#### DOCUMENT RESUME

ED 079 569 AC 014 444

AUTHOR Shenk, Faye

TITLE Development and Validation of Scores to Predict

Officer Career Status.

INSTITUTION Air Force Human Resources Lab., Lackland AFB, Tex.

Personnel Research Div.

REPORT NO AFHRL-TR-73-1

PUB DATE Mar 73 NOTE 30p.

EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS \*Career Choice; Data Collection; Measurement

Instruments: \*Military Personnel: \*Officer Personnel:

\*Predictive Validity; Statistical Data; \*Surveys;

Tables (Data)

IDENTIFIERS \*Career Intent Score; United States Air Force

#### ABSTRACT

This study was designed to determine the predictability of an officer's career decision and to evaluate relationships between career intent, various demographic, environmental and attitudinal factors, and career status. Survey data were collected from individuals before they entered active duty, and annually, through five years of active military service. The scores designed to predict career status were determined from each individual's yearly survey responses. Generally, the relationship between career status and the scores based on responses prior to commissioning were quite low; however, there was a definite increase in prediction after the subjects experienced active duty. The largest increase in predictability occurred during the first two years of active duty. This seems to indicate a plateau in the subject's attitude toward the military career. Offer of Air Force opportunities. such as education, training, and Regular commissions might be more effective at this point than at the time of commissioning. In addition, from an economical standpoint, the Air Force might realize considerable savings in training costs by sending those junior officers most likely to remain on active duty to the more expensive educational and training programs. The Career Intent Score was the measurement device most predictive of future career status, although correlations were only moderate. (Author/DB)

# AIR FORCE

· O 07.5

US DEPARTMENT OF HEALTH.
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
"HIS DOCUMENT HAS BEEN REPRO
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN
ATING IT POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRE
SENT OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

AFHRL-TR-73-1

**DEVELOPMENT AND VALIDATION OF SCORES** TO PREDICT OFFICER CAREER STATUS

By

Faye Shenk

PERSONNEL RESEARCH DIVISION Lackland Air Force Base, Texas 78236

**March 1973** 

Approved for public release; distribution unlimited.

LABORATORY

AIR FORCE SYSTEMS COMMAND **BROOKS AIR FORCE BASE, TEXAS** 

## NOTICE

When US Government drawings, specifications, or other data are used for any purpose other than a definitely related Government procurement operation, the Government thereby incurs no responsibility nor any obligation whatsoever, and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise, as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.



ED 079569

AFHRL-TR-73-1

**March 1973** 

# DEVELOPMENT AND VALIDATION OF SCORES TO PREDICT OFFICER CAREER STATUS

Ву

Faye Shenk

Approved for public release; distribution unlimited.

PERSONNEL RESEARCH DIVISION
AIR FORCE HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND
Lackland Air Force Base, Texas 78236



# **FOREWORD**

This research was completed under Project 7719, Air Force Personnel System Development on Selection, Assignment, Evaluation, Quality Control, Retention, Promotion, and Utilization; Task 771907, Analysis of Major Factors Related to Career Decisions and Retention.

This is part of a continuing evaluation concerning a sample of officers who entered the Air Force as second lieutenants during 1963 and 1964. This historical study is an evaluation of reported career intentions and various demographic, environmental, and attitudinal factors which influence career selection or nonselection. Other reports of this study include PRL-TR-65-2, AD-613 333, USAF Officer Career Decisions: Predictability of Initial Career Intent; PRL-TR-67-10, AD-664 037, USAF Officer Career Intent after First Year of Active Duty; AFHRL-TR-69-33, AD-703 728, Career Indications among Junior Officers; AFHRL-TR-70-49, AD-722 408, Changes in Career Intent During Initial Tour of Active Duty.

This report has been reviewed and is approved.

Harold E. Fischer, Colonel, USAF Commander



#### **ABSTRACT**

During 1963 a long-term study of officer input, from the principal Air Force commissioning sources, was initiated. This study was designed to determine the predictability of an officer's career decision and to evaluate relationships between career intent, various demographic, environmental and attitudinal factors, and career status. This report presents the development and validation of various scores designed to predict career status.

Survey data were collected from individuals before they entered active duty, and annually, through five years of active military service. The scores designed to predict career status were determined from each individual's yearly survey responses. Generally, the relationship between career status and the scores based on responses prior to commissioning were quite low; however, there was a definite increase in prediction after the subjects experienced active duty. The largest increase in predictability occurred during the first two years of active duty. This seems to indicate a plateau in the subject's attitude toward the military career. Offer of Air Force opportunities such as education, training, and Regular commissions might be more effective at this point, than at the time of commissioning. In addition, from an economical standpoint, the Air Force might realize considerable savings in training costs by sending those junior officers most likely to remain on active duty to the more expensive educational and training programs. The Career Intent Score was the measurement device most predictive of future career status although correlations were only moderate.



# TABLE OF CONTENTS

		Page
1.	Introduction	1
II.	Procedure	1
III.	Results and Discussion	2
	Career Intent Score	2 2 3
IV.	Summary and Conclusions	4
Refe	rences	5
Appe	endix I: Development of Experimental Scores	7
Appe	endix (I: Tables	11
	LIST OF TABLES	
Table		Page
1	Descriptive Statistics for Career Intent Scores and Career Status	_
2	Means, Standard Deviations, and Validities of the Precommission and Active Duty  Ccreer Intent Scores for each Source of Commission	12
3	Descriptive Statistics for Retainability Score and Career Status	12
4	Means, Standard Deviations, and Validities of the Retainability Score for Each Source of Commission	. 13
5	Means and Standard Deviations of Experimental Scores: Total Sample	. 14
6	Validities of Experimental Scores with Career/Noncareer Status as of December . 369: Total Sample	15
7	Classification of Items According to Herzberg's Theory	. 15
8	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: AFA	. 16
9	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: OTS	. 17
10	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: OTS-AECP	. 18
11	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: AFROTC (Cat C Omitted)	. 19
12	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: USMA	. 20
13	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: USNA	. 21
14	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: OCS	. 22
15	Validities of Experimental Scores with Career/Noncareer Status as of December 1969: AFROTC-Cat C	



# DEVELOPMENT AND VALIDATION OF SCORES TO PREDICT OFFICER CAREER STATUS

#### 1. INTRODUCTION

During 1963 a long-term study of officer input from the principal Air Force commissioning sources was initiated (Ewing & Alvord, 1965). This study was designed to determine the predictability of an officer's career decision and to evaluate relationships between career intent, various demographic, environmental and attitudinal factors, and career status. One of the aims of the study was to answer such questions as: Can career decision or career status be predicted? If so, at what point? This report presents the development of various scores which were applied to the survey data and the validation of these scores with career status as of December 1969.

#### II. PROCEDURE

In the first phase of this study, a Precommission Survey was developed to determine variables which might contribute to the career attitudes of officer trainees and newly commissioned officers. The survey was divided into three parts: The first asks for demographic data; the second requires a statement of career-intent; and the third contains scales on which the subject indicates degree of individual job expectations and extent to which these expectations might be achieved in the Air Force (Job Importance-Job Possibility Scale<sup>1</sup>). To determine factors which contribute to career decisions during the period of active duty, the Active Duty Survey was developed. While the Precommission Survey was primarily related to college training and activities, certain demographic items from the survey (e.g., marital status, family attitudes) were included in the follow-up Active Duty Survey to provide continuity. In addition, the demographic section of the Active Duty Survey includes questions relating to the respondent's present status, such as his current military assignment, military background, and job satisfaction. The career-intent section and the Job Importance-Job Possibility Scale appear in the Precommission and Active Duty Surveys. Examples of these surveys were published in previous technical reports (Ewing & Alvord, 1965; Shenk 1970).

