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A LONGITUDINAL ANALYSIS OF THE
INSTITUTIONAL-OCCUPATIONAL
ORIENTATION MEASURES ON THE
1977 AND 1980 USAF QUALITY
OF LIFE SURVEYS

Eric H. Tomlin, Captain, USAF

LSSR 72-80

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Dr. Charles C. Moskos, Jr., postulated in 1976 that the military was moving from an institution model (self-sacrifice) toward an occupation model (self-interest). The concepts of the institution and occupation models were operationalized, tested and measured for the Air Force with a set of questions included in the 1977 Quality of Air Force Life Survey. The same questions were included in the 1980 Quality of Air Force Life Survey. The primary purpose of this research was to test the results from both surveys to determine if a measurable change has in fact occurred. Sampled members of the Air Force were found to be shifting more toward an occupational orientation between 1977 and 1980. However, sampled members with between 0-5 and 16-20 years of service also increased in the institutional orientation. A secondary purpose of this research was to analyze an opposing view of the institutional orientation using Vroom's expectancy theory valence model. The valence model premise of self-interest instead of self-sacrifice as a descriptor of the institutional model was found to be partially operative for enlisted AFSC's where there is no strong civilian counterpart to the Air Force job, but not for officer AFSC's.

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A LONGITUDINAL ANALYSIS OF THE INSTITUTIONAL-OCCUPATIONAL
ORIENTATION MEASURES ON THE 1977 AND 1980
USAF QUALITY OF LIFE SURVEYS

A Thesis

Presented to the Faculty of the School of Systems and Logistics
of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the Requirements for the
Degree of Master of Science in Systems Management

By

Eric H. Tomlin, BSIE
Captain, USAF

September 1980

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This thesis, written by

Captain Eric Tomlin

has been accepted by the undersigned on behalf of the
Faculty of the School of Systems and Logistics in partial
fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN SYSTEMS MANAGEMENT

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CHAPTER I

INTRODUCTION

Background

It has been postulated by military sociologist, Dr. Charles C. Moskos, Jr., that the military is moving from "a predominately institutional format to one more resembling that of an occupation" (Moskos, 1977:42). This concept was first presented in an address by Dr. Moskos at the Fifth Annual Symposium of Psychology in the Air Force sponsored by the Air Force Academy, April 8-10, 1976. In his presentation he defined the institutional and occupational model, the rationale leading to his conclusion, and the implication that a shift to an occupational model will lead to organizational changes in the military system.

To examine this concept more closely, working definitions of institution and occupation are necessary.

Institution: based upon the notion of self-sacrifice; legitimated in terms of values and norms, i.e., a purpose transcending individual self-interest in favor of a presumed higher good; following a calling; sacrifice of monetary advantage that would be enjoyed outside the organization in the interest of the superordinate organization purpose, which leads to heightened self-esteem and esteem within society; compensation is provided by an array of social supports and benefits which clearly indicate to all that the institution takes care of its own and that they are set apart from the rest of society; institutional paternalism, members have complete trust in their leaders, and are assured of equity [Moskos, 1977:42].

Occupation: concerned primarily with self-interest; legitimated in terms of the market place, i.e., what are the prevailing wages and benefits earned for similar work in industry; some voice in the determining of appropriate salary and working conditions (industrial democracy); rights counter-balanced by responsibilities to meet contractual obligations; primary allegiance to self, rather than to the organization and its goals; advancement of group interests through the practices of trade unionism [Moskos, 1977:42].

The Chairman of the Joint Chiefs of Staff at that time, General David C. Jones, subsequently learned of this concept, recognized the relevance of the "way of life" versus "just a job" argument and of such a shift toward "just a job". He quickly began applying the concept in testimonies in favor of preservation of institutional reinforcements in military life (Craver, 1977; Jones 1978) and in other speeches and articles. Other military leaders and authors on military subjects have shown an interest in this concept and have involved themselves in the value promotion of institutional reinforcements (Gates, 1977a, 1977b; Hagemann, 1978; Davis 1979).

Just what this institutional model is and how the military may have moved from this to an occupational model was treated extensively by Hagemann (1978). A recap of the major points in light of the current state of affairs, however does seem in order.

The Institutional View

The traditional view of the military profession is that of an institution and even a "way of life". The

commitment to serve by the individual and the control over and individual is more than the normal employer-employee relationship. Liability for combat exposure, mobility, round-the-clock duty, a high level of discipline and surrender of many civil rights are unique to military service (Jones, 1978). Except for the extremely limited combat liability for women, these factors apply to every man and woman in uniform, whether the individual serves for a single tour or for a full career. Self-interest is theoretically subdued in favor of group goals (mission accomplishment). For those who serve longer than the initial commitment, this has become an accepted theory. "An Air Force career isn't just another job--its one that calls for a special kind of motivation" (Davis, 1979:1). The concept is that anything required is part of the job.

