38.83	7,491	44.70
E8	3,944		2,336	
E9	722		574	
W1	697		329	
W2	1,742		1,140	
W3	1,076		762	
W4	324		228	
O1	1,904	9.42	333	52.26
O2	3,835		1,297	
O3	6,251		3,245	
O4	2,754		1,878	
O5	1,541		1,139	
O6	560		458	
	219,532	100%	61,043*	

*27.8% of total USAREUR service members.

Data Analysis

All rank levels were included in the sample population. In order to simplify data analysis, three rank groups were established. The service members were divided as follows:

Enlisted	E1-E4
NCO	E5-E9
Officer	O1-O6, plus Warrant Officers W1-W4

The major decision in this respect was excluding E-5s from the enlisted category. Our demographic data showed that the majority of E-5s had over 3 years

of service, and as such represented a career group. E-5s are also included as part of the NCO population in the annual "USAREUR Personnel Opinion Survey." Warrant officers were included as part of the officer population to avoid the creation of a fourth category, particularly since they represented only 1.7% of our sample.

Table 4

Distribution of Rank Groups by Community Size

	Small	Medium	Large	Row percentage
Enlisted	129 (64.5%)	58 (29.0%)	13 (6.5%)	100%
NCO	276 (46.0%)	263 (44.0%)	58 (10.0%)	100%
Officer	37 (22.0%)	72 (42.0%)	62 (36.0%)	100%
	442 (46.0%)*	393 (40.5%)*	133 (13.5%)*	

Total 968

*Percent of total survey sample

The following procedure was used to select members of each decision group. The "yes" decision group is comprised of those SMs who responded "yes" to the following question: "Would you extend on your present tour here in USAREUR if you were given the choice?" The "no" decision group is comprised of those SMs who responded "no" to the following question: "Would you extend on your present tour here in USAREUR if the Army gave you enough money?" The "maybe" decision group is comprised of those SMs who did not respond with either one of these two options. They indicated they were "not sure," that they might extend, but only for an incentive. Each decision group had, as a result, nonoverlapping SMs from the total sample population. The question, "Do you plan to extend---," was not used in the creation of the three decision groups. Of the sample, 15.6% responded positively to this question, while 20% of the sample responded positively to the question "Would you extend if given the chance?" As noted earlier, it was our opinion that this group included people who were attracted to USAREUR but were not extending for circumstances beyond their control. Our goal was to differentiate as clearly as possible the groups in terms of the attractiveness of a USAREUR tour without the influence of other possibly irrelevant factors. A comparison is warranted, however, between the actual extensions in USAREUR and the percentage of responses to these two survey questions.

Each of the incentive options was followed by four response categories: "Definitely not," "Might consider it," "Very likely," and "Would definitely extend." The data in the latter two categories were combined and treated as an affirmative response. This avoided the influence of any response bias on the part of the respondents in terms of personal interpretation or cautiousness. The responses of the three decision groups are compared on the basis of these

data, since the combined data of the remaining categories are the complement to it. While other alternatives existed, the adopted approach permitted ease of presentation and interpretation of the data. The analysis was primarily limited to the data of the service members, with some analysis of the responses of spouses as warranted. This latter decision was based on an analysis to determine the similarity between the responses of the SM and spouse in the same family. The high consistency of the responses between them in terms of decision to extend justified basing the analysis primarily on the responses of the SM. As discussed in the Results section, only 7% of the families had individuals who reported "yes" to the decision to extend, while the opposite member reported "no." Any analysis conducted on the data for the spouse was selected on the extension decision of the SM in order to maintain consistency of the reported data between family members.

The two principal factors used in the analyses were decision to extend and rank. Each of these factors was treated at three levels, which permitted the conduct of a two-way analysis of variance with a 3 x 3 design. The dependent variables were the incentive options and other questions evaluated. The analyses were based on the frequency of responses for a response option. The survey item responses were not averaged or weighted across response categories (e.g., no problem, small problem, etc.) since the psychometric scaling properties of the various response categories were not known.

RESULTS

Decision to Extend

As discussed in the section on Method, the responses of the service members were divided into three decision groups:

yes - those who would extend regardless of incentives
maybe - those who would consider extending for incentives
no - those who would not consider extending regardless of incentives.

The breakdown of our sample into these three decision groups and by the three rank groupings is shown in Table 5. The data in this table indicate that a higher percentage of officers are in the "yes" group (32.2%) than enlisted personnel (11.1%). On the other hand, more enlisted personnel are in the "maybe" group (61.8%) with only 39.2% of the officers in this group. The "no" group contains an equal percentage of each rank grouping. In short, a larger proportion of the officer population is willing to extend regardless of incentives, while a larger proportion of the enlisted population would consider extending for incentives. The "maybe" decision group in this respect is the target of opportunity for us. It represents the group from which additional extensions could be obtained if incentives were offered. The following analyses and recommendations are based primarily on this decision group.

In Table 5, it can be seen that fewer service members in the "maybe" group would be attracted to incentives as rank increases. Table 3 shows that as rank increases a greater proportion of service members are married. The result is that the extension incentives would attract a larger percentage of the married accompanied enlisted personnel who, however, are a smaller proportion of the total force. The implications of this data are shown in Table 6,

Table 5

Frequency and Percentage of Sample Responding by Rank and Decision Group

	"Yes" group (I plan to extend)	"Maybe" group (I might extend)	"No" group (I would not extend)	Row Total	Row percentage
Rank 1 (E1-E4)	N = 22	N = 123	N = 54	N = 199	20.7%
Row %	(11.1%)	(61.8%)	(27.1%)		
Rank 2 (E5-E9)	N = 112	N = 287	N = 194	N = 593	61.6%
Row %	(18.9%)	(48.4%)	(32.7%)		
Rank 3 (W1-O4)	N = 55	N = 67	N = 49	N = 171	17.7%
Row %	(32.2%)	(39.2%)	(28.6%)		
Column total	189	477	297	Total 963	
Column percentage	19.6%	49.5%	30.9%		

which combines the data from Tables 3 and 5, and indicates the projected numbers of service members who could be attracted by incentives. This table shows that there are 113,611 enlisted men in USAREUR (or 51.75% of the total force), that 12,137 are married and accompanied (10.68% of the total number of enlisted men), and that 7,501 married and accompanied enlisted men could be expected to consider extending for incentives (the 61.8% of the enlisted men who fall in the "maybe" decision group). This represents 6.6% of the total enlisted population in USAREUR. Similarly, 21.6% of the NCOs and 20.5% of the officers in USAREUR would be attracted by incentives. Put another way, the incentives would appeal to 50% of the total married and accompanied population in USAREUR or to 13.7% of the total USAREUR population. The degree to which incentives would appeal to the unmarried service member or the unaccompanied married service member cannot be estimated on the basis of these data, but obviously some meaningful percentage of these groups should also be attracted.

Table 6

Percentage of Rank Groups in USAREUR Population Compared to Percentage of Same Groups That Are Married and Accompanied and That Fall in the "Maybe" Decision Group

	Percent of total USAREUR force	Number of personnel in USAREUR	Percent married and accompanied	Number of personnel married and accompanied	Percent of sample in "maybe" group
Enlisted	51.75	113,611	10.68	12,137	61.8
NCO	38.83	85,237	44.70	38,097	48.4
Officer	9.42	20,684	52.26	10,809	39.2
Total	100%	219,532		61,043	

The first column in Table 5 provides an extension base rate estimate. It indicates that overall, 19.6% of our sample would like to extend regardless of incentives. Specifically, 11% of the enlisted, 18.9% of the NCOs, and 32.2% of the officers. These figures should be confirmed by the actual USAREUR extension rates in these groups. These data in effect represent the base rate for the calculation of buy-in costs relative to savings in PCS costs to determine how many extensions are required to break even. One estimate is that the number of extensions must exceed twice the base rate. It is recommended, however, that the break-even point be calculated for each rank grouping. We have been advised by DCSPER that the base rate for all extensions in USAREUR is 9%. If this figure is reliable, it would appear that the married accompanied USAREUR population is more willing to extend than the overall USAREUR population.

Relationship of Decision to Extend and Rank Relative to Incentives

As discussed in the Method section, the two principal factors in the analyses were decision to extend and rank. Each of these factors was treated at three levels, which permitted the conduct of a two-way analysis of variance. The following data present the results of this analysis with respect to each of these factors.

The percentage of each decision group indicating a willingness to extend for each of the monetary incentives offered is shown in Figure 1. As can be seen in this figure, there is a clear differentiation between the "yes," "maybe," and "no" groups with respect to the attractiveness of the incentives and their willingness to consider extending. The response differences between each of these three groups are statistically significant ($p < .05$) for each of the incentives offered. The results for each decision group can be viewed with respect to how much it would take to overcome their resistance or desire not to extend. In this regard, a higher percentage of the "yes" group would elect to accept each of the incentives. Their resistance threshold, of course, is low or nonexistent. However, they still react to the desirability of the incentives. The "no" group, on the other hand, has a high resistance to extending. They have relatively little positive response to the incentives offered. Certain incentives, however, can be viewed as exceeding their resistance threshold (e.g., $3,000/year).

The "maybe" group, as one would expect, falls in the middle of the other two groups. Their willingness to extend increases markedly as financial incentives increase. Put another way, their resistance to extending is overcome by increasingly higher incentives.

The data for each of the three rank groups is shown in Figure 2. Of interest in this figure is the fact that each of the three rank groups responds in an equivalent manner to the financial incentives offered. There is no statistically significant difference between each of the three rank groups, except for the $50/month incentive, where the enlisted men express greater interest. In effect, the increasing financial incentives have an equally attractive value to each rank grouping. This analysis, of course, does not reflect the differential results of the three decision groups as shown in Figure 1.

The attractiveness of the nonfinancial incentives for the three decision groups and for the three rank groups is shown in Figures 3 and 4, respectively. These incentives are for (1) a space-required trip back to the point of embarkation; (2) a space-required trip back to the home of record; and (3) a job change.