The Precommission Survey was completed by 5,609 trainees to be commissioned during 1963 through 1964 as second lieutenants. Officer trainees were selected from the following sources: Air Force Reserve Officer Training Corps (AFROTC), Officer Training School (OTS),<sup>2</sup> Officer Training School - Airman Education and Commissioning Program (OTS-AECP), Officer Candidate School (OCS) and the Military Academies (AFA, USMA, and USNA). After approximately one year, the subjects participating in the precommission phase were matched with the Uniform Officer Record (UOR) Active Duty File to determine date of entry onto active duty and to obtain current assignment locations. Questionnaires were mailed directly to the subjects and were returned by them to the Personnel Research Division. The original sample received an Active Duty Survey annually through five years of military service. Results of these analyses for the period prior to commissioning through five years of active duty, using expressed career-intent as the intermediate criterion, have been compiled and reported (Ewing, 1967; Shenk, 1969, 1970).

Career status was determined for these subjects by matching with the UOR Active Duty and Loss Files as of December 1969. Subjects were divided into the following career status categories: Career, Noncareer, Inactive, and Unknown. The Career<sup>3</sup> group includes subjects still on active duty as of December 1969; the Noncareer group consists of subjects with a date of loss between 1963 and 1969; the Inactive group includes cases which were in a transition state on the UOR Files; and the Unknown group represents subjects for which initial data were missing (such as AFSN) and for which no match was made on the UOR Files.



<sup>&</sup>lt;sup>1</sup>The original Job Importance-Job Possibility Scale was developed and utilized (Harding & Bottenberg, 1962; Harding, Downey, & Bottenberg, 1963) in studies of OTS graduates and USAFIT trained officers. One statement, "Achieving leadership in my field," was added to Harding's scales.

<sup>&</sup>lt;sup>2</sup>Now called School of Military Sciences--Officer (SMS-O) Training.

<sup>&</sup>lt;sup>3</sup>Seventy-two percent of this group have active duty commitment dates between 1970 and 1976. However, since they have extended beyond the normal obligated tour, they were designated as "career" for this report.

#### III. RESULTS AND DISCUSSION

In evaluating the initial survey data, several scores to predict career status were designed Technical aspects of the development of these measures and related statistics are presented in the appendices. Scores have been previously analyzed using an intermediate criterion of expressed career intent (Ewing & Alvord, 1965; Ewing, 1967). This report presents data elating to the validation of these measurements with a criterion of intermediate career status (career/noncareer) as of December 1969.

#### **Career Intent Score**

One measure, a Career Intent Score, was developed for both the Precommission and the Active Duty surveys. The Precommission Career Intent Score<sup>4</sup> was derived from assigned weights of plus 1 or minus 1 to items which related positively or negatively to the career-intent statement. The Active Duty Career Intent Score was derived in the same manner based on the first year active duty survey responses. The Active Duty Career Intent Score key was applied to the first through the fifth years survey responses. Means, standard deviations, and validities of the Career Intent Scores and the in-or-out of service criterion (career status) are presented in Table 1. These data are presented for the total sample by year of duty. Data relating to the individual sources of commission are presented in Appendix 1.

The overall correlation between the Precommission Career Intent Score and the career status criterion was .20 which is relatively low. Correlations between the Precommission Career Intent Score and the criterion for the various sources ranged from .01 for USNA to .24 for OTS (Table 2 in Appendix II). The correlations are small for practical purposes; however, the score was computed six years prior to determination of career status and is primarily based on college activities and selected demographic factors, prior to actual experience in the Air Force. The relationship between these two factors (Precommission Career Intent Score and career status) is greater for the OTS and AFROTC sources which represent the largest input to the Air Force.

An increase in prediction of career status was achieved with the Active Duty Career Intent Score for succeeding survey response data. The Career

first year active duty survey correlated .33 with career/noncareer status as of December 1969. This initial increase in prediction (beyond the precommission point) was consistent for all sources of commission. The relationship between these two factors (Active Duty Career Intent Score and career/noncareer status) for the total sample further increased to .40 for the second year survey data; .41 for the third year survey data; .43 for the fourth year survey data; and decreased to .27 for the fifth year survey respondents. The decrease in relationship at the fifth year point may be due to restriction in range since the majority of the subjects had completed their normal tour of duty and elected to remain on active duty or leave the service.

Intent Score obtained for subjects completing the

One important factor concerning the relationships found between Active Duty Career Intent Score and career status should be pointed out. There is very little increase in prediction after the second year of active duty. It appears that a plateau is reached and further application of this particular score beyond that point does not significantly increase prediction. This seems to indicate a definite time period in which development of an officer's attitude and skill would be most beneficial. After one or two years of active duty, the offer of such benefits as training, education, or a Regular commission might have more influence than prior to commissioning. These findings are somewhat supported in evaluating the expressed career intent of these subjects with their career status as of December 1969 (Shenk, 1972). In the case of the career-intent statement, the largest increase in prediction was obtained after the subject had been on active duty for one year (correlation between precommission career-intent statement and career status was .24; correlation between intent after one year of active duty and career status was .41). While the Precommission Career Intent Score shows little promise for determining the actual career status of officers after four years it appears that the Active Duty Career Intent Score provides a more effective measure, which could be used to predict career status for junior officers.

#### Retainability Score

The Retainability Score is based on item responses to the Job Importance-Job Possibility Scale. This scale consists of 23 statements representing factors relating to job satisfaction/dissatisfaction. The subject is required to rate each statement on a five-point scale: First indicating the



<sup>&</sup>lt;sup>4</sup>The Precommission Career Intent Score was applied only to the Precommission Survey data.

importance of the statement to his job satisfaction, and second, indicating the possibility of obtaining the reward or working condition while in the Air Force. The scoring technique, developed by Downey, Harding, and Bottenberg (1964), is based upon the proportion of career officers and ex-officers responding to each combination of items. Means, standard deviations and validities of the Retainability Score, and the criterion of career status for the total sample are presented in Table 3.

It was hypothesized that officers who were career minded would tend to show significantly higher scores than those who were not so inclined, indicating that they had attitudes and expectations somewhat similar to known career officers. As shown in Table 3 there are slight differences between means for the career and noncareer groups with the career group having the higher means, except for the precommission phase. While this trend is in the direction predicted, the differences between means are too slight to be of practical significance. Another factor which becomes apparent is the overall consistent (though slight) decrease in means for the two criterion groups for each year of active duty.

The correlation between the Retainability Score, derived from the Precommission Survey data, and the criterion of career status was .08 for the total sample. The correlation between the Retainability Score and the criterion increased for each year of active duty, except the fifth year. For instance, the relationship between the Retainability Score for the first year active duty survey data and the criterion was .23; .28 for the second year survey data; .31 for the third year data; .38 for the fourth year data; and .28 for the fifth year data. While these correlations are not substantial in magnitude, it is evidenced again that there is very low prediction prior to commissioning and an apparent increase in prediction after the subjects have actually experienced Air Force service.

For comparative purposes, descriptive and correlational data on the Retainability Score for each source of commission are presented in Table 4.