The traditional cash-in-hand disadvantage of the past was offset by a variety of distinctly military institutional supports and benefits: Commissaries, Base Exchanges, Deferred Annuities, Medical and Dental Care, "People" programs and others (Moskos, 1978; Gates, 1977a). This "taking care of its own" is indicative of the concept of the military as an institutional model. Before the 1960s, integration of professional and even residential life was almost complete (Janowitz, 1960).

Shifting to an Occupational View

The view of the military with aspects of an

occupational model can be seen in the recent trend toward unionization (now illegal) and the increasing use of civilians to perform the traditional military tasks (Moskos, 1977). The illegalization of the union may unwittingly push organization activities away from the mainstream unions toward more politicized groups; even to those that see themselves as a continuation of the troop dissent movements during the Vietnam War years (Moskos, 1978). The concept of "block voting" is an open alternative to unionization in an effort to effect change or maintain the status quo. Conversion of military positions goes on. In the Air Force, almost 53,000 military were replaced by civilians since 1965 (Hagemann, 1978). In addition, civilians have replaced military in direct military operational roles such as training elements of the Saudi Arabian Forces and contracting the American Monitoring Force in the Sinai (Moskos, 1977). Moskos believes these are two symptoms that identify a shift from an institutional to an occupational model.

This shift may be a result of trends in a number of areas occurring simultaneously. The 1970s have witnessed profound changes in the military of the United States. The draft was abandoned in favor of the All Volunteer Force (AVF). With this has come the concept of pay compatibility with the civilian sector. The armed forces now compete in the market place for the talents of individuals just as any big business does. The standards of "duty", "honor", and "country", may

have been replaced by the self-interest of monetary value (Moskos, 1977). There are advocates of a single salary pay system, like any business uses, in place of the various pay and allowance categories. Additionally, the high cost of the AVF has stimulated interest in elimination or reduction of Commissary, Base Exchange, Deferred Annuity, and other benefits. The perceptions of military members and their families may well be that the special benefits that set the military apart and compensate for the special hardships are diminishing.

High technology has invaded all aspects of the military, particularly the Air Force. Weapon systems are complex. Minimum levels of education and special knowledge have increased. Again, in the Air Force this has become profound. There has developed in much of the Air Force a vast engineering and logistical organization. The parallels to a civilian industrial establishment are most striking. The military work environment has even drawn closer to the eight-to-five 5-day work week of most of society (Yarmolinsky, 1971). Air Force leadership now has a special concern with maintaining the ethos of the military institution and heroic fighter spirit (Janowitz and Moskos, 1979).

Decreasing on-base accommodations require most military families and even single individuals to live beyond the commanding influence found on and sometimes near

a military installation. Military members are moving less often, allowing people to become more closely associated with civilian community influence and the inherent occupational model influence (Little, 1971). Legal decisions have narrowed the purview of military jurisdiction. The courts have accepted to some extent the standards of contract principles in enlisted litigation (Moskos, 1978). Spouses of military members are redefining their roles and resisting participation in customary social functions associated with the community in which they live (Moskos, 1977).

Methods and concerns associated with the maintenance of high discipline and self-sacrifice have given way to concern with high morale and reliance on manipulation persuasion and group consensus (Hagemann, 1978). This may well be a result of changes of management philosophy in the private and public sectors of society.

These events that have occurred and continue to occur may not be exhaustive of the number of trends which are moving the military in general and the USAF in particular, toward an occupational model. However, their spectrum is wide.

Implications of a Shift to the Occupational Model

If a shift is truly occurring in the Air Force, changes in the behavior of personnel should not be unexpected.

For example, in an occupational model, one could expect members to feel freer to move in the market place by terminating (commensurate with service commitments) their employment with the Air Force in favor of another organization if their needs were not met (Janowitz and Moskos, 1979). Members could begin expressing a devotion to their specialized occupational skills in place of generalized institutional skills (anything required is part of the job). General dissatisfaction, a lowering of morale, a decline of involvement could increase as the organizational structure and management philosophy of the institutional model depart further and further from an operational model that is more occupationally oriented.

To understand this better it would be well served to digress to some previous research related to the institutional/occupational models concerning behavior in organizations. These studies were based primarily on organizations employing professional people such as college professors, engineers, scientists and accountants. These people with specialized skills are not unlike officer and enlisted members possessing specialized skills through education and extensive training. The studies centered on manifest and latent organizational roles. Manifest roles are open and recognized as being operative in an organizational behavior. Latent roles are also operative in an organizational behavior but are not recognized for their worth (Gouldner, 1957).

As they are "discovered" and included in evaluations of organizational theory they then become manifest roles.

The Cosmopolitan-Local Parallel

Presented as two latent roles of people in organizations, (Gouldner, 1957) describes the "cosmopolitan" and the "local". The similarity between the cosmopolitan and the occupational orientations, and, the local and the institutional orientations should become clear as these concepts are developed. This and similar studies have also been described as an issue of professional commitment versus organizational commitment (Porter, Lawler and Hackman, 1975).