The response to these incentives is plotted together with the financial incentives for comparison purposes. The three decision groups again respond in a significantly different manner for these additional incentives, with the "yes" group being the most attracted by the additional incentives and the "no" group being least attracted. The results for these additional incentives are similar to the financial incentives for each of the three decision groups. The three rank groups, however, as can be seen in Figure 4, no longer respond in an equivalent manner as they did for financial incentives. The trip back

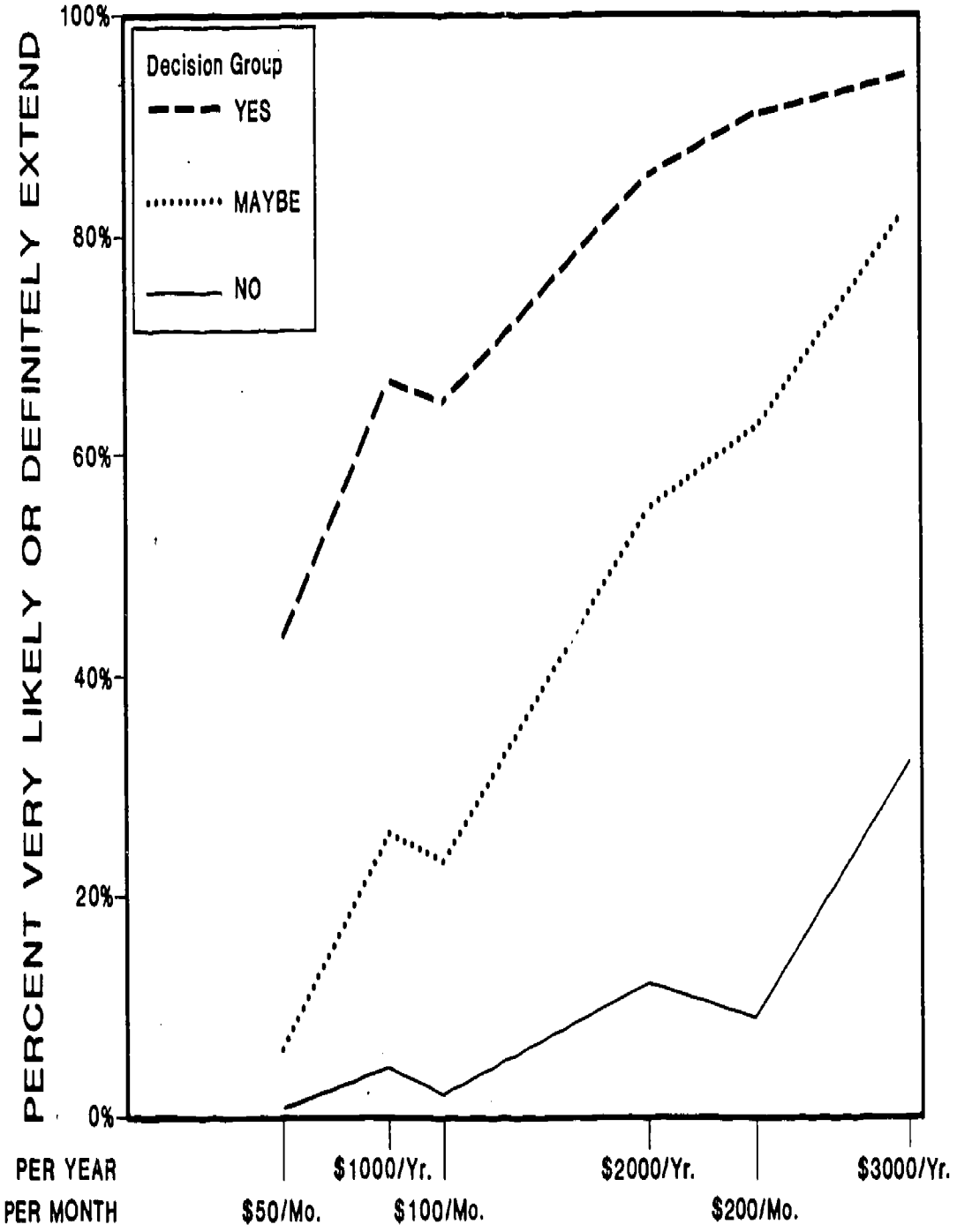


Figure 1. Percent of each decision group expressing willingness to extend for financial incentives (across all rank groups).

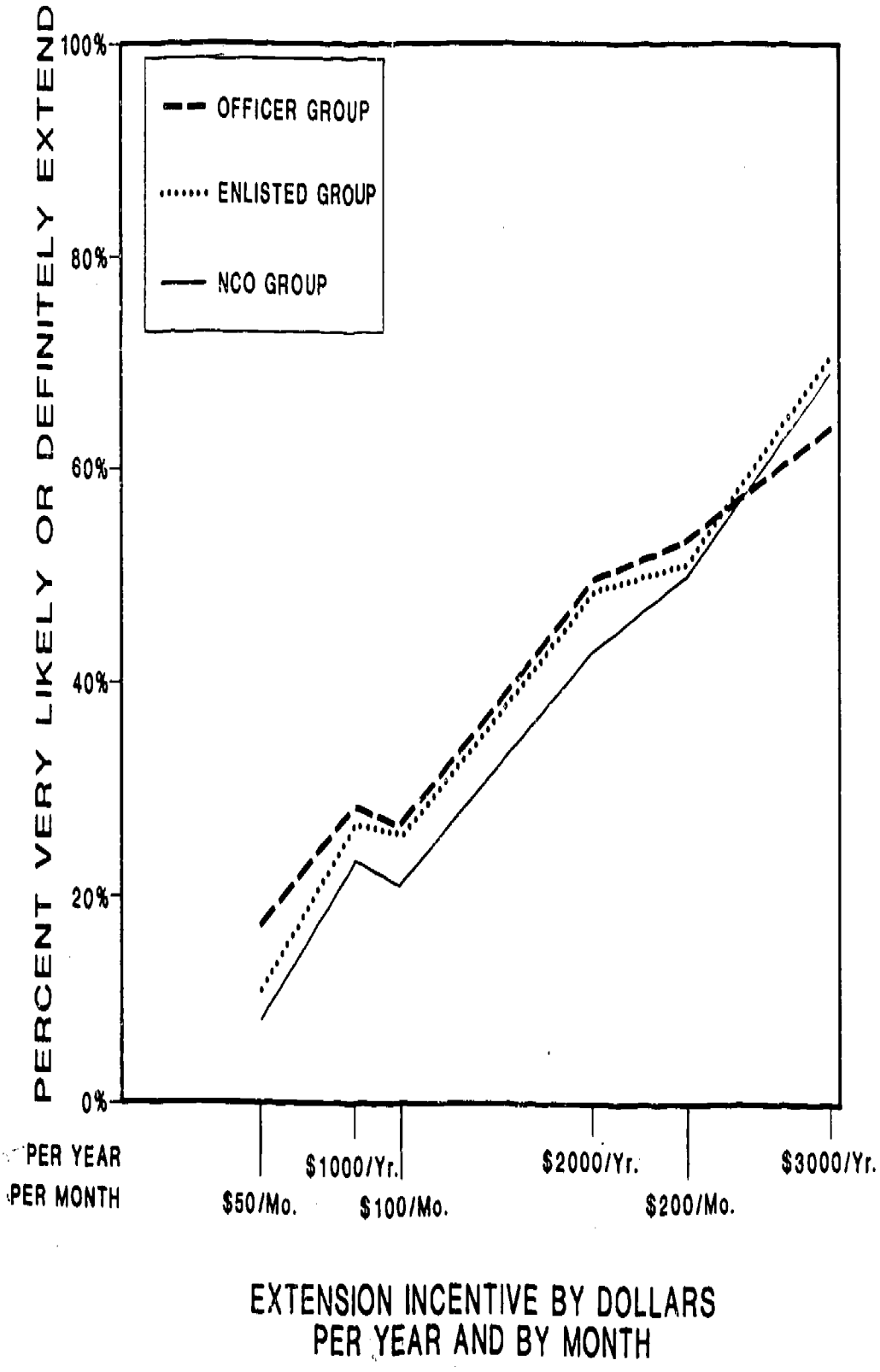


Figure 2. Percent of each rank group expressing willingness to extend for financial incentives (across all decision groups).