#### **Experimental Scores**

Several other experimental scores were generated from the Job Importance-Job Possibility

Scale. These scores were derived from various combinations of weighted values, which were assigned to responses on the importance section and the possibility section. Means and Standard deviations for the Experimental Scores are presented in Table 5, Appendix II. The validities of these scores with career/noncareer status are given in Table 6. Of these measures, the Total Possibility, Positive Score, Possibility Motivators, and Retention Scores were the most predictive: however, none of the experimental measures correlated as highly with career status as the Career Intent Score. In analyzing these scores with the career-intent statement (Ewing & Alvord, 1965. Ewing, 1967), it was found that the serviceoriented subjects considered the possibility of obtaining desired working conditions and rewards in the Air Force to be greater than necessary for their satisfaction, while the demands of the noncareer-oriented subjects exceeded the possibility of obtaining job satisfaction in the service. Of the experimental measures, the Positive Score appeared to be the best predictor of expressed career intent. This score is also one of the best experimental predictors for career status in the early years of active duty. This score indicates that the importance of the item was rated higher than the possibility of attainment for that item. In correlating the Positive Score with career status, negative relationships were found indicating the noncareer subjects had rated the importance higher than the possibility of attainment for the factors. The Possibility Motivators Score is a measure based on Herzberg's (Herzberg, Mausner, & Snyderman, 1959) theory of motivatorsdissatisfiers. Each of the items on the Job Importance-Job Possibility Scale were categorized according to this two-factor theory of work motivation (Table 7, Appendix II). The Possibility Motivators Score is merely the sum of the weighted responses on the possibility scale for items identified as motivators. This score had a low but positive relationship with career status; in other words, the career officers rated these items as having a higher achievement value in the Air Force than the noncareer officers. The Total Possibility Score is the sum of all the weighted responses on the Possibility Scale. This measure is also related positively to career status. The Retention Scores, which use different weights, also show a positive relationship with career status. In evaluating these measures, it was noticed that apparently various combinations of the possibility of achievement and the importance to the individual or the possibility of attainment alone are more predictive of career status than the



<sup>&</sup>lt;sup>5</sup> A detailed explanation of these scores is presented in Appendix I.

importance factor alone. Validities of the experimental measures for each year of active duty for the total sample and for each source of commission are given in Tables 8 through 15 in Appendix II.

#### IV. SUMMARY AND CONCLUSIONS

One of the aims of this historical study of officer input was to determine if career status could be predicted. Survey data were collected on a sample of officers, before and during, their active military service tour. This report presents the validation of the various scores which were designed to predict career status.

Generally the relationships between career status and the scores based on the precommission survey data were not strong; however, there was a definite increase in prediction among the various measures after the subjects had completed one year of active duty. The Career Intent Score appears to be the best overall predictor. Although the correlation between the Precommission Career Intent Score and career status (.20) was somewhat low; the Active Duty Career Intent Score, based

on responses made during the first year of active du v. correlated .33 with career/noncareer status. There was another increase in prediction at the second year point (.40) between these two factors. After the second year of active duty there was very little increase in relationship. Prediction of career status before entry to active duty is not as reliable as information obtained after the subject has completed one or two years of military service. This was also evidenced in evaluating the reliability and validity of the expressed career-intent of these subjects (Shenk, 1972). The validities of the Retainability Score, based upon empirical comparisons of career and noncareer officers, were rather low, but did show an increase for succeeding years of active duty.

Since several of these scores, particularly the Career Intent Score, appear to have a sizeable and significant relationship with the future career status of junior officers; their unique contribution and validity should be evaluated in the prediction of various training criteria. Such measures, combined with current operational selection tests (such as the Air Force Officer Qualifying Test), may prove useful in selecting those junior officers with definite career potential.



#### REFERENCES

- Downey, R.L., Jr., Harding, F.D., & Bottenberg, R.A. Ratings by officer groups of importance and obtainability of selected job characteristics. PRL-TDR-64-4, AD-437 954. Lackland AFB, Tex.: Personnel Research Laboratory, Aerospace Medical Division, February 1964.
- Ewing, F. USAF officer career intent after first year of active duty. PRL-TR-67-10, AD-664 037. Lackland AFB, Tex.: Personnel Research Laboratory, Aerospace Medical Division, August 1967.
- Ewing, F., & Alvord, R.W. USAF officer career decisions: Predictability of initial career intent. PRL-TR-65-2, AD-613 333. Lackland AFB, Tex.: Personnel Research Laboratory, Aerospace Medical Division, February 1965.
- Harding, F.D., & Bottenberg, R.A. Attitudes and career intentions of officer training school students. PRL-TDR-62-8, AD-289 872. Lackland AFB, Tex.: Personnel Research Laboratory, Aerospace Medical Dvision, May 1962.
- Harding, F.D., Downey, R.L., Jr., & Bottenberg, R.A. Career experiences of AFIT classes of 1955 and 1956. PRL-TDR-63-9, AD-403 830. Lackland AFB, Tex.: Personnel Research Laboratory, Aerospace Medical Division, April 1963.

- Herzberg, F., Mausner, B., & Snyderman, B.B. The motivation to work. (2d ed.) New York: John Wiley & Sons, Inc., 1959.
- Shenk, F. Career indications among junior officers.

  AFHRL-TR-69-33, AD-703 728. Lackland

  AFB, Tex.: Personnel Research Division, Air

  Force Human Resources Laboratory,

  September 1969.
- Shenk, F. Changes in career intent during initial tour of active duty. AFHRL-TR-70-49, AD-722 408. Lackland AFB, Tex.: Personnel Division, Air Force Human Resources Laboratory, December 1970.
- Shenk, F. Predictability of expressed career intent. AFHRL-TR-72-25, AD-749 093. Lackland AFB, Tex.: Personnel Research Division, Air Force Human Resources Laboratory, March 1972.



## APPENDIX I: DEVELOPMENT OF EXPERIMENTAL SCORES

#### Career Intent Score

Frequency and percentage distributions were obtained for responses for each item alternative on the Precommission Survey for the total group and for three career intent response categories (definitely career, uncertain, and noncareer). After preliminary review of these distributions, subjects from each procurement for cross-validation. The source were then divided into two groups, one for key developr or uased on the responses to sample selected for key development was further subdivided into the career-intent statement, a measure of the sureness of their responses, and whether they had prior service. After counting the number of cases in each subgroup, it was found that some of the 12 subgroups had an insufficient number of case: to be considered separately in the analyses. Therefore, in the final analysis, four subgroups were formed based on career intent and certainty or sureness of career decision excluding prior service. It was further noted that some of the frequencies for the four subgroups, particularly among the military academies, were quite small. As a result, the USMA, USNA, and AFA were treated as one source. Subgroup data were obtained for OTS, AFROTC, OCS, and the Military Academies. It was noted that the frequencies for the OCS source were quite small; however, it was decided not to combine the OCS subjects with another source since they formed a unique group (generally college non-graduates).

#### Final Composition of Subgroups for Developing Key

Subgroup	Attitude toward Career	and	Sureness of Decision
1	Favorable		Certain or probably won't change mind
2	Favorable		Might change mind
3	Uncertain or unfavorable		Certain or probably won't change mind
4	Uncertain or unfavorable		Might change mind

For each of the four subgroups and for all of the cases in the first half of the sample, a count of the number of cases chaosing each alternative of the Precommission Survey items was obtained. Chi squares were computed for each item by source of commission for these four subgroups.

Based on the data, the most important factors influencing a positive or negative career decision were identified, and a Precommission Career Intent Key for the total sample was developed. Keying consisted of assigning a score of plus 1 or minus 1 to items which related positively or negatively to the career-intent statement.

Scores derived from the Precommission Career-Intent Key were cross-validated on the second half of the sample for each source of commission individually and all sources combined. The criterion score was the weight assigned to the response to the career-intent statement (definitely career = 2; most likely career, uncertain, or most likely not career = 1; definitely not career = 0). Correlations between the Precommission Career Intent Score and the career-intent statement for the various sources ranged from .39 for the USNA to .53 for the USMA, with an overall correlation for all sources combined of .44. Data relating to the Precommission Career Intent Score was presented by Ewing and Alvord (1965).