In his precedent-setting study, drawing from his own research and citing research by Leonard Reisman in 1949 and Vernon Benty in 1950, Gouldner (1957) presented the cosmopolitan as an individual who was oriented toward reference groups outside the employing organization. A local is one who could have reference group orientation within the employing organization. A cosmopolitan was also found more likely to be low on loyalty to the employing organization and high on commitment to specialized role skills. A local on the other hand, was high on loyalty to the organization and low on commitment to specialized role skills (Gouldner, 1957).

These distinctions have real meaning in analyzing behavior and performance. For example, the refusal of a promotion of a (cosmopolitan) scientist perplexes executives.

But, the promotion would take this scientist away from the work being done and the reference to the scientific community at large. To other locals, a promotion is a sign of "making it" in an organization they think highly of (Litterer, 1973).

Perhaps another way of looking at this is in light of Vroom's (1964) expectancy theory. The interest here is with the second level valences for, or attractiveness of, certain second level career outcomes. These outcomes reflect various aspects of the first level outcome of the career itself and the associated valence or attractiveness of this career. The cosmopolitan scientist attaches a negative valence to the promotion since it does not maximize his/her career self-interests of being where the scientific work is really being done and separates him/her from the reference to the scientific community. The local on the other hand, attaches strong positive valence toward the promotion since it tends to maximize his/her self-interest of being recognized by and associated with the organization.

In the Air Force, an occupationally oriented member may not really want to be promoted beyond a certain point because this will take the individual out of the cockpit, out of the laboratory environment or out of the computer programming job into a managerial position that puts too much distance between the member and the reference group or does not allow that individual to maximize his or her

self-interest. Of course the structure of the Air Force does not allow one to forego promotion. Career progression is promotion in grade. After a certain point, promotion generally means a dramatic change in the type of work one does. Those who are strongly occupationally oriented may find the situation intolerable and terminate their employment with the Air Force. Career intent was found to be negatively correlated with the occupational orientation ($-.39$ for all personnel and $-.47$ for first termers) in the baseline survey of this writer's research effort (Stahl, Manley and McNichols, 1978).

Other behavior may be more meaningful when considered in view of the cosmopolitan-local construct. Consider a company in the middle of reorganization with its accompanying transition disturbances. Cosmopolitans may feel that to get their real work done they would have to go elsewhere. Locals, having their reference groups within the organization and loyalties to it, may be more willing to tolerate the shifting and confusion with the recognition that the long run change would benefit the organization (Litterer, 1973).

Other examples include the amount of influence an individual has in an organization or the propensity toward rule tropism and informal sociability. Statistical significance was not high enough to make the cosmopolitan-local construct a predictor in these areas, but trends were

established indicating the constructs usefulness in analysis and future research (Gouldner, 1957). These examples though seem to parallel parts of the definitions by Moskos (discipline, social supports) concerning institutional and occupational orientations. Also, the military has a unique way of reorganizing in that members make frequent moves from one organization to another. Often these organizations have completely different missions or goals.

The validity of two of the basic behavioral aspects of Gouldner's construct, commitment to specialized skills and loyalty to the organization, have been replicated by other researchers and have also been found to be more complex than Gouldner first envisioned (Berger and Grimes, 1973), (Flango and Brumbaugh, 1974). Gouldner's third basic aspect, reference group orientation, has not been reproduced but has instead been found to be capable of independence between inner and outer orientations or reference groups (Friedlander, 1971). These findings indicate a continuum aspect of the cosmopolitan-local construct that was also recognized by the construct's author during further analysis of his own study (Gouldner, 1958). Other researchers agree (Glaser, 1963), (Goldberg, Baker and Rubenstein, 1965) (Friedlander, 1971), (Berger and Grimes, 1973), (Flango and Brumbaugh, 1974), (Stabl, McNichols and Manley, 1979). The construct is not a dichotomy or even a single dimensioned continuum, but can be depicted as in Figure 1.

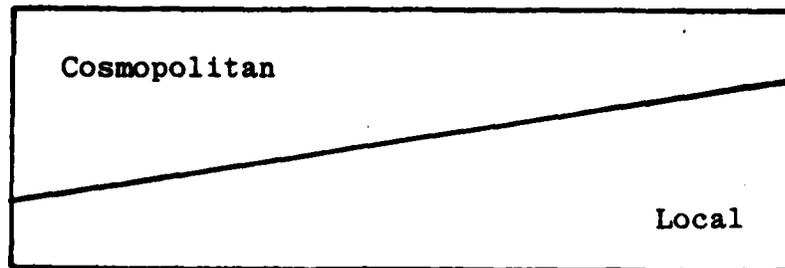


Fig. 1 Cosmopolitan-Local Continuum

This same independence was found in the institutional/occupational orientation of Air Force personnel. In fact, some members were found to be highly oriented in both dimensions as well as having a low orientation in both dimensions (Stahl, et al., 1980). A "zero sum" relationship was not found to be true. Personnel could be committed to the military as an institution and, at the same time, be concerned with specialized skills and rights counterbalanced by responsibilities. Figure 2 illustrates the same continuum aspects of the institutional/occupational model.