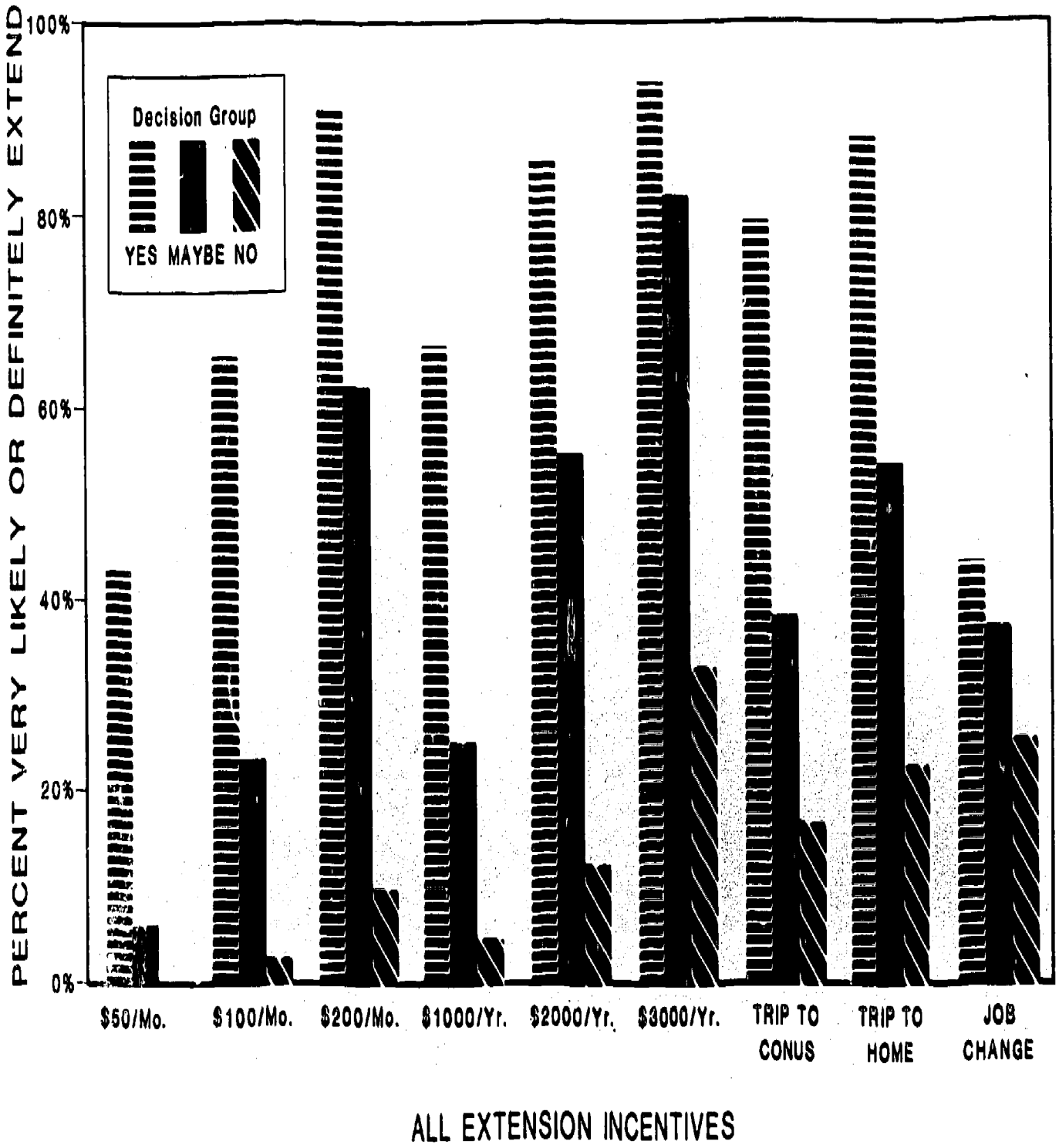


Figure 3. Percent of each decision group expressing willingness to extend for each incentive (across all rank groups).

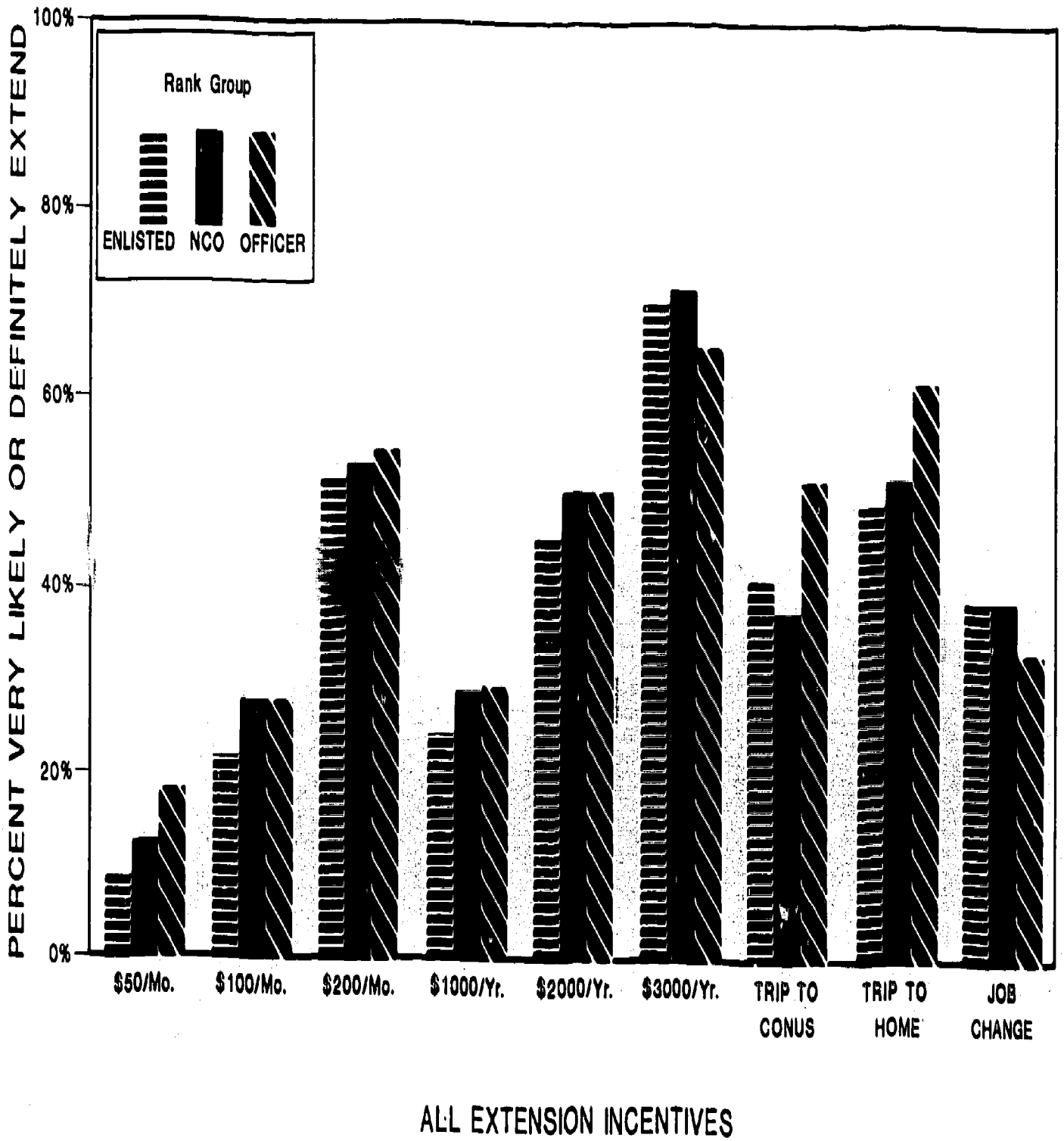


Figure 4. Percent of each rank group expressing willingness to extend for each incentive (across all decision groups).

home, whether to the point of embarkation or home of record, is of more interest to the officer population, while a job change is of more interest to the enlisted and NCO populations. These differences were found to be statistically significant ($p < .05$). As can be seen in both Figures 3 and 4, the trip home and a job change have an incentive value (in terms of the percentage who would be willing to extend) equal to a financial incentive alone. This relationship is compared more directly in Figure 5, where differences in rank and decision groups have been averaged out for purposes of illustration. Figure 5 shows, for example, that a job change has an incentive value equivalent to a financial incentive of $1,500, since 32% of the sample population would react favorably to each of these incentives. The trip home would be equivalent to an incentive value of $200/month, each capturing a 47.8% positive response. These relationships argue strongly for the consideration of these incentives alone.

Analyses of the Attractiveness of Each Incentive Relative to Each Decision Group

The data in this section deal with the relative value of each incentive for each of the decision groups by rank. As indicated earlier, the "maybe" decision group represents the target group of interest for any tour extension incentives program. The "yes" group will benefit by the selection of any incentive, without an increase in extensions. Some individuals in the "no" decision group may still extend at any financial level. The data for these latter groups, however, do not materially aid in the selection of an incentive level. The data are shown in Figures 6 and 7, for the "yes" and "no" decision groups, respectively. The difference between these two groups in terms of their willingness to extend for any incentive is clearly illustrated when they are compared to each other. Little or no rank differences are evident in the "yes" decision group (Figure 6), with some differences showing up for the "no" decision group (Figure 7). The data in this figure indicate that the NCO is relatively more likely to consider extending than the enlisted service member or the officer for $2,000 or $3,000/year. The latter financial incentive, in this regard, attracts NCOs at a level that may exceed the break-even point. In addition, both NCOs and enlisted personnel in the "no" decision group are more interested in a job change than officers. The differences between the rank groups just cited were found to be statistically significant ($p < .05$).

The data for the "maybe" decision group are shown in Figure 8 for each of the rank groups. If one accepts 19.6% as the overall sample base rate for extensions of the married and accompanied population (Table 5), then several of the incentives would increase extensions beyond the break-even point, which is roughly estimated to be twice the base rate. This would include the following financial and nonfinancial incentives, which attract at least 40% of the respondents in the "maybe" decision group: $200/month, $2,000/year, $3,000/year, a trip to the point of embarkation, a trip home, and a job change for enlisted and NCO personnel. The latter also reflects that a job change as well as $1,000 and $3,000/year are relatively more attractive incentive options for the enlisted and NCO personnel than for officer personnel ($p < .05$).