The Active Duty Career-Intent Score Key was developed in the same manner as the Precommission Career-Intent Score Key. The Active Duty Career-Intent Score Key, developed on the first year active duty survey, was applied to each succeeding year's survey data. Correlation between the Active Duty Career-Intent Score and the career-intent statement for subjects completing the first active duty survey ranged from .47 for OCS to .62 for OTS-AECP. Data for the Active Duty Career Intent Score was presented by Ewing (1967).

#### Retainability Score

A scoring technique developed in a previous study (Downey, Harding, & Bottenberg, 1964) was applied to the items contained in the Job Importance-Job Possibility Scale which appeared in each survey. The items were scored according to weights developed for each pair of items based on the proportion of



career officers and ex-officers responding to each combination. Weights varying from 1 to 0 were applied to all pairs of items on the Job Importance-Job Possibility Scale.<sup>6</sup> By summing the weights for each combination of responses, a Retainability Score was generated for each officer; the maximum score possible was 22.

#### n ntal Scores

Various experimental scores were generated for responses to the Job Importance-Job Possibility Scale. To obtain these experimental scores the following weighted values were first assigned to each alternative:

Alternative	Value	Importance Scale Response	Possibility Scale Response
a	1	Not important at all	No possibility at all
b	2	Somewhat below average in importance	Less than average possibility
c	3	Of average importance	Average possibility
đ	4	Somewhat above average in importance	Better than average possibility
е	5	Extremely important	Very good possibility

In addition each of the items in the Job Importance-Job Possibility Scale was categorized according to Herzberg's (Herzberg, Mausner, & Snyderman, 1959) theory of motivators-dissatisfiers. Herzberg proposes a two-factor theory of work motivation in which factors which provide motivation are content factors involving achievement, recognition, work itself, responsibility, and advancement. The factors which inhibit motivation are termed context factors and involve company policy and administration, supervision, salary, interpersonal relations and working conditions. The content factors or motivators are necessary for motivation whereas the context factors will not increase motivation but must be met at a minimum level to prevent dissatisfaction. There were 10 items classified as motivators and 13 as dissatisfiers on the Job Importance-Job Possibility Scale. A complete listing of the scale items and their classification according to Herzberg's theory of motivation to work is given in Table 5, Appendix II.

Using the weighted values previously defined, the following experimental scores were generated for each subject.

	Experimental Scores
Importance Motivators	Sum of weighted responses on the importance scale for items identified as motivators
Importance Dissatisfiers	Sum of weighted responses on the importance scale for items identified as dissatisfiers
Possibility Dissatisfiers	Sum of varietied responses on the possibility scale for items identified as dissatisfiers
Possibility Motivators	Sum cf weighted responses on the possibility scale for items identified as motivators
Difference IPM	Sum of weighted responses for items identified as motivators on the possibility scale subtracted from the same responses on the importance scale

<sup>&</sup>lt;sup>6</sup>Weighted values were not computed for the item, "Achieving leadership in my field," which was added to the Harding Job Importance-Job Possibility Scale.



# Experimental Scores (Continued)

Difference IPD	Sum of weighted responses for items identified as dissatisfiers on the possibility scale subtracted from the same responses on the importance scale
Total Motivators	Sum of weighted responses for all items on both the importance and possibility scale identified as motivators
Total Dissatisfiers	Sum of weighted responses for all items on both the importance and possibility scale identified as dissatisfiers
Total Score	Sum of weighted responses for each item on the possibility scale subtracted from the same responses on the importance scale
Negative Score	Sum of all negative item-pair scores; i.e., the possibility weight was greater than the importance weight
Negative Frequency	The number of negative differences; i.e., the number of times the possibility weight was greater than the importance weight
Zero Frequency	The number of zero differences; i.e., the possibility and the importance weights were the same
Positive Score	Sum of all positive item-pair scores; i.e., the importance weight was greater than the possibility weight
Positive Frequency	The number of positive differences; i.e., the number of times the importance weight was greater than the possibility weight
Positive Plus Zero Frequency	The number of positive and zero differences; i.e., the importance weight was greater or equal to the possibility weight
Positive Frequency Plus Negative Frequency	The number of positive and negative differences; i.e, the number of times the difference between the importance weight and the possibility weight were not 0
Total Importance	Sum of weighted responses for each item on the importance scale
Total Possibility	Sum of weighted responses for each item on the possibility scale

In addition, various a priori combinations of importance-possibility responses were generated to determine their usefulness in predicting retention. The generation of these scores involved assigning new values to combinations of the importance and possibility item responses so that a high value was assigned a response that was considered very important with a better than average or very good chance of attainment for that characteristic. To obtain the three Retention Scores (A, B, and C), the weighted values given below were first assigned to each alternative:

Weight	Importance Scale Response	Weight	Possibility Scale Response
Plus 4	Extremely important	Plus 2	Very good
Plus 3	Somewhat above average in importance	Plus 1	Better than average
Plus 2	Of average importance	Minus 0	Average
Plus 1	Somewhat below average in importance	Minus 1	Less than average
Plus 0	Not important at all	Minus 2	None at all



The Retention Scores are computed as described below:

Retention Score A	Sum of the importance weight times the possibility weight for each item pair
Retention Score B	Sum of importance weight squared times the possibility weight for each pair
Retention Score C	Sum of importance weight cubed times the possibility weight for each item pair

The Importance-Possibility Score is the sum of the weighted values given below for each pair of items on the Job Importance-Job Possibility Scale:

Weight	Importance Scale Responses	Possibility Scale Responses
4	Extremely important or somewhat above average in importance	Very good or better than average
3	Of average importance, below average in importance, or not important at all	Very good, better than average, or average
2	Extremly important or somewhat above average in importance	Less than average or none at all
1	Extremly important or somewhat above average in importance	Average
1	Of average importance, somewhat below average in importance, or not important at all	Less than average or none at all



Table 1. Descriptive Statistics for Career L. tent Scores and Career Status

			Career S	Career Status Group					Career			Career
Score by		Career			Noncareer	1	\$	Total	Criter	e uo i	Total	Validity
Survey Year	₹	as	z	₹	SD	2	₽	os So	<b>∑</b>	es	Z	
Precommission	5.31	12.31	2,986	.38	12.28	2,028	3.34	12.54	99.	.49	4,644	.20
First Year	6.05	17.65	2,388	- 6.43	18.28	1,817	68.	19.01	.57	.49	3,978	.33
Second Year	5.27	16.78	2,178	- 9.30	16.84	1,591	73	18.36	.58	.49	3,536	.40
Third Year	3.18	17.28	2,429	-11.86	15.24	1,612	-2.71	18.07	9.	.49	3,727	4.
Fourth Year	5.25	16.97	2,479	-10.79	14.40	1,266	10	17.94	99	.47	3,545	.43
Fifth Year	2.50	16.41	2,607	- 8.58	11.59	480	90	16.65	86 80	.33	2,794	.27

Note. — The combined N of the Career and Noncareer groups will not be the same as the total sample. The total sample is based only on cases having scores for all measures. The data for the Career and Noncareer groups represents data for all subjects having a Career Intent Score.

<sup>a</sup>Criterion: Career weighted 1; noncareer weighted 0.