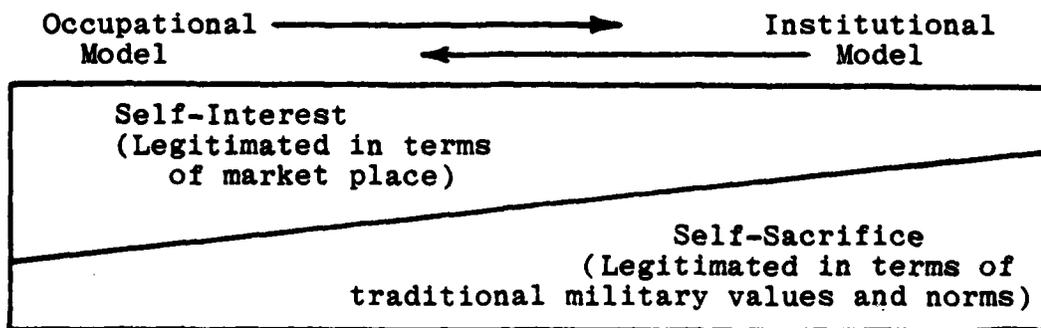


Fig. 2 Occupational-Institutional Continuum
(Manley, McNichols and Stahl, 1976)

The dimensionality suggests an interaction with the organizational environment. One author states that the distinction between local or cosmopolitan may be highly dependent on the organization. For example, an organization with goals compatible with the "institution of science" may not create for the "cosmopolitan" scientist the division or prioritization of orientation suggested by the original cosmopolitan-local construct (Glaser, 1963). A question used in the study by Gouldner (1957) asked if the professor would leave the present school for a position at Harvard or Princeton under various conditions of salary. Would this cosmopolitan at the small college become more of a local at Princeton or Harvard where high association is made with these schools and "academia"? The answer would probably be yes, viewing behavior as a function of both the individual and the environment in which he or she is behaving (Reitz, 1977). This situation corresponds to an occupationally oriented Air Force member's desire to get back to the cockpit, the laboratory or technically oriented job even at the expense of foregone promotions (Qualy, 1978; Rach, 1979).

Performance is another area of concern to organizations and researchers alike. Using various measures of performance depending upon the organization or association, performance was found to be significantly related to "cosmopolitan" type orientations in several instances.

Scientific performance (adjusted for ability, quality of training, and type of experience) is significantly related to the cosmopolitan orientation (Pelz, 1956). Cosmopolitan academics published more than locals in the same organization (Gouldner, 1957). The productivity of scientists and engineers (based on several measures) was significantly associated with the cosmopolitan dimension (Stahl, et al., 1979). No institutional/occupational parallels can be drawn at this point. There have been no studies concerning institutionally and occupationally oriented military members and performance. However, in light of the above it could be posited that quality of performance in highly technical and specialized areas could be well served by retaining occupationally oriented members for those positions. This would also require changes in the structure of military organizations that would allow these members to progress while remaining within that area.

Behavioral aspects of the institutional/occupational model have not been studied. The commonality of institutional/occupational orientation to the local/cosmopolitan construct though suggests that if a shift in the Air Force is taking place, the Air Force may have to deal with the consequences either by programs aimed at re-institutionalizing members or, as Moskos has suggested, undergo organizational changes.

Recent Research

Recent research has provided valid measures of institution-occupation orientation and baseline scores that can be compared with future samplings. Stahl, et al., (1978) discuss the measures as an outgrowth of research by Gouldner (1957, 1958) concerning the broader cosmopolitan-local construct. The measures developed were included in the 1977 USAF Quality of Life Survey. Their validity and usefulness in measuring institution-occupation orientation resulted in successful testing of differences among several groups based on demographics. Correlations of institution-occupation scores with survey measures of career intent, seniority, job satisfaction, and perceived prestige of the military were also measured. Hagemann (1978), used the survey results to test differences among additional groups. He also discovered survey questions (of those available on the survey) that best predicted orientations. All tests also provided baseline scores.

The results are encouraging. "The measurement of orientation of latent social identities with organizations, whether labeled cosmopolitan-local by Gouldner, or institution-occupation per Moskos, has now been extended to include military personnel" (Stahl, et al., 1978:426). These same measures are included on the 1980 USAF Quality of Life Survey. Results achieved by Stahl, et al., (1978), and Hagemann (1978) are presented in Chapter 3 to compare

with the results of this writer's research.

A research effort by Lewis (1978) included an analysis of institutional and occupational orientations using Vroom's (1964) expectancy theory valences for an Air Force career and a civilian career. Lewis (1978) extensively discussed the background and growth of expectancy theory as originated by Vroom (1964). Additional research concerning expectancy theory and valence models for an Air Force career and a civilian career were conducted by Mosbach and Scanlan (1979) and at the time of this writing is being conducted by Young (1980).