The information in Figure 8 provides the basic data for the calculation of the most cost-effective incentive relative to the actual extension base rate of each rank group. Such a calculation would have to take into account the extra incentive costs of the "yes" group relative to the base rate, and the

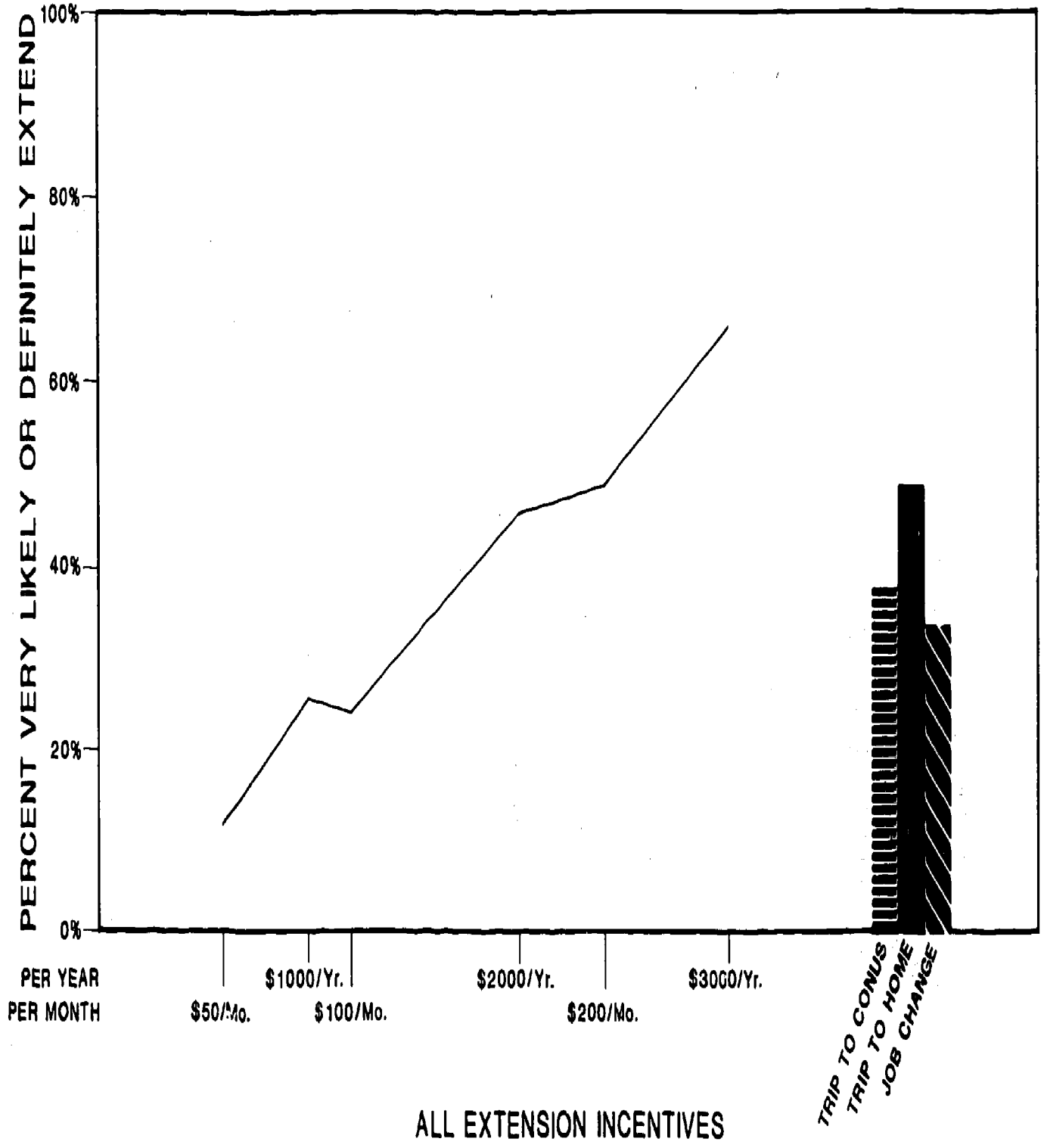


Figure 5. Comparison of the relative attractiveness of financial and nonfinancial incentives for all decision and rank groups.

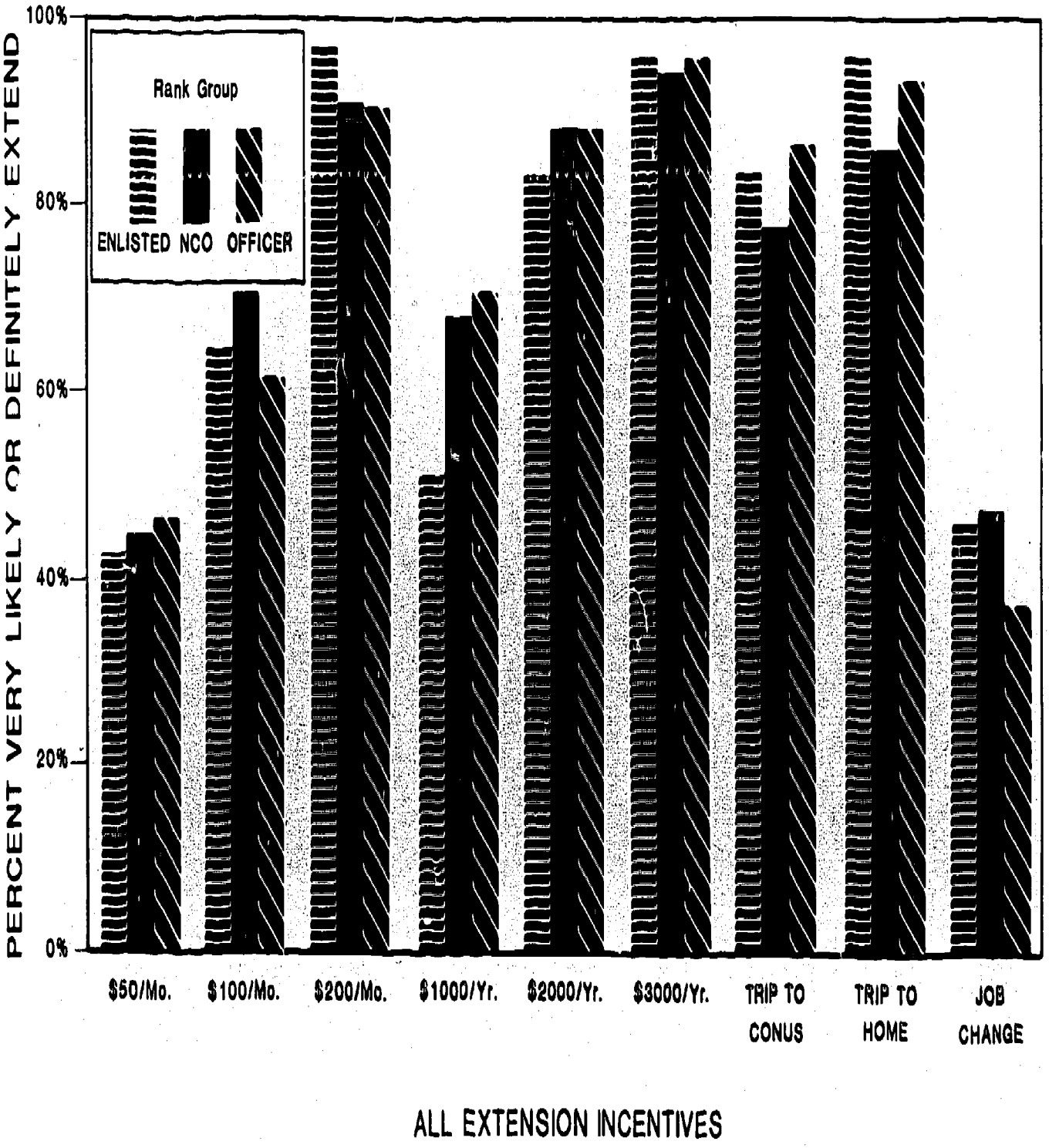


Figure 6. Comparison of the relative attractiveness of incentives for the rank groups within the "yes" decision group.

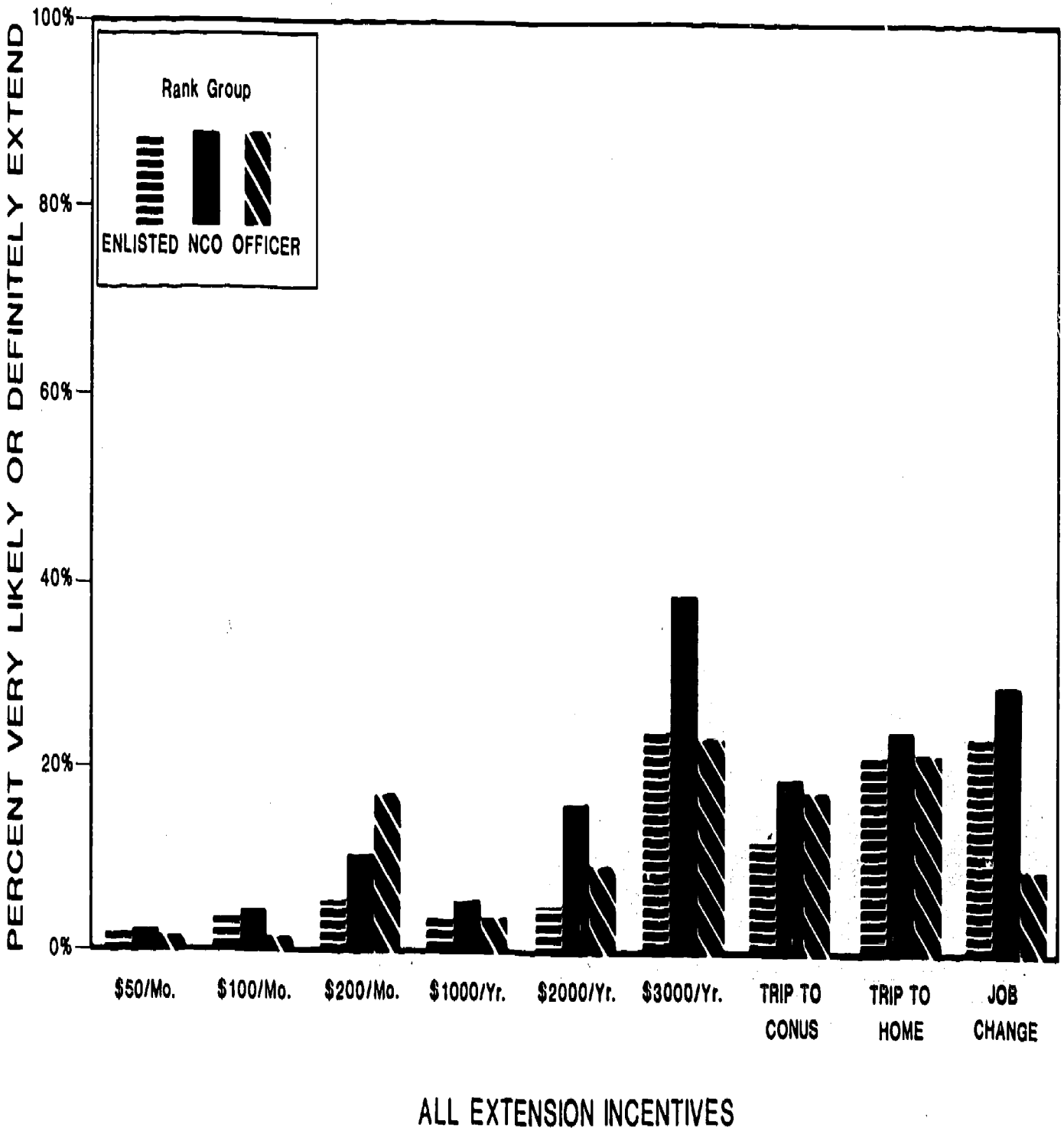


Figure 7. Comparison of the relative attractiveness of incentives for the rank groups in the "no" decision group.