Table 2. Means, Standard Deviations, and Validities of the Precommission and Active Duty Career Intent Scores for each Source of Commission

	Career II		Crite	rion			Career I		Crite	rion		
Survey Year	M	SD	M	SD	N	r	М	SD	М	SD	N	r
			AFA	\ \				,	USMA			
Precommission	4.86	11.06	.69	.49	411	.17	.83	10.46	.63	.48	46	.05
First Year	10.26	15.85	.70	.46	392	.22	5.52	16.23	.66	.47	44	.20
Second Year	7.44	15.10	.71	.45	363	.24	6.55	16.52	.66	.47	44	.35
Third Year	2.58	15.39	.70	.46	340	.29	.36	15.47	.67	.47	42	.33
Fourth Year	2.72	15.86	.76	.43	327	.32	2.30	16.32	.73	.44	30	.03
Fifth Year	1.19	13.84	.83	.38	295	.35	2.37	11.00	.87	.34	30	.06
			OTS						USNA			
Precommission	2.17	12.37	.48	.50	1,289	.24	3.73	11.38	.65	.48	48	01
First Year	- 3.76	18 64	.49	.50	1,238	.27	4.40	16.57	.64	.48	47	.50
Second Year	- 5.72	17.ú8	.48	.50	1,056	.39	2.44	16.74	.67	.47	43	.51
Third Year	- 6.11	17.44	.50	.50	1,001	.43	.04	16.59	.67	.47	45	.52
Fourth Year	£ 2.23	17.73	.60	.49	927	.48	.53	16.14	.76	.43	38	.41
Fifth Year	1.55	16.62	.83	.38	695	.42	- 3.84	12.97	.81	.39	37	.54
		0	TS-AI	ECP					ocs			
Precommission	11.31	10.40	.90	.30	118	.14	°.15	10.64	.80	.40	96	.18
First Year	9.81	16.84	.89	.31	121	.27	11.70	15.85	.80	.40	91	.33
Second Year	9.6	16.43	.93	.26	82	.27	10.75	15.74	.82	.38	80	.21
Third Year	8.98	17.06	.93	.26	82	.33	9.17	18.32	.84	.37	75	.27
Fourth Year	10.57	16.70	.92	.27	104	.42	13.44	15.63	.90	.31	77	.26
Fifth Year	6.25	14.95	.98	.14	95	.15	10.90	16.52	.97	.17	70	.31
		1	AFRO	TC				AFR	OTC-	Cat C		
Precommission	4.14	12.81	.58	.49	2,282	.21	- 3.00	11.28	.88	.33	354	.11
First Year	.73	19.06	.56	.50	2,040	.32	- 2.60	21.73	.60	.49	5	.82
Second Year	64	18.52	.58	.49	1,861	.38	-11.71	17.90	.71	.45	7	.88
Third Year	- 2.60	18.32	.59	.49	1,972	.42	- 6.91	17.32	.83	.38	170	.10
Fourth Year	.07	18.13	.62	.48	1,811	.45	- 6.53	16.63	.87	.34	231	.19
Fifth Year	1.73	16.84	.89	.31	1,298	.24	- 8.92	15.94	.94	.24	274	.01

Table 3. Descriptive Statistics for Retainability Score and Career Status

			Career Sta	tus Grou	IP.					reer ntus		Retainability Score
Retainability		Caree	r	N	loncar	<b>98</b> r	Tot	tal		eriona	Total	Validity
Score by Survey Year	М	SD	N	M	SD	N	М	SD	М	SD	N	r
Precommission	18.49	.73	2,782	18.66	.77	1,845	18.45	.75	.60	.49	4,644	.08
First Year	18 49	.72	2,291	18.13	.81	1,716	18.34	.78	.57	.49	3,878	.23
Second Year	18.43	.74	2,067	17.97	.85	1,490	18.24	.82	.58	.49	2,536	.28
Third Year	18.31		2,292	17.77	.86	1,499	18.10	.84	.60	.49	3,727	.31
Fourth Year	18.32	.73	2,353	17.66	.90	1,205	18.09	.85	.66	.47	3,545	.37
Fifth Year	18.22	.78	2,467	17.50	.95	340	18.13	.83	.88	.33	2,794	.28

Note. — The combined N of the Car. er and Noncareer groups will not be the same as the total sample. The total sample is based only on cases having scores for all measures. The data for the Career and Noncareer groups represents data for all subjects having a Retainability Score.



<sup>&</sup>lt;sup>2</sup>Criterion: Career weighted 1; noncareer weighted 0.

Table 4. Means, Standard Deviations, and Validities of the Retainability Score for Each Source of Commission

	Retainal Scor		Crite	rion			Retaina Sco		Crite	ri on		
Survey Year	м	SD	M	SD	N	r	м	SD	М	SD	N	r
			Al	FA					USM	<b>A</b>		
Precommission	18.45	.60	.69	.46	411	.10	18.30	.66	.60	.48	46	.04
First Year	18.50	.75	.70	.46	392	.17	18.28	.75	.66	.47	44,	.14
Second Year	18.31	.82	.71·	.45	363	.15	18.29	.82	.66	.47	44	.28
Third Year	18.14	.75	.70	.46	340	.23	18.07	.88	.67	.47	42	.17
Fourth Year	18.14	.92	.76	.43	327	.26	17.92	1.01	.73	.44	30	.33
Fifth Year	18.10	.94	.83	.38	295·	.34	18.19	.59	.87	.34	30	.08
			0	TS					USN	<b>iA</b>		
Precommission	18.38	.78	.48	.50	1,289	.10	18.46	.62	.65	.48	48	.05
First Year	18.21	.75	.49	.50	i,238	.21	18.20	.81	.64	.48	47	.38
Second Year	18.13	.81	.48	.50	1,056	.32	18.13	.62	.67	.47	43	.42
Third Year	18.01	.86	.50	.50	1,001	.34	17.91	.75	.67	.47	45	.47
Fourth Year	18.03	.85	.60	.49	927	.41	18.00	.90	.76	.43	38	.44
Fifth Year	18.16	.81	.83	.38	695	.39	17.96	.68	.81	.39	37	.34
			OTS-	AECP				•	OC	S		
Precommission	18.42	.77	.90	.30	118	.01	18.35	.59	.80	.40	96	.15
First Year	18.38	.69	.89	.31	121	.08	18.58	.80	.80	.40	91	.22
Second Year	18.34	.68	.93	.26	82	.04	18.49	.71	.82	.38	80	.08
Third Year	18.40	.81	.93	.26	82	.08	18.32	.71	.84	.37	75	.13
Fourth Year	18.45	.66	.92	.27	104	.32	18.59	.62	.90	.31	77	.22
Fifth Year	18.25	.62	.98	.14	95	.16	18.46	.68	.97	.17	70	.31
			AFR	ОТС				AF	ROTO	C-Cat C		
Precommission	18.53	.73	.58	.49	2,282	.10	18.24	.84	.88	.33	354	.03
First Year	18.37	.79	.56	.50	2,040	.24	18.42	.52	.60	.49	5	.45
Second Year	18.27	.84	.58	.49	1,861	.27	18.10	.66	.71	.45	7	.55
Third Year	18.13	.82	.59	.49	1,972	.34	17.94	1.00	.83	.38	170	.10
Fourth Year	18.11	.84	.62	.48	1,811	.39	17.92	.78	.87	.34	231	.18
Fifth Year	18.17	.82	.89	.31	1,298	.25	17.80	.88	.94	.24	274	.13