Lewis' (1978) approach to the institutional/occupational orientations considered both to be expressions of self-interest as opposed to the institutional orientation being an expression of self-sacrifice and the occupational orientation being an expression of self-interest proposed by Moskos (1977). This is indirectly analogous to analyzing the association of orientations with career intent but deals with more complex structures. As Lewis (1978) found out, career intent was positively correlated with the valence for an Air Force career and negatively correlated with the valence for a civilian career. All results were significant. Additionally, it has been shown that career intent is a valid predictor of actual turnover (Waters, Roach and Waters, 1976).

A linkage between the valence model of expectancy

theory for career choices and actual turnover has been established. If a positive correlation does exist between the institutional orientation and the valence for a civilian career, a path can be traced between Moskos' postulates and the Air Force retention situation through Vroom's expectancy theory models of valences for career choices.

The effort by Lewis (1978) concerned officers in scientific and engineering career fields with between one and five years Total Active Federal Military Service (TAFMS). The results concerning institutional/occupational orientations supported a hypothesis of positive association between the occupational orientation and the valence for a civilian career, and, negative association between the occupational orientation and the valence for an Air Force career. An hypothesis of a positive association between the institutional orientation and the valence for an Air Force career, and, a negative association of the institutional orientation with the valence for a civilian career was not supported. Although not significant, the results were in the correct direction.

The results for the occupational orientation agree with the criterion of Moskos (1977) that this model is primarily concerned with the maximization of self-interest. The valences are in fact quantitative representations of that self-interest.

Because institutional orientation was not

significantly correlated with the Air Force and civilian career valences, Moskos' contention of the element of self-sacrifice in this model cannot be refuted. However, since these findings were based only on scientists and engineers with one to five years TAFMS, a more detailed analysis of the valence model of Vroom's expectancy theory applied to Moskos' institutional/occupational orientation is now considered. This is possible because for the first time, valence model questions and institutional/occupational orientation questions are on the same large scale survey. The areas of interest here are the occupational orientations where there are civilian career alternatives to the Air Force job and institutional orientations where there is not a readily visible strong civilian career alternative to the Air Force job. If the expression of self-interest of institutionally oriented members is in fact operative, it would appear that given the state of the art in gathering this type of data, this would be best detectable in members for which there is no strong civilian alternative to their Air Force job.

Forces other than self-interest do play a part in people's choices. Mosbach and Scanlan (1979) considered Vroom's (1964) original model as did Lewis (1978) plus two variations that included family influence and current and expected future job satisfaction. This writer's analysis, however, is limited to the terms used by

Lewis (1978) and the first model used by Mosbach and Scanlan (1979) which is Vroom's (1964) original valence model which Vroom termed Proposition I. For the analysis at hand this model is described in terms of an Air Force or civilian career.

The first level valence for an Air Force career is the sum of the valences for second level outcomes (e.g., high salary, interesting and challenging job, effective use of abilities) multiplied by the perceived instrumentalities (correlations) between the second level outcomes and first level outcomes. Mathematically this would be:

$$VAF = \sum_K (I_{AFK} \times V_K)$$

where

VAF = Valence (attractiveness) for an Air Force career.

I_{AFK} = Instrumentality (perceived correlation) between an Air Force career and the attainment of one of a second level outcome, K. Values range from -1 to 1.

V_K = Valence (attractiveness) of a second level outcome K. Values can be positive or negative or zero.

K = The number of second level outcomes considered.

The valence for a civilian career was developed in the same manner.

$$VCV = \sum_K (I_{CVK} \times V_K)$$

where

VCV = Valence for a civilian career

I_{CVK} = Instrumentality between a civilian career and the attainment of a second level outcome, K. Values vary from -1 to +1.

Statement of Problem

Moskos stated that the military is shifting from the institution to the occupation model. This has only been theoretically treated by non-empirical means. There has yet to be a quantitative analysis of any such shift. The problem is to determine if there have been any measurable changes in the institutional/occupational orientations of Air Force personnel between 1977 and 1980.

Moskos also contends that self-sacrifice is the key factor in the institutional model and self-interest is the key factor in the occupational model. The valences of Vroom's expectancy theory applied to career choices assumes that, given a free choice, people will favor careers that maximize their self-interest. This presents a true dilemma concerning the institutional model. The second problem is to determine the relationship between institutional/occupational orientations and valences for Air Force and civilian careers.

Objectives and Hypotheses

The primary objective of this research is to determine if there are any significant differences between the orientation scores, as described in Chapter 2, of the selected groups of Air Force personnel as measured during the 1977 USAF Quality of Life Survey and those same demographic groups in the 1980 USAF Quality of Life Survey.