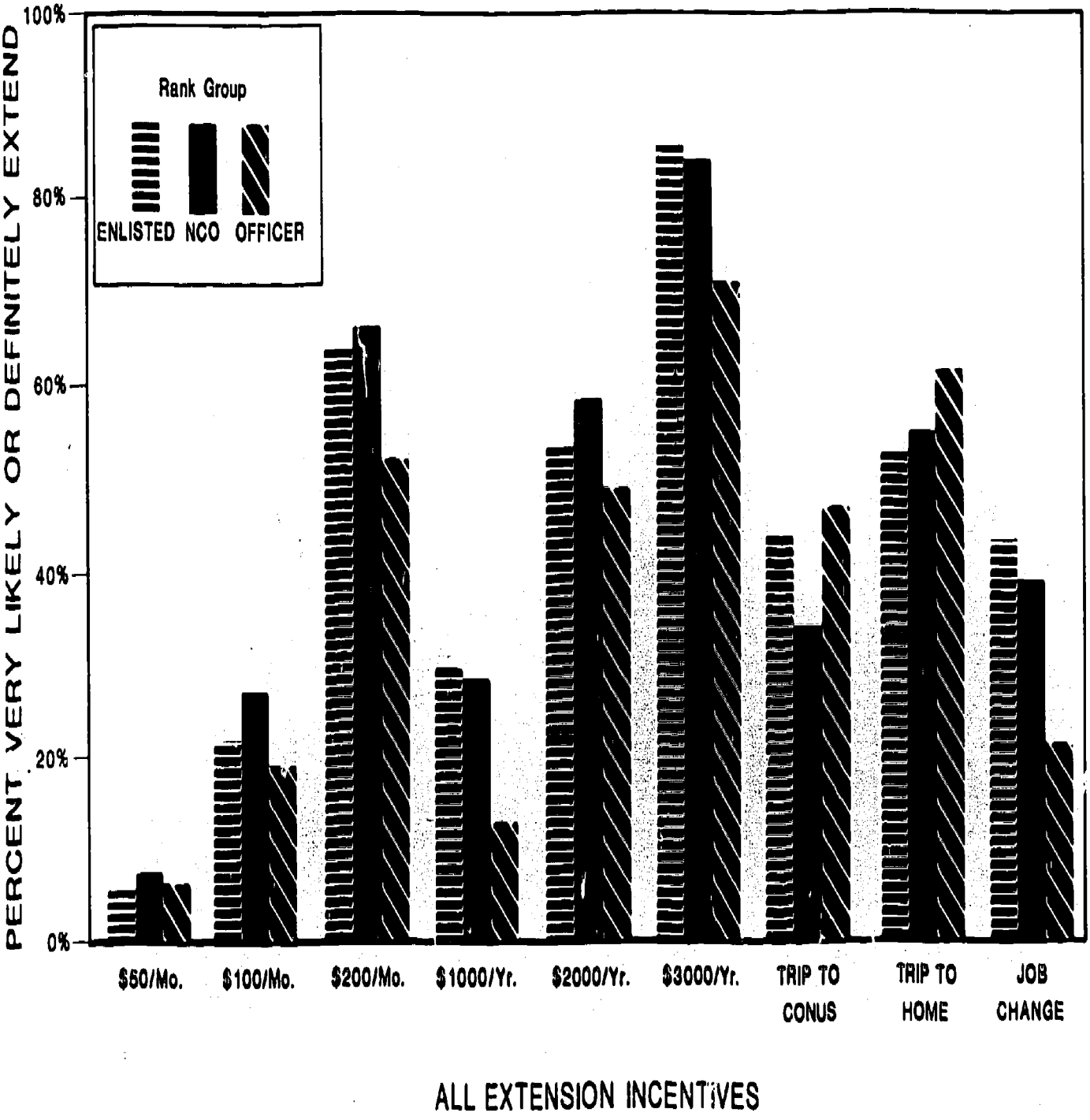


Figure 8. Comparison of the relative attractiveness of incentives for the rank groups in the "maybe" decision group.

savings in permanent change of station (PCS) costs to be realized. The actual incentive value to be used should be selected relative to the percent gain in extensions desired, assuming the figure falls above the break-even point.

Value of Incentives for the Spouses of Service Members

The degree to which spouses would support the service member's decision on extension is shown in Table 7. As can be seen in this table, the spouses are very willing to support a decision to extend in USAREUR: 44.6% of the spouses responded "yes," while only 20.1% of the SMs responded "yes." The opposite occurs for the "maybe" group: 49.6% of the SMs responded "maybe," while only 26.7% of the spouses did so. On the other hand, an equivalent number of spouses and SMs responded "no." Of the married couples, 50% responded to the same decision category. Only 7% of the couples had opposite responses of "yes" or "no." In the other 43% of the cases, the alternate response was "maybe" by one of the family members. The data indicate considerable agreement within the family, with the spouse more predisposed to extend than the service member.

Table 7

Percentage of Service Members and Spouses in Each Decision Group

	Yes	Maybe	No
Service member	20.1	49.6	30.3
Spouse	44.6	26.7	28.8

50% of service members and spouse pairs selected the same response option.

The value of any incentive should be a function of its appeal, both to the service member and the spouse. It is necessary to determine the degree of agreement between the spouse and SM on the incentives themselves. The analysis was conducted for the "maybe" decision group, in order to provide more information on the relative utility of the incentives for this target population. The data are reported in Tables 8 and 9 relative to each of the three rank groups. Table 8 shows the four most desired incentives for the service member and the spouse as determined by the percentage of each that responded favorably to each option. As can be seen in Table 8, the officers and their spouses report the same degree of preference. They each rank $3,000/year as their first preference with a trip home and a trip to CONUS ranked second and fourth, respectively. Not surprisingly, military members and spouses in the enlisted and NCO groups also rank $3,000/year as their first preference. A trip home, however, represents the second priority for the spouses in these two groups, but not the service member. The relative attractiveness of all of the incentives for service members and spouses by rank groups is shown in Table 9. The least attractive for all groups, not surprisingly, is $50/month.

Table 8

Relative Attractiveness of Most Preferred Incentives for Service Members and Spouses by Rank Group for the "Maybe" Decision Group

Rank preference for incentives	Enlisted		NCO		Officer	
	SM	Spouse	SM	Spouse	SM	Spouse
First	$3,000/year	$3,000/year	$3,000/year	$3,000/year	$3,000/year	$3,000/year
Second	$200/month	Trip home	$200/month	Trip home	Trip home	Trip home
Third	Trip home	$200/month	$2,000/year	$200/month	$200/month	$200/month*
Fourth	$2,000/year	Trip to CONUS	Trip home	$2,000/year	Trip to CONUS	Trip to CONUS*

*Tied for third most attractive extension incentive for officer spouses.

Table 9

Relative Attractiveness of Each Incentive for Service Member and Spouse by Rank Group for the "Maybe" Decision Group

	Enlisted		NCO		Officer	
	SM	Spouse	SM	Spouse	SM	Spouse
$50/month	6%	6%**	7%	10%	5%	10%
$100/month	20%	18%	25%	22%	17%	14%
$200/month	62%*	43%	65%*	46%	53%*	35%
$1,000/year	27%	20%	26%	22%	11%	13%
$2,000/year	52%	41%	58%*	45%	47%*	27%
$3,000/year	84%*	68%	82%*	70%	69%*	48%
Trip to CONUS	42%	42%	34%	37%	47%	35%
Trip home	53%	53%	53%	51%	61%*	43%*
Job Change	42%	38%	39%*	30%	21%	23%

*Indicates significant response difference between service member and spouse ($p < .05$).

**All figures reflect percentage responding "very likely" or "definitely extend."

Demographic Variables Related to the Decision to Extend

As part of the Family Survey, several questions were asked to obtain information on the background demographic characteristics of the sample surveyed. These included questions pertaining to age, length of marriage, number of children, time in service, education, family income, time served in USAREUR on this tour, number of PCSs to USAREUR, and whether they volunteered for a USAREUR tour. These questions, however, were not designed to meet the needs of the incentive survey, and are less comprehensive than we would have desired. The demographic information, for example, did not include questions which would permit us to differentiate a "quality" soldier. The available data, nonetheless, indicate some interesting and predictable relationships.

An analysis was conducted to determine whether demographic variables were related to the decision to extend by rank groups. The demographic variables that show a statistically significant response difference are shown in Table 10. Few variables proved to be discriminating, with none for the enlisted group. As can be seen in this table, the NCOs who plan to extend (the "yes" group) are differentiated by those service members who had volunteered to come, had greater family income, and had spent more time in USAREUR (this tour). Officers in the "yes" group were also predominantly those service members who had volunteered to come. Only two variables differentiated service members in the "maybe" decision group, and this occurred only for officers. The demographic variables were lower family income and less time in USAREUR (this tour). Some hope had been expressed by military personnel interested in this analysis that the incentives would attract service members who have more education and time in service. Outside of these two variables, however, no other demographic

Table 10

Statistically Significant Background Differences for Each Decision Group by Rank Group

Enlisted		
No statistically significant differences between decision groups ($p < .05$).		
NCOs		
Yes group:	Greater family income	Yes group = $18,783.78 Maybe group = $16,789.47 No group = $16,727.75
Yes group:	Greater time in USAREUR (this tour only)	Yes group = 2.27 years Maybe group = 1.54 years No group = 1.51 years
Yes group:	Greater percentage volunteered for USAREUR tour	Yes group = 58% Maybe group = 34% No group = 22%
Officers		
Maybe group:	Lower family income	Yes group = $29,791.66 Maybe group = $25,204.08 No group = $29,705.88
Maybe group:	Less time in USAREUR (this tour only)	Yes group = 1.94 years Maybe group = 1.43 years No group = 1.89 years
Maybe group:	Greater percentage volunteered for USAREUR tour	Yes group = 84% Maybe group = 43% No group = 58%

Variables considered: age, length of marriage, number of children, time in service, education, family income, time served in USAREUR this tour, number of previous PCSs to USAREUR, volunteered for USAREUR tour, and the distribution of grades within each rank group.