Table 5. Means and Standard Deviations of Experimental Scores: Total Sample

				Survey	Years		
Experimental Scores	Item	Pre	1st	2nd	3rd	4th	5 th
mportance Motivators	M	39.31	39.86	39.83	39.88	39.64	39.2
inportance meaning	SD	4.74	4.59	4.62	4.55	4.52	4.6
mportance Dissatisfiers	M	45.71	46.17	46.23	46.43	46.20	45.4
inportance = iosatronero	SD	5.87	5.69	5.66	5.59	5.67	5.5
ossibility Motivators	M	36.23	33.64	32.41	31.42	31.61	32.1
ossibility motivators	SL	5.23	5.80	5.85	5.61	5.68	5.4
ossibility Dissatisfiers	M	44.75	42.20	41.38	40.60	40.71	40.7
OSSIDILITY DISSELECTS	SD	5.22	5.03	5.01	4.97	5.01	4.8
Difference Imp-Poss Motivators	M	3.08	6.22	7.42	8.46	8.03	7.0
Miletence mip-1 oss Motivators	SD	5.49	6.11	6.39	6.29	6.39	6.2
N.C Imm Boss Dissortisfiers	M	.96	3.97	4.85	5.83	5.49	4.6
Difference Imp-Poss Dissatisfiers	SD	6.15	6.56	6.62	6.68	6.80	6.6
	M	75.54	73.49	72.24	71.30	71.25	71.3
Cotal Motivators			8.49	8.39	8.06	8.03	7.9
	SD	8.33	88.37	87.61	87.03	86.91	86.1
Total Dissatisfiers	M	90.47		8.39	8.21	8.27	8.0
	SD	9.25	8.50			13.52	11.
Total Score	M	4.03	10.19	12.27	14.30		11.
	SD	10.40	11.46	11.75	11.64	11.83	7.
Negative Score	M	8.16	7.07	6.82	6.97	7.30	
	SD	5.54	4.76	4.64	4.55	4.70	4.
Negative Frequency	M	5.60	4.79	4.52	4.41	4.59	4.
	SD	3.01	2.70	2.56	2.44	2.48	2.
Zero Frequency	M	8.94	7.56	7.12	6.55	6.61	6.
	SD	3.77	3.43	3.46	3.31	3.36	3.
Positive Score	M	12 19	17.26	19.09	21.27	20.83	19.
	SD	7.81	9.38	9.90	10.05	10.20	9.
Positive Frequency	M	8.46	10.65	11.35	12.04	11.81	11.
	SD	4.09	4.07	4.06	3.81	3.89	3.
Positive Freq plus Zero Freq	M	17.40	18.21	18.48	18.59	18.41	18.
••	SD	3.01	2.70	2.56	2.44	2.48	2.
Positive Freq plus Neg Freq	M	14.06	15.44	15.88	16.45	16.39	16
11 0 1	SD	3.77	3.43	3.46	3.31	3.36	3.
Total Importance	M	85.02	86.03	86.06	86.31	85.84	84
	SD	9.37	9.02	9.05	8.92	8.99	8
Total Possibility	M	80.99	75.84	73.79	72.02	72.32	72
10tm	SD	9.55	9.97	9.98	9.66	9.78	9
Retention Score A	M	40.35	24.41	17.96	11.32	11.95	13
	SD	32.41	33.66	33.60	33.17	33.94	32
Retention Score B	M	137.38	82.47	60.01	35.70	37.34	43
Recention Scote D	SD	118.57	121.87	121.27	120.17	123.57	116
Retention Score C	M	486.75	289.57	208.61	118.32	123.18	114
referrior Scole C	SD	447.52	455.62	452.05	449.06	463.42	435
Immonton on Bossibalitas Conse	M M	63.95	58.61	56.68	55.02	55.30	55
Importance-Possibility Score	M SD	10.69	10.33	10.11	9.54	9.62	9
	0.0	4,644	3,978	3,536	3,727	3,545	2,7

Table 6. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: Total Sample

	Survey Years								
Experimental Scores	Pre	1 st	2nd	3rd	4th	5 th			
Importance Motivators	.01	01	.02	.03	.02	01			
Importance Dissatisfiers	04	04	<b>05</b>	04	03	.00			
Possibility Motivators	.12	.22	.27	.31	.33	.1			
Possibility Dissatisfiers	.07	.16	.20	.23	.25	.1′			
Difference Imp-Poss Motivators	11	22	23	26	28	10			
Difference Imp-Poss Dissatisfiers	09	16	20	<b>−.20</b>	20	1.			
Total Motivators	.08	.15	.20	.24	.25	.1			
	.01	.07	.08	. 1 ت.	.13	. 1			
Total Dissatisfiers	11	20	24	16	27	<b>l</b>			
Total Score	.04	.01	01	01	<b>05</b>	1			
Negative Score	.07	.08	.07	.0′	.08	.0			
Negative Frequency	.05	.17	.21	.27	.22	.1			
Zero Frequency	12	25	29	31	33	2			
Positive Score	12 10	20 20	23	23	24	1			
Positive Frequency		08	<b>07</b>	07	08	.0			
Positive Freq plus Zero Freq	.07	08 17	21	22	22	l			
Positive Freq plus Neg Freq	05		21 02	01	01	C			
Total Importance	02	03	02 .26	.30	.32	.1			
Total Possibility	.10	.21		.33	.35	.2			
Retention Score A	.10	.22	.28	.33	.35	.2			
Retention Score B	.10	.22	.28			.2			
Retention Score C	.09	.21	.27	.32	.34	.1			
Importance-Possibility Score	.10	.19	.22	.24	.25				
Number of cases	4,644	3,978	3,536	3,727	3,545	2,79			

Table 7. Classification of Items According to Herzberg's Theory

Classification	Job Importance-Job Possibility Items
Dissatisfier	Adequate job security
Dissatisfier	Work under consistent and intelligent personnel policies
Motivator	Have a say in what happens to you
Motivator	Feel that you are accomplishing something
Dissatisfier	Do a great deal of traveling
Motivator	Become proficient in a specialized type of work
Motivator	Be in a competitive situation
Dissatisfier	Obtain a good salary
Dissatisfier	Have a definite work schedule
Dissatisfier	Settle down in a certain area
Motivator	Be promoted on the basis of ability
Dissatisfier	Spend a lot of time with my family
Motivator	Advance at a fairly rapid rate
Dissatisfier	Be able to retire at an early age
Dissalisfier	Have competent supervisors
Dissatisfier	Make a lot of money
Motivator	Be given recognition for work well done
Motivator	Fly or continue flying
Dissatisfier	Do work which my wife and family can be proud of
Dissatisfier	Have prestige or social status
Dissatisfier	Keep very busy
Motivator	Variety in job activities
Monvator	Achieve leadership in my tield



Table 8. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: AFA

			Survey	Years		
Experimental Scores	Pre	1 st	2nd	3rd	4th	5 th
Importance Motivators	.01	.02	01	.07	.07	.07
Importance Dissatisfiers	05	03	09	.06	03	.01
Possibility Motivators	.13	.18	.12	.21	.19	.21
Possibility Dissatisfiers	.06	.02	.03	.09	.18	.13
Difference Imp-Poss Motivators	10	15	10	14	10	11
Difference Imp-Poss Dissatisfiers	08	05	10	01	14	08
Total Motivators	.09	.13	.07	.18	.17	.18
Total Dissatisfiers	01	01	05	.10	.08	.08
Total Score	11	10	11	08	14	11
Negative Score	.04	05	.02	08	04	11 12
Negative Frequency	.08	.01	.04	.01	.03	12 02
Zero Frequency	.06	.15	.09	.07	.10	02
Positive Score	12	16	13	13	20	21
Positive Frequency	11	13	10	<b>0</b> 7	20 11	21 09
Positive Freq plus Zero Freq	08	01	04	01	11 03	0 <del>9</del> .02
Positive Freq plus Neg Freq	06	15	<b>39</b>	07	03 10	12
Total Importance	03	01	06	.08	10 .02	−.12 <sub>-</sub> 04
Total Possibility	.11	.12	.08	.06 .17	.02	.19
Retention Score A	.13	.14	.11	.20	.25	.24
Retention Score B	.13	.15	.11	.20		
Retention Score C	.12	.15	.11	.20	.26	.25
Importance-Possibility Score	.14	.13	.07	.14	.26 .10	.25 .13
Number of Cases	411	392	363	340	327	295