Specifically, the null hypothesis that the respective means of the institution-occupation scores are equal (have not changed) for the 1977 and 1980 surveyed groups specified below are tested against the alternate hypothesis that they are not equal (a change has occurred). The groups are:

1. Junior Enlisted (E-1 - E-5)
2. Senior Enlisted (E-6 - E-9)
3. Junior Officers (Lt. - Capt.)
4. Senior Officers (Maj. - Capt.)
5. All Members
6. Members with Doctorates
(i.e., Ph. D., M. D., L.L. D., Ed. D.)
7. Physicians
8. Officers possessing Research and Development,
Scientific and Engineering Air Force Specialty
Codes (AFSC)
9. Rated Officers
10. Non-Rated Officers

Several of the above groups are tested using the 1980 survey to determine if they still differ significantly on the measures of institution and occupation as tested from the 1977 survey (Stahl, et al., 1978, 1980; Hagemann, 1978).

These tests are that:

1. Senior sergeants are more institutionally and less occupationally oriented than junior enlisted personnel.
2. Senior officers are more institutionally and less occupationally oriented than junior officers.
3. Members with doctorate degrees are more occupationally and less institutionally oriented than members with less formal education.
4. Physicians are more occupationally and less institutionally oriented than others.
5. Rated officers are less institutionally oriented than non-rated officers.
6. Officers possessing Research and Development, Scientific and Engineering AFSC's are more occupationally oriented than other officers.
7. Officers are less occupationally oriented than enlisted personnel.

The null hypothesis that no change has taken place between the 1977 survey and the 1980 survey in the correlations of institution-occupation with career intent, seniority, job satisfaction, and perceived prestige of the military is tested against the alternate hypothesis that there has been change in any of the correlations.

A secondary objective of the research is to determine whether the institutional orientation is positively correlated with the valence for an Air Force career and negatively correlated with the valence for a civilian career for members who do not have a strong visible alternative to their Air Force job, and, whether the occupational orientation is

positively correlated with the valence for a civilian career and negatively correlated with the valence for an Air Force career for members who do have a strong visible alternative to their Air Force job.

A test of significant positive correlation between the valence for an Air Force career and the institutional orientation, and, significant negative correlation between the valence for a civilian career and the institutional orientation is considered for the following Air Force Specialty Codes (AFSC's):

Officer

40XX	Aircraft Maintenance
60XX, 64XX 65XX, 66XX	Transportation, Supply, Procurement, Logistics
70XX, 73XX	Administrative, Personnel

Enlisted

47XXX	Vehicle Maintenance
60XXX, 61XXX 62XXX, 64XXX	Transportation, Services, Food Services, Supply
70XXX, 73XXX	Administration, Personnel

The selection of these AFSC's are based on this writer's review of Air Force career fields.

Finally, a test of significant positive correlation between the valence for a civilian career and the occupational orientation, and, significant negative correlation between the valence for an Air Force career and the occupational orientation is considered for the following AFSC's:

Officer

10XX, 11XX, 12XX, 13XX, 14XX, 15XX, 22XX	Pilots, Navigators
26XX, 27XX, 28XX	Scientific and Development Engineering
30XX	Communications Electronics
51XX	Computer Systems
93XX, 94XX, 95XX, 98XX	Doctors, Dentists

Enlisted

20XXX	Intelligence
27XXX	Command & Control Systems Operations
30XXX, 32XXX	Communications Operation, Avionics Systems
42XXX, 43XXX, 46XXX	Aircraft Systems Maintenance Aircraft Maintenance, Munitions Weapons Maintenance
51XXX	Computer Systems
90XXX, 91XXX, 98XXX	Medical, Dental

The selections of these career fields are based on Military Personnel Center identification of current critical career fields and this writer's review of Air Force career fields.

Limitations and Assumptions

Since this research effort is based on data obtained from surveys, results can only be expressed in terms of the design parameters of the survey questions. Furthermore, the sincerity of those who responded to the survey plus their

interpretation of the questions affects the results. The assumption is made that respondents answered to the best of their ability and their interpretation of the questions was the same as the intended interpretation of the question designers. Miswording of one question intended for inclusion in this analysis has rendered it useless and therefore limits the depth of this writer's effort. This is fully discussed in Chapter 2.

Summary

This chapter describes the basis for the research effort. The concepts of institutional and occupational orientation as described by Moskos are the foundation. Interest in these concepts is still high within the Air Force community. Operationalized, tested and measured by Stahl, Manley, and McNichols and further measured by Hagemann, there are now baseline scores of orientations for many Air Force groups. The baseline from the 1977 USAF Quality of Life Survey can now be compared with scores obtained from the 1980 USAF Quality of Life Survey. These comparisons will detect any shifts in orientation as hypothesized by Moskos to the extent they are measured on the two surveys.

A view contrary to Moskos' thesis concerning institutional orientations is that self-interest, as in the occupational orientation, is the operational factor, not self-sacrifice. This can be measured using Vroom's valence

model for career outcomes. This view and the correlations between valences and orientations are also examined for selected career fields.