Statistical significance level was $p < .05$.

variables were available that could be directly used to determine "quality" differences among the three decision groups. An alternative way of looking at the influence of demographic variables was to determine whether there was any relationship to the attractiveness of the incentives for the "maybe" group within each rank group. The statistically significant data from this analysis are reported in Tables 11A and 11B. Meaningful data appeared to be limited to the following: (1) less educated enlisted men are willing to extend for the $100/month incentive; (2) NCOs with less time in service are more willing to extend for a job change; and (3) more senior officers required greater financial incentives than younger officers.

Quality of Family Life and Community Variables Related to Decision to Extend

The inclusion of the Incentive Survey as part of the Family Survey also allowed investigating the relationship between the perceived quality of family life and support provided by the community with respect to decision to extend. The first of these factors to be evaluated was degree of satisfaction in terms of Army life, family life, and housing in USAREUR. The relationship of these variables to the three decision groups is shown in Figure 9. As can be seen in this figure, there is a clear (and statistically significant) relationship between the decision to extend and these three areas of satisfaction, with the degree of satisfaction becoming less as the decision to extend moves from the "yes" to the "no" category. The difference in the level of satisfaction, however, is less pronounced with respect to satisfaction with housing.

The results of the "maybe" decision group fall midway between the results of the "yes" and "no" groups. The incentives, as a result, could be viewed by the "maybe" decision group as one means of compensating for the lack of satisfaction in these areas. A similar analysis was run on the responses of the spouses within each of the three decision groups. The pattern of responses was similar to those in Figure 9 for the service member, with the following exceptions. The spouses in the "yes" and "maybe" decision groups were somewhat more satisfied with family life. With respect to Army life, however, the spouses were uniformly less satisfied for all decision groups. With respect to housing, the spouses in the "yes" and "no" groups were more satisfied than those in the "maybe" group.

The results of a more detailed evaluation of the quality-of-life factors underlying satisfaction are presented in Tables 12A and 12B. The respondents to the family survey were asked to evaluate 32 separate items pertaining to the quality of family life (e.g., spouse happiness, children's happiness, amount of time with children, etc.), and the quality of community services (e.g., commissary, youth program, medical/dental services, etc.). These two groups of items could be considered related to intrinsic (family life) satisfaction and extrinsic (community life) satisfiers, respectively. The respondents were asked to evaluate each item relative to their last assignment before coming to USAREUR, in terms of whether the experiences associated with each item were considered much worse than, just as bad as, just as good as, or much better than their last assignment. Each decision group was compared with respect to the number responding "much worse than," and also in a separate analysis with respect to "much better than." The purpose of selecting out these extremes was to identify "problem areas" and also "strong points" of

Table 11A

Incentives That Are Statistically Significant Relative to Selected Background Variables of the Enlisted and NCO Rank Groups in the "Maybe" Decision Group

Enlisted

For the enlisted group, less educated SMs are more willing to extend for the $100/month bonus.

Education		$100
Lowest third:	Some high school/High school GED	42% willing to extend
Middle third:	High school graduate	13% willing to extend
Top third:	Some college/College graduate/ Trade-Vocational school	24% willing to extend

Older enlisted SMs indicate less willingness to extend for the $50/month, $100/month, and $1,000/year bonus.

Age	$50	$100	$1,000
17-20 years	27%	55%	64%
21-25 years	1%	21%	24%
26-30 years	8%	13%	36%

NCO group

Middle-education-level NCOs indicate more willingness to extend for the job change option than either the lower- or upper-level education NCO groups.

Education		Job change incentive
Lowest third:	Grade school/Some high school/ High school GED	36% willing to extend
Middle third:	High school degree	49% willing to extend
Top third:	Trade-Vocational school/Some graduate work/Graduate degree	32% willing to extend

Those NCOs with more time in service report greater willingness to extend for $1,000/year and a trip to the point of debarkation. Those with less time in service report a greater willingness to extend for a job change.

Time in service	$1,000 willing to extend	Trip to the point of debarkation	Job change willing to extend
3-6 years	23%	19%	53%
6-10 years	26%	35%	39%
10+ years	28%	39%	32%

Table 11B

Incentives That Are Statistically Significant Relative to Selected Background Variables of the Officer Rank Group in the "Maybe" Decision Group

Officer

Middle age group officers (26-40 years) report greater willingness to extend for the $200/month and $2,000/year incentives than do younger and older officers.

Age	$200/month	$2,000/year
21-25 years	25% willing to extend	0% willing to extend
26-30	65%	53%
31-40	59%	59%
41-50	17%	25%

Variables considered: age, education, time in service, and grade distribution within each rank group.

Statistical significance level was $p < .05$.

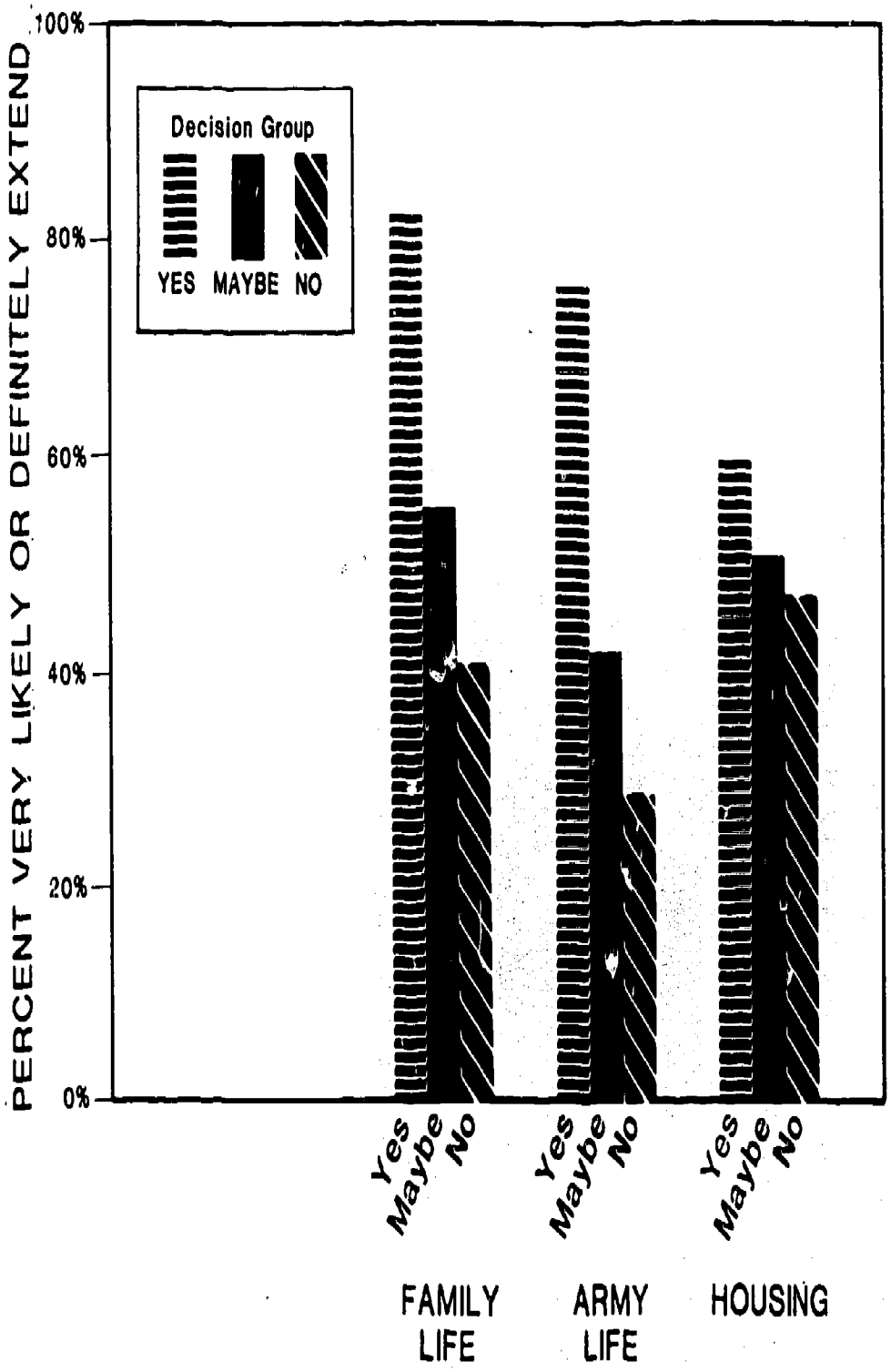


Figure 9. Percent of each decision group expressing satisfaction with family life, army life, and housing.