Table 9. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: OTS

	Survey Years							
Experimental Scores	Pre	1 st	2nd	3rd	4th	5 th		
Importance Motivators	02	04	.03	<b>–.00</b>	01	08		
Importance Dissatisfiers	.00	.01	.00	03	01	0		
Possibility Motivators	.13	.15	.24	.27	.34	.2		
Possibility Dissatisfiers	.10	.16	.22	.26	.29	.2		
Difference Imp-Poss Motivators	13	17	19	23	31	2		
Difference Imp-Poss Dissatisfiers	.07	12	17	22	22	2		
Total Motivators	.07	.09	.19	.20	.23	.1		
Total Dissatisfiers	.05	.10	.12	.14	.16	.1		
Total Score	12	16	20	25	29	2		
Negative Score	01	05	11	11	11	1		
Negative Frequency	.06	.03	.00	.00	.06	.0		
Zero Frequency	.08	.15	.21	.24	.28	.2		
Positive Score	16	21	28	34	39	3		
Positive Frequency	12	14	19	21	<b>27</b>	2		
Positive Freq plus Zero Freq	06	03	.00	.00	06	(		
Positive Freq plus Neg Freq	08	15	21	<b>24</b>	<b>28</b>	2		
Total Importance	01	01	.01	02	01	0		
Total Possibility	.12	.17	.25	.29	.34			
Retention Score A	.13	.19	.28	.33	.39	.:		
Retention Score B	.13	.19	.28	.33	.39	•		
Retention Score C	.12	.18	.27	.33	.39			
Importance-Possibility Score	.12	.14	.20	.21	.26	•		
Number of Cases	1,289	1,238	1,056	1,001	927	6		



Table 10. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: OTS-AECP

01 05 09 04 08 05 04 07 05  02 	.11	20 .03 .05	.01 .06 .30 .23 28 14 .21 .17 23 .01	.15 10 .01
01 05 09 04 08 05 04 07 07 05 	.1208 .08 .010412 .12 .0302 .08	07 .13 16 23 20 .03 .05 23	.06 .30 .23 28 14 .21 .17 23	.16 .15 .14 16 02 .08 .15 10
05 09 04 08 05 05 04 07 05 	.1208 .08 .01041212	07 .13 16 23 20 .03 .05 23	.06 .30 .23 28 14 .21 .17 23	.16 .15 .14 16 02 .08 .15 10
09 04 08 05 04 07 05  02 	.08 .08 .01 - .04 - .12 .12 .03 - .02 .08	.13 16 23 20 .03 .05 23	.30 .23 28 14 .21 .17 23	.15 .14 16 02 .08 .15 10
04 08 05 04 07 05 02	.01 - .04 - .12 . .12 . .03 - .02 . .08	16 23 20 .03 .05 23	.23 28 14 .21 .17 23	.14 16 02 .08 .15 10
08 05 04 07 05 02	.04 - .12 .12 .03 - .02 .08	23 20 .03 .05 23	28 14 .21 .17 23	16 02 .08 .15 10
05 04 07 05 	.04 - .12 .12 .03 - .02 .08	20 .03 .05 23	14 .21 .17 23	02 .08 .15 10
04 . 07 . 05 02	.12 .12 .03 .02 .08	.03 .05 23 .07	.21 .17 23 .01	.08 .15 10
04 . 07 . 05 02	.12 .03 .02 .08	.05 23 .07	.17 23 .01	.06. 15. 10. 01.
07 . 05 02	.03 – .02 .08	23 .07	23 .01	10 .01
05 –. 02 –.	.02 .08	.07	.01	.01
02 –.	.08			
			.01	
·	.01	.05	.10	.02
06.			28	12
			26 09	01
			0 <del>9</del> 01	.01
02 –.				
		.09	10 .04	02
•		.16	.28	.04
•				.16
•				.19
				.20
	_			.20
	<del></del>			.03 95
(	.07 .	07 .14 07 .15 01 .04	07     .12     .20       07     .14     .20       07     .15     .20       01     .04     .08	.07 .12 .20 .33 .07 .14 .20 .34 .07 .15 .20 .34



Table 11. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: AFROTC (Cat C Omitted)

<del>-</del>	Survey Years									
Experimental Scores	Pre	1 st	2nd	3rd	4th	5 th				
Importance Motivators	.03	.01	.02	.06	.02	.01				
Importance Dissatisfiers	02	05	05	05	03	.00				
Possibility Motivators	.16	.25	.29	.36	.37	.16				
Possibility Dissatisfiers	.11	.18	.22	.24	.25	.13				
Difference Imp-Poss Motivators	13	23	25	28	31	13				
Difference Imp-Poss Dissatisfiers	11	18	21	22	21	<b>0</b> 9				
Total Motivators	.11	.17	.21	.28	.28	.11				
Total Dissatisfiers	.05	.07	.10	.11	.13	.07				
Total Score	13	23	25	28	29	12				
Negative Score	.04	.03	.00	~.03	04	11				
Negative Frequency	.08	.10	.08	.09	.08	03				
Zero Frequency	.09	.19	.24	.25	.25	.15				
Positive Score	15	27	30	33	35	20				
Positive Frequency	14	23	25	28	27	10				
Positive Freq plus Zero Freq	08	10	08	09	08	.03				
Positive Freq plus Neg Freq	<b>09</b>	19	24	25	25	15				
Total Importance	.00	03	02	.00	- 01	.00				
Total Possibility	.14	.23	.27	.33	.34	.16				
Retention Score A	.14	.24	.29	.36	.36	.22				
Retention Score B	.13	.24	.29	.36	.36	.23				
Retention Score C	.13	.23	.28	.35	.35	.23				
Importance-Possibility Score	.13	.22	.24	.28	.27	.08				
Number of Cases	2,282	2,040	1,861	1,9 <b>7</b> 2	1,811	1,298				



Table 12. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: USMA

			Survey	Years		
Experimental Scores	Pre	1 st	2nd	3rd	4th	5 th
Importance Motivators	.04	.04	.09	.03	.30	28
Importance Dissatisfiers	.00	11	18	.00	.37	.28
Possibility Motivators	.00	.25	.16	.19	01	04
Possibility Dissatisfiers	.04	.06	.19	.14	.11	04
Difference Imp-Poss Motivators	.04	31	08	16	.28	21
Difference Imp-Poss Dissatisfiers	03	14	27	10	.27	19
Total Motivators	.02	.13	.15	.14	.20	20
Total Dissatisfiers	.02	04	.00	.07	.32	19
Total Score	.00	24	20	15	.30	22
Negative Score	06	06	10	16	31	.16
Negative Frequency	03	.05	03	07	24	.23
Zero Frequency	.11	.26	.25	.15	10	01
Positive Score	05	30	33	27	.17	19
Positive Frequency	07	25	19	09	.29	14
Positive Freq plus Zero Freq	.03	05	.03	.07	.24	23
Positive Freq plus Neg Freq	11	26	25	15	.10	.01
Total Importance	.02	09	04	.02	.36	32
Total Possibility	.02	.18	.20	.19	.05	04
Retention Score A	.00	.21	.27	.29	.07	03
Retention Score B	.00	.22	.29	.29	.05	00
Retention Score C	.00	.21	.30	.28	.04	09
Importance-Possibility Score	07	.22	.17	.10	02	.13
Number of Cases	46	44	44	42	30	30