The following chapter discusses the methodology used in this research effort.

CHAPTER II

METHODOLOGY

Introduction

In this chapter, the methodology used by the writer to conduct this research effort is discussed. Included here is an overview of the survey instruments, the groups and subgroups used, the variables involved and the analysis techniques.

The Surveys

The surveys used in the study were the 1977 and 1980 USAF Quality of Air Force Life, Active Duty Air Force Personnel Surveys. Each survey was given to a sample of personnel throughout the Air Force. The same personnel are not necessarily in both surveys.

The 1977 survey consisted of 165 questions: 19 demographic and the remainder attitudes and opinions. A total of 10,687 surveys were returned. The 1977 survey is included in Hagemann's (1978) work as Appendix A.

The 1980 survey consisted of 144 questions: 19 demographic and the remainder attitudes and opinions. A total of 5,425 surveys were returned. The 1980 survey is reproduced in Appendix A herein. All references to question numbers pertain to the 1980 survey. See Hagemann (1978)

for the corresponding question numbers on the 1977 survey.

Survey Bias

A weighting procedure was used to correct the bias introduced by oversampling some groups. This weighting procedure causes responses to be considered more or less heavily as they actually are to equalize the consideration given to a response in accordance with the ratios of groups' sample sizes to their respective total populations (Nie, Hull, Jenkins, Steinbrenner and Bent, 1975). If the number of cases in a particular group is multiplied by the weight factor applied to each case in that group, the product would equal the total Air Force population of that group.

For the 1977 survey, enlisted personnel were assigned weights based on grade. Officers were assigned weights based on grade, sex, and three categories of ethnic background (black, white, and other). This corrected the oversampling of females, personnel in higher grades, and racial minorities. The weights assigned to the 1977 survey responses are included in Appendix B of Hagemann (1978).

For the 1980 survey, assigned weights were based on grade for all personnel. The weights assigned to the 1980 survey responses are presented in Appendix B herein (McNichols, 1980).

Analysis Groups

Major groups have been identified in Chapter 1,

Objectives and Hypotheses. These groups are defined by grade (question 3), education (question 6), Air Force Specialty Code career group (questions 16 and 17), and aeronautical rating (question 19). In order to negate the possible confounding effects of length of service, each hypothesis for each group in Chapter 1 was additionally tested (where applicable) separately by the same six subgroups based on Total Active Federal Military Service (TAFMS) (question 5) as Hagemann (1978) used:

Subgroup 1 - Completed less than one year to completed less than 6 years.

Subgroup 2 - Completed 6 years but less than 11 years.

Subgroup 3 - Completed 11 years but less than 16 years.

Subgroup 4 - Completed 16 years but less than 21 years.

Subgroup 5 - Completed 21 years but less than 26 years.

Subgroup 6 - Completed 26 years or more.

Hypothesis testing concerning research and development (R/D), scientific and engineering (S/E) officers was further subgrouped based on question 6 in the same manner as Hagemann (1978). This was done to avoid confounding by education since doctoral degree holders were found to be less institutionally and more occupationally oriented than others (Stahl, et al., 1978).

Subgroup A - R/D and S/E officers with Master's Degree through Doctorate Degree.

Subgroup B - R/D and S/E officers with graduate work beyond a Master's Degree through a Doctorate Degree.

Analysis Techniques

Limitations

A serious setback in question interpretation has resulted from the omission of one word in one of the questions dealing with the institutional orientation on the 1980 survey. This was question 58. It was intended to be one of four questions that when summed together, would become the institutional orientation measure (Stahl, et al., 1978). With the omission of the word "more" in "I wish that more Air Force members had a genuine concern for national security", the meaning of the question was severely altered.

Because of the altered interpretation of this question, it cannot be used. This decision was reinforced by several comments received from survey respondents concerning this question. As a result, the depth of the longitudinal analysis was limited but not invalidated since the baseline data were reanalyzed without the counterpart of question 58.

The data base for the 1980 survey is about half of that for the 1977 survey. Subgroup sizes may limit analysis and generalizations of some of the subsets.

Reanalysis Plan of the 1977 Survey Data

The limiting situation called for replicating the work of Stahl, et al., (1978) and relative portions of Hagemann (1978) using the remaining three institutional orientation questions:

1. Air Force members should take more interest in mission accomplishment and less interest in their personal concerns (question 52).
2. What is your opinion of discipline in today's Air Force? (question 93).
3. More supervision of member performance and behavior is needed at lower levels within the Air Force (question 94).

The occupational orientation questions remained unchanged:

1. If I left the Air Force tomorrow, I think it would be very difficult to get a job in private industry with pay, benefits, duties, and responsibilities comparable with my present job (question 34).
2. An Air Force base is a desirable place to live (question 35).
3. The Air Force requires me to participate in too many activities that are not related to my job (question 51).
4. An individual can get more of an even break in civilian life than in the Air Force (question 100).