Table 12A

USAREUR Community Life Elements Seen as Either Better or Worse Than Previous Assignment by Each Decision Group

Items selected as being either relatively better or worse by one or more of the decision groups compared to their previous assignment	Much better*			Much worse**		
	Yes	Maybe	No	Yes	Maybe	No
1. Your present housing	0.23	0.14	0.16	0.35	0.49	0.49
2. Your present neighborhood	0.24	0.14	0.10	0.25	0.36	0.42
3. PX	0.15	0.05	0.05	0.39	0.66	0.70
7. Cost of living	0.25	0.15	0.15	0.23	0.34	0.38
8. Being able to travel around and see new places	0.58	0.38	0.34	0.09	0.23	0.32
9. Opportunity to eat out with family and friends	0.39	0.16	0.17	0.74	0.24	0.31
14. Children's happiness	0.15	0.05	0.05	0.08	0.24	0.22
15. Spouse's happiness	0.27	0.11	0.07	0.07	0.37	0.46
16. Military member's satisfaction with his/her job	0.34	0.15	0.10	0.11	0.42	0.58
17. Amount of time parents have with their children	0.14	0.04	0.05	0.28	0.56	0.57
18. Chances of promotion/advancement	0.18	0.07	0.09	0.10	0.24	0.36
21. Quality of "unit morale"	0.17	0.10	0.06	0.17	0.43	0.53
29. Amount of crime	0.50	0.38	0.30	0.05	0.12	0.23
30. Quality of marital relationship	0.28	0.19	0.20	0.05	0.14	0.24
Items being rated as neither better nor worse between decision groups relative to last assignment						
5. Child care services	0.10	0.05	0.05	0.38	0.49	0.50
25. Fear that family members will be "caught" in a war	0.12	0.11	0.10	0.46	0.51	0.57

*The "yes" group reported these items to be relatively much better than the "maybe" and "no" groups at a statistically significant level ($p < .05$).

**The "maybe" and "no" groups reported these items to be relatively much worse than the "yes" group at a statistically significant level ($p < .05$).

life in USAREUR. As a result, two different statistical comparisons were obtained for each item. The data reported in Tables 12A and 12B are grouped according to statistically significant differences found for each item between each of the three decision groups. The data reported for each item represent the percentage of each decision group selecting that response option.

Table 12B

USAREUR Community Life Elements Seen as Only Relatively Worse Than Previous Assignment by Each Decision Group

Items selected as being only relatively worse by one or more of the decision groups than previous assignment	Much worse*		
	Yes	Maybe	No
4. Commissary	0.37	0.63	0.71
6. Medical/dental services	0.24	0.40	0.42
10. Quality of Army Community Service Program	0.12	0.21	0.30
11. Quality of recreation programs (theaters, gyms, crafts, etc.)	0.28	0.55	0.57
12. Chances for spouse to find a job	0.28	0.41	0.49
13. Quality of children's education	0.19	0.25	0.35
19. Quality of military training to keep the unit ready	0.09	0.18	0.33
20. Quality of leadership in the Army units here to keep the unit ready	0.15	0.25	0.43
22. Unit readiness to act in defense of the U.S. and our allies in Europe	0.07	0.15	0.23
23. Fear of military member going to war	0.20	0.33	0.40
24. Youth activities	0.19	0.32	0.43
26. Use of NCO/Officers Club	0.22	0.32	0.39
27. Quality and number of friendships	0.13	0.28	0.38
31. Quality of chaplains' programs	0.05	0.12	0.17
32. Quality of church/synagogue services and activities	0.07	0.15	0.22

*The "maybe" and "no" groups reported these items to be relatively much worse than the "yes" group at a statistically significant level ($p < .05$).

Some of the quality-of-life items were reported as being relatively "much better" by the "yes" decision group, and relatively "much worse" by the "no" and "maybe" decision groups. This set of items is shown at the top of Table 12A. Of particular interest is that the items that fell into this group were primarily related to intrinsic satisfaction. In general, the "yes" decision group had a higher percentage reporting "much better," while the "maybe" and "no" decision groups had a higher percentage reporting "much worse" in the second of the two analyses. The percentage of responses in the "maybe" decision group, however, were not as high as those for the "no" decision group in the later analysis.

The community life items, shown in Table 12B, were only reported as being relatively "much worse." A relatively higher percentage of individuals in the "no" and "maybe" groups reported "much worse" than did members of the "yes" group. Once again the percentage of negative responses of the "maybe" decision group is not as high as those for the "no" decision group. The responses of all three decision groups were similar in regard to the "much better" response option for this group of items. The items in this group are primarily related to community support services or the extrinsic satisfiers.

The above data indicate that the "yes" decision group is relatively more satisfied with family intrinsic issues in USAREUR than the "maybe" and "no" groups. They are also less dissatisfied with extrinsic factors than the "maybe" and "no" groups, but not necessarily more satisfied in this area. The "maybe" and "no" groups, on the other hand, report a statistically higher number of responses for the "much worse than" option relative to the "yes" group. This response pattern extends to extrinsic community support services as well as intrinsic family issues. While the responses of the "maybe" group are not as extreme as the "no" group for these two groups of items, it appears that their more negative view of USAREUR also generalizes to all facets of USAREUR life.

One area of the Family Survey dealt with expectations about USAREUR, specifically whether experiences were better, the same, or worse than expected. The responses to each of these three options were averaged, yielding a mean value for each decision group, as shown in Table 13. This departure from presentation of item response percentages was taken to simplify the presentation of the data. Asterisks are used to indicate where the groups differ significantly from each other. The experiences of the "no" decision group were found to be worse than expected with respect to "a chance for the family to enjoy and appreciate living in a foreign country," a "chance to travel in Europe," and with respect to "increased chances of advancement and promotion for military member." The experiences of the "yes" group were found to be better than expected for seven of the nine expectations items. The two items not included in this pattern were responded to in a similar manner by each of the three decision groups. These items are "quality of schools for kids" and "quality medical/dental services for family." For these two items, the expectations of all three decision groups were basically met.

The influence of community size (large, medium, and small) on the decision to extend is shown in Table 14. The "yes" responses are somewhat equivalent for the medium and large communities. They are 50% fewer, however, for the small community, where a higher percentage of "no" responses occur. The "maybe" responses decrease gradually as community size increases. It would appear that the smaller communities have a negative influence on the decision to extend. However, the smaller communities also have a higher percentage of enlisted personnel as shown in Table 4, and as shown in Table 5, enlisted personnel are less willing to extend. As a result, community size alone cannot be considered the decisive factor.

Table 13

Comparison of Expectations About USAREUR with Experiences in USAREUR, by Decision Groups

	"Yes" decision group	"Maybe" decision group	"No" decision group
1. Quality housing for family	0.95***	0.85*	0.80*
2. Quality schools for kids	1.02	0.94	0.90
3. Time for family togetherness	0.78	0.47*	0.44*
4. A job I really liked	1.10	0.65*	0.46*
5. Increased chances of advancement and promotion for military member	0.99	0.76*	0.68**
6. Chance to travel in Europe	1.16	0.86*	0.69**
7. Chance for family to enjoy and appreciate living in a foreign country	1.17	0.84*	0.64**
8. Quality medical/dental services for family	0.86	0.78	0.73
9. Financial security and stability	1.11	0.91*	0.90*

*Significantly lower than "yes" decision group ($p < .05$).

**Significantly lower than both "yes" and "maybe" decision groups ($p < .05$).

***The above values are averages associated with the following response scale:
Worse Than Expected = 0, About What We Expected = 1, Better Than Expected = 2.

Table 14

The Relationship Between Community Size and Decision to Extend

Decision group	Small community	Medium community	Large community	Row total	Row percentage
Yes (Column %)	60 (13.5%)	96 (24.3%)	35 (26.5%)	191	19.6%
Maybe (Column %)	231 (51.8%)	192 (48.6%)	57 (43.2%)	480	49.3%
No (Column %	155 (34.7%)	107 (27.1%)	40 (30.3%)	302	31.1%
Column total	446	395	132	973	
Column %	45.8%	40.6%	13.6%		100%

Perceptions of the Value of a USAREUR Tour and Factors That Would Influence the Decision to Extend

Two separate questions were added at the end of the Incentive Survey to determine whether the respondents regarded a USAREUR tour as being good for their career, and what they perceived as the "one thing" that would stop them from extending in USAREUR. The responses to each of these questions were calculated for each of the three decision groups. The results as shown in Table 15 indicate that the perception of a USAREUR tour as being good for one's career is influenced by rank as well as the decision to extend. The "yes" group has the most positive responses, with the "no" group once again reporting the fewest positive responses. Within these decision groups, however, the responses differ by rank. In particular, the officers see a USAREUR tour as having more career value than the enlisted personnel who have the lowest response in the "yes" and "no" groups.

The respondents picked the one reason that would stop them from extending from a list of five choices. The results for ranks within each decision group are shown in Table 16. The results for the "no" decision group are of particular interest. Officers cite family reasons as the most important reason for not extending, while enlisted and NCO personnel cite job-related reasons. Money has little or no role with respect to this decision. This same pattern of results is evident for the "maybe" decision group, but becomes less pronounced for the "yes" decision group. However, family reasons and job-related reasons are the most frequently cited reasons for not extending for all groups, with money reasons playing a minimal role. These data reinforce the view that financial incentives serve as a compensating mechanism rather than being the

Table 15

Percentage of Service Members Who See an Assignment in USAREUR as Being Good for Their Army Career, by Decision Group and Rank Group

	"Yes" decision group			"Maybe" decision group			"No" decision group		
	Enl	NCO	Off	Enl	NCO	Off	Enl	NCO	Off
Yes, good for Army career	59.1%	79.5%	87.7%	52.4%	51.0%	77.6%	22.2%	41.0%	62.0%
Not sure, No, Other	49.9%	20.5%	12.3%	47.6%	49.0%	22.4%	77.8%	59.0%	48.0%

Table 16

Reasons Cited as the "One Thing" That Would Stop a Service Member from Extending, by Decision Group and Rank Group

	"Yes" decision group			"Maybe" decision group			"No" decision group		
	Enl	NCO	Off	Enl	NCO	Off	Enl	NCO	Off
Family reasons	22.7%	43.8%	50.9%	28.2%	30.0%	52.2%	22.2%	15.9%	54.0%
Personal reasons	13.6%	11.6%	10.5%	7.3%	10.8%	11.9%	3.7%	13.9%	14.0%
Job-related reasons	40.9%	34.8%	31.6%	41.9%	38.2%	31.3%	46.3%	45.1%	28.0%
Money reasons	13.6%	4.5%	1.8%	8.9%	10.4%	0	1.9%	1.0%	0
Don't like Europe	0	0.1%	1.8%	5.6%	3.8%	3.0%	7.4%	16.4%	2.0%

solution to a problem of financial need. This also helps to explain the important incentive value of a job change and a trip home.