Table 13. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: USNA

	Survey Years								
Experimental Scores	Pre	1 st	2nd	3rd	4th	5 th			
Importance Motivators	28	04	09	02	.14	07			
Importance Dissatisfiers	.00	08	06	.01	.22	13			
Possibility Motivators	.06	.34	27	.22	50	.52			
Possibility Dissatisfiers	02	.20	19	.17	.18	.38			
Difference Imp-Poss Motivators	26	35	15	18	24	40			
Difference Imp-Poss Dissatisfiers	.01	22	17	09	.11	33			
Total Motivators	13	.24	24	.14	.39	.32			
Total Dissatisfiers	01	.06	.08	.10	.26	.14			
Total Score	13	32	18	15	09	.40			
Negative Score	.13	07	23	17	28	.21			
Negative Frequency	.14	10	06	01	19	.30			
Zero Frequency	11	.47	.39	.26	.25	.16			
Positive Score	08	37	32	26	26	40			
Positive Frequency	01	38	29	17	06	30			
Positive Freq plus Zero Freq	14	.19	06	.01	.19	30			
Positive Freq plus Neg Freq	.11	.47	39	26	25	16			
Total Importance	13	08	.01	.00	.20	12			
Total Possibility	.02	.30	.26	.23	.40	.50			
Retention Score A	01	.32	.37	.33	.40	.50			
Retention Score B	02	.32	.38	.35	.41	.49			
Retention Score C	03	.32	.38	.36	.42	.49			
Importance-Possibility Score	02	.30	.24	.34	.33	.32			
Number of Cases	48	47	43	45	38	37			



کر نور ۱

Table 14. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: OCS

			Survey	Years		
Experimental Scores	Pre •	1 st	2nd	3rd	4th	5th
Importance Motivators	.00	.06	.04	07	01	.21
Importance Dissatisfiers	.05	.19	.10	.21	05	.14
Possibility Motivators	.03	.20	.05	.17	.30	.21
Possibility Dissatisfiers	.03	.13	.13	.27	.17	.20
Difference Imp-Poss Motivators	02	16	01	20	31	04
Difference Imp-Poss Dissatisfiers	.02	.10	.00	05	16	04
Total Motivators	.02	.16	.05	.07	.19	.24
Total Dissatisfiers	.05	.20	.14	.31	.08	.21
Total Score	.00	02	.00	13	24	05
Negative Score	14	10	06	.08	.11	01
Negative Frequency	04	09	05	.08	.08	.11
Zero Frequency	.03	.20	.05	.04	.13	.04
Positive Score	08	11	04	13	25	06
Positive Frequency	.00	08	.00	09	16	11
Positive Freq plus Zero Freq	.04	.09	.05	08	08	11
Positive Freq plus Neg Freq	03	20	05	04	13	04
Total Importance	.03	.15	.08	.10	03	.20
Total Possibility	.03	.19	.10	.24	.26	.23
Retention Score A	.09	.20	.12	.18	.27	.22
Retention Score B	.09	.19	.13	.17	.28	.20
Retention Score C	.08	.18	.13	.16	.28	.19
Importance-Possibility Score	.11	.19	.07	.27	.23	.24
Number of Cases	96	91	80	75	77	70



Table 15. Validities of Experimental Scores with Career/Noncareer Status as of December 1969: AFROTC-Cat C

			Survey	Years		
Experimental Scores	Pre	1st	2nd	3rd	4th	5 th
Importance Motivators	.03	.00	.33	.06	.18	.09
Importance Dissatisfiers	.00	14	12	.01	.00	.09
Possibility Motivators	.06	.67	.71	.09	.16	.00
Possibility Dissatisfiers	03	.50	.62	.04	.11	.02
Difference Imp-Poss Motivators	03	86	49	05	05	.05
Difference Imp-Poss Dissatisfiers	03	50	48	03	09	.06
Total Motivators	.05	.40'	.75	.10	.21	.05
Total Dissatisfiers	.02	.29	.33	.03	.06	.07
Total Score	<b>03</b>	69	62	05	08	.0€
Negative Score	.01	.23	.28	06	05	16
Negative Frequency	.02	.53	.51	07	01	08
Zero Frequency	.03	.75	.58	.05	.11	.01
Positive Score	04	<b>77</b>	70	07	12	.00
Positive Frequency	<b>−.04</b>	76	59	01	10	.04
Positive Freq plus Zero Freq	02	53	51	.07	.01	.08
Positive Freq plus Neg Freq	03	75	58	05	11	01
Total Importance	.01	<b>−.07</b>	.06	.03	.08	.10
Total Possibility	.05	.60	.74	.08	.15	.01
Retention Score A	.04	.63	.75	.09	.17	.03
Retention Score B	.04	.63	.71	.10	.17	.0:
Retention Score C	.03	.63	.67	.10	.17	.0:
Importance-Possibility Score	.04	.72	.69	.04	.14	0
Number of Cases	354	5	7	170	231	274



Security Classification						
DOCUMENT CONT			wordl second is almosticad.			
(Security classification of title, body of abstract and indexing	annotation must be e	ntered when the o	verall report is classified)			
1 ORIGINATING ACTIVITY (Corporate author)		28. PEPORT SECURITY CLASSIFICATION				
Personnel Research Division		Uncalssif	ied			
Air Force Human Resources Laboratory		25 GROUP				
Lackland Air Force Base, Texas 78236						
3 REPORT TITLE						
DEVELOPMENT AND VALIDATION OF SCORES TO PRE	DICT OFFICER C	AREER STATU	Js 			
4 OESCRIPTIVE NOTES (Type of report and inclusive dates)						
S AUTHORIS) (First name, middle initial, fast name) Faye Shenk						
6 REPORT DATE	78. TOTAL NO O		7b. NO OF REFS			
March 1973	23		9			
SE CONTRACT OR GRANT NO	90. OF INATOR	S REPORT NUME	3ER(5)			
	A Frience	2.1				
b. PROJECT NO 7719	AFHRL-TR-7	J-1				
c. Task No. 771907  d. Work Unit No. 77190727	9b. OTHER REPO thie report)	RT NO(S) (Any of	ther numbers that may be assigned			
Approved for public release; distribution unlimited.						
11. SUPPLEMENTARY NOTES	12. SPONSORING		VITY			
	Personnel Re	search Division				
	Air Force Hu	man Resources	Laboratory			
	Lackland Air	Force Base, Tex	xas 78236			
13 ABSTRACT						

During 1963 a long-term study of officer input, from the principal Air Force commissioning sources, was initiated. This study was designed to determine the predictability of an officer's career decision and to evaluate relationships between career intent, various demographic, environmental and attitudinal factors, and career status. This report presents the development and validation of various scores designed to predict career status.

Survey data were collected from individuals before they entered active duty, and annually, through five years of active military service. The scores designed to predict career status were determined from each individual's yearly survey responses. Generally, the relationship between career status and the scores based on responses prior to commissioning were quite low; however, there was a definite increase in prediction after the subjects experienced active duty. The largest increase in predictability occurred during the first two years of active duty. This seems to indicate a plateau in the subject's attitude toward the military career. Offer of Air Force opportunities such as education, training, and Regular commissions might be more effective at this point, than at the time of commissioning. In addition, from an economical standpoint, the Air Force might realize considerable savings in training costs by sending those junior officers most likely to remain on active duty to the more expensive educational and training programs. The Career Intent Score was the measurement device most predictive of future career status although correlations were only moderate



DD FORM 1473

Unclassified

Security Classification

Unclassified

USAF Precommission/Active Duty Survey Career/non-career status validity Importance-Possibility Scale  ERIC Clearinghouse  JUL 1 7 1973  on Adult Education	SAF Precommission/Active Duty Survey precr/non-career status lidity prortance-Possibility Scale  ERIC Clearinghouse  JUL 1 7 1973
USAF Precommission/Active Duty Survey Career/non-career status validity Importance-Possibility Scale  ERIC Clearinghouse  JUL 1 7 1973	SAF Precommission/Active Duty Survey areer/non-career status lidity aportance-Possibility Scale  ERIC Clearinghouse  JUL 1 7 1973