DISCUSSION

The two main variables addressed in this research were decision to extend and rank. The service members who would extend without incentives (the "yes" decision group) represent 20% of the total sample. The service members who are unsure and would consider extending but only for incentives (the "maybe" decision group) represent 50% of the total sample. The remaining 30% represent the service members who would not extend even for incentives (the "no" decision group). As rank increases the willingness to extend increases, with officers representing the largest percentage of respondents in the "yes" decision group. Conversely, enlisted personnel represent the largest percentage of respondents in the "maybe" decision group. The rank groupings are about equally divided in the "no" decision group. This latter finding reinforces the somewhat clinical nature of this group. Their pervasive dissatisfaction in USAREUR may be a perceptual manifestation rather than being related to any Army considerations per se. This point is elaborated later in this discussion.

Within each decision group, the rank groups are equally attracted by the incentives offered. As the financial value of the incentives offered increases, the percentage of service members who would consider extending increases in a proportional manner. Similarly, there is a statistically significant difference between each decision group in terms of its willingness to extend for the financial incentives. As would be expected, the highest percentage of service members who would accept a financial incentive fall in the "yes" decision group and the least in the "no" decision group. One might ask why the "yes" decision group would respond in an increasingly positive manner as the level of financial incentives increases, since they plan to extend in any case. One explanation can be viewed in terms of resistance to extension. The "yes" decision group has no resistance to extending. The financial incentives simply become more attractive as they increase in perceived value. The "no" decision group, however, can be viewed as having the highest resistance to extending. This group responds, nevertheless, in a small but increasing manner as the level of the financial incentives increases. The responses of the "maybe" decision group fall between those for the "yes" and "no" decision groups. In this respect their resistance is less than that of the "no" decision group, but more than that of the "yes" decision group.

The most interesting finding in the data is that the above decision groups represent three relatively distinct family groups in terms of their satisfaction with life in USAREUR. These three groups were initially identified with respect to their plans for extending in USAREUR. However, it became apparent from their responses to the larger Family Survey that their decision to extend was closely related to a large number of factors associated with life in USAREUR.

Members of the "yes" decision group are relatively more satisfied with their family and Army life and their housing than the other decision groups. Their experiences in USAREUR were closer to their expectations. When compared to their assignment before coming to USAREUR, members of the "yes" decision group are relatively more satisfied than the other decision groups

with their family life. A higher percentage of service members in the "yes" decision group also sees USAREUR as being good for an Army career. The "no" decision group is dissatisfied with almost all facets of their USAREUR tour, including the family and community support variables surveyed. In particular, their experiences did not meet their expectations with respect to life in Europe and travel opportunities, and they do not see a USAREUR assignment as being good for an Army career. They are also relatively more dissatisfied with their family life and community support services in USAREUR. The responses of the "maybe" decision group fall midway between those of the "yes" and "no" decision groups. Despite these differences, the service members in each of the three decision groups have the same demographic background characteristics. In particular, there are no differences with respect to age, time in service, education, and the distribution of grades within each rank group.

The responses of the three decision groups were not only consistently different with respect to the above issues, but in most cases were found to be different at a statistically significant level. In view of these differences, the "yes" and "no" decision groups could almost be viewed as extreme and "clinically" different groups of people. They appear to be fixed in their views, with their respective perceptions generalizing to almost all facets of USAREUR life. The fact that the three rank groups are equally distributed in the "no" decision group also lends to this interpretation. It would appear that persons in the "no" group have a similar type of attitude that does not like change or the need to cope with cultural differences. For whatever reason, such persons maintain a negative perception of all USAREUR-related experiences. It is possible that no combination of incentives or policy changes may in any appreciable sense overcome the negative attitudes of these individuals.

The next interesting findings in the data are the factors that seem to influence satisfaction or dissatisfaction. The "yes" group is relatively more positive about their family life, while the "no" group is relatively more dissatisfied with not only family life but community support services as well. This finding is consistent with Frederick Herzberg's Motivation-Hygiene Theory that was formulated to explain job satisfaction/dissatisfaction.[3] Briefly stated, the theory suggests that factors related to satisfaction are separate from the factors that lead to dissatisfaction. It postulates that intrinsic, psychological growth factors (motivations) are related to satisfaction, while external support (hygiene) factors are related to dissatisfaction. The lack of intrinsic factors does not lead to dissatisfaction, but only the lack of satisfaction. Similarly, the presence of positive external factors does not cause satisfaction but only the lack of dissatisfaction. The impact of the motivation and hygiene factors is not completely exclusive, however. The lack of intrinsic motivators can cause a degree of dissatisfaction but not to the same extent as the lack of external factors. The presence of external factors may affect satisfaction but only to a slight degree. The results of this research reflect the predictions of this theory. As shown in Table 12, the "yes" group is relatively more satisfied with the intrinsic or family variables above. The "no" and "maybe" groups are relatively more dissatisfied with both family issues and community support services. These results have several implications. First and foremost is the fact that family issues, as well as job issues, are

---

[3]The nature and causes of job satisfaction. In Dunnette, M. D., Handbook of Industrial and Organizational Psychology, Rand McNally, 1976.

the primary determinants of satisfaction or dissatisfaction for the families in USAREUR. Community support services, as well as financial status, can contribute according to this theory to dissatisfaction. The fact that the "yes" group expressed less dissatisfaction with community support services implies that some of the negative attitudes of the "no" and "maybe" groups may have generalized to this area. Beyond a certain point, however, the level of community support services will not create satisfaction per se. The implications of these findings are that other things being equal the greatest return on investment for family satisfaction will be in those areas that directly impact on the quality of family life and personal fulfillment on the job.

The "maybe" group represents the target of opportunity with respect to any incentive program. This group, as noted earlier, represented 49.5% of the family members surveyed. With respect to rank groups, 61% of the enlisted, 48% of the NCOs, and 39% of officers fell into this group. However, the actual percentages of the married and accompanied service members within these same rank categories in USAREUR are 10%, 44%, and 52%. This is due to the fact that the number of married service members increases as rank increases. As a result, a higher percentage of the married personnel in the lower ranking groups will be attracted by an incentive program.

As noted earlier, the incentives value utilized must attract a percentage of service members that is higher than the break-even point. This refers to the fact that unnecessary costs would be incurred by paying incentives to those service members who would have extended anyway, which must be deducted from the PCS savings of those who extend for incentives. The break-even point has been estimated to be about twice the base rate or the percentage of service members who extend voluntarily. The actual tour extension base rate for married and accompanied personnel in USAREUR needs to be ascertained from the extension records. However, the base rate for these individuals can be estimated by the percentage of persons who indicated that they "planned" to extend their current tour, as mentioned under Data Analysis in the Methods section. This figure is approximately 16% for married and accompanied service members, which would make the break-even point at 30%. In other words, an incentive value must be selected that will attract 32% or more of the service member population in order to be cost effective. Using this value relative to the data presented in Figure 8 for the "maybe" decision group indicates the following: $200/month or $2,000 and $3,000/year could increase the potential extension rate above the estimated break-even point. The actual financial value used, however, should be picked relative to the desired gain in extensions at or above the actual break-even point.

As might be expected, $3,000/year attracts the highest percentage of individuals who indicate willingness to extend relative to the incentives offered. Space-required airline tickets for the family to either (1) the point of embarkation or (2) the home of record, plus 30 days noncharged leave for each of these options also will exceed the break-even point for the "maybe" group. A trip to home of record, however, is much more desirable to the service members in this decision group. Of some interest also is the fact that a job change has a high incentive value for enlisted and NCO service members that is comparable to some of the financial incentives in terms of attractiveness.

The information contained in Figure 8 provides the necessary information to conduct a cost analysis. The financial break-even point should be calculated

for each rank category in the "maybe" decision group relative to PCS costs saved and the cost of incentives that would be paid to the actual percentage of service members who now extend without incentives. The incentive to be offered should be selected in terms of the financial value that corresponds to the extension rate desired for each rank category. This assumes that the desired gain in extensions falls above the financial break-even point. A trip back can be considered as an alternative option if its financial cost is equivalent to or less than the financial value associated with the desired rate of extension. The reader should not lose sight of the fact that these data are only applicable to married and accompanied service members in USAREUR. The degree to which the estimated extension rates by incentives found in this research can be extrapolated to the unmarried population and the married unaccompanied population must be determined, taking into account the base extension rates and PCS costs for these groups.

Of additional interest is the fact that the spouses of the service members are very willing to support a decision to extend in USAREUR: 44.6% fall in the "yes" decision group as compared to 20.1% of the service members. The SMs and spouses are equally represented in the "no" decision group, which reinforces the imperviousness of this group. Otherwise, the attitude of the spouses can be seen as a positive influence. This influence can only beneficially sway the undecided service members to accept a financial incentive. The incentive of highest priority to the spouse, like the service member, is $3,000/year. However, a trip to the home of record is the second priority for the spouse in the "maybe" group, regardless of the service member's rank.

The data and analyses have been primarily concerned with the relative attractiveness of financial and other incentives. However, family- and job-related reasons are seen by service members in each of the three decision groups as the two major obstacles to an extension in USAREUR, more officers indicating family reasons, and more enlisted and NCO personnel indicating job-related reasons. Money is not seen as an obstacle to extending in USAREUR by any of the decision groups or rank groups. The implication of this very important information is that the incentives offered are only compensation for problems in these other areas. The financial incentives offered, as a result, do not get at the underlying problems that influence a service member's decision to extend. An equal or greater return in extensions may be achieved by changes in present practices or new policies that affect job and family satisfaction. The data reinforce the importance of family support programs and any initiatives related to job assignment.