To insure the dimensionality of the questions remained unchanged from the two original factors, the seven questions were factor analyzed using the same procedure as Stahl, et al., (1978), that is, principle components without iteration followed by varimax orthogonal rotation of factors with eigenvalues greater than 1.0. This was accomplished

using subprogram FACTOR from the Statistical Package for Social Sciences (SPSS) (Nie, et al., 1975). Factor loadings on the seven questions were examined to determine if they were still of approximately equal magnitude for values greater than .5 on the respective factors as found by Stahl, et al., (1978), and trivial for other values. With this criteria satisfied, the institutional orientation (INST) score is again derived by just summing on the three questions that load the one factor. The occupational orientation (OCCP) score was computed in the same manner except that the polarity of the first two occupational orientation questions (questions 35 and 51) must be reversed prior to summation.

As a further check, a Pearson product-moment correlation analysis of the institutional orientation score based on the three questions was made with the score based on all four questions from the 1977 data. This was accomplished using SPSS subprogram PEARSON CORR.

Correlations among institutional/occupational orientations, career intent, seniority, job satisfaction, and perceived prestige of the military were recomputed so that all values common to the longitudinal analysis were derived from the same set of questions.

After new institutional/orientation scores and correlations were computed from the 1977 survey that were compatible for analysis with the 1980 survey, the 1980 survey was examined. Recomputing the occupational orientation

scores was necessary even though these were still based on the same four occupation questions. By recomputing scores and comparing to the scores obtained by Stahl, et al., (1978) and Hagemann (1978), this writer was confident that the same procedure was being followed thereby eliminating any procedural effects in the longitudinal analysis.

Analysis of the 1980 Survey Data

The longitudinal examination began by confirming that the seven institutional/occupational orientation questions in 1980 were still descriptions of two factors or dimensions. This was accomplished by applying factor analysis to the 1980 survey data in the same manner as it was applied to the 1977 data and examining the loadings of the questions on the factors to assure that simple summation of the respective individual questions to form the institutional and occupational orientation measures was still valid.

Longitudinal Analysis

The hypotheses concerning a shift in the institutional and occupational orientation between 1977 and 1980 were tested using SPSS subprogram T-TEST. This test computes Student's *t* and probability levels to test whether or not the difference between means is significant (Nie, et al., 1975). For these tests, the null hypothesis is that there is no difference in the orientation measures

(no shift in occupational or institutional orientations).

Model Stationarity

The hypotheses concerning whether selected groups in 1980 still differ significantly as those groups did in 1977 on the measures of institutional and occupational orientation were tested using SPSS subprogram T-Test. The null hypothesis is that there is no significant difference.

The hypotheses concerning the correlations of institutional/occupational orientation with career intent (question 11), seniority (question 3), job satisfaction (a linear combination of questions 44, 45, 46, and 47) and perceived prestige of the military (question 107) were tested using a procedure given in Snedecor and Cochran (1967): Correlations from two samples (1977 and 1980) are transformed to a z value according to the formula

$$Z_i = 1/2 [\log_e (1 + r_i) - \log_e (1 - r_i)]$$

Testing then proceeds as usual for a difference of two means. The value

$$\bar{Z} = \frac{Z_1 - Z_2}{\sigma_{Z_1 - Z_2}} \quad \text{with} \quad \sigma_{Z_1 - Z_2} = \left(\frac{1}{n_1 - 3} + \frac{1}{n_2 - 3} \right)^{\frac{1}{2}}$$

is compared to the Student's t at the desired significance level with degrees of freedom equal to $n_1 + n_2 - 2$. For this series of tests, the null hypothesis is that there has been no significant difference between the correlation from

the 1977 survey data and the correlations from the 1980 survey data.

Institutional/Occupational Orientation
Correlations with Career Valences

The institutional/occupational orientation measures were tested for significant positive and negative correlations with the valences for an Air Force career and a civilian career (for the selected AFSC's, see Chapter 1). Correlation analysis was performed using SPSS subprogram PEARSON CORR. This subprogram computes Pearson product-moment correlations for pairs of variables.

Valences for an Air Force or civilian career were computed as described in Chapter 1. Questions 61 through 69 are the valences for nine second-level career outcomes (V_K). Questions 70 through 78 are the instrumentalities between the nine second-level outcomes and the first-level outcome of an Air Force career (I_{AFK}). Questions 79 through 87 are the instrumentalities between the nine second-level outcomes and the first-level outcome of a civilian career (I_{CVK}). The summations of the products $I_{AFK} \times V_K$ and $I_{CVK} \times V_K$ ($K = 1, \dots, 9$) are the valences for an Air Force career (VAF) and civilian career (VCV).

For all cases in this analysis, the null hypothesis is that there is zero correlation between orientation measures and valences.

The Variables

Missing Values

For one reason or another, several cases contained a mismarked response to one or more questions or even no response to a question. In both of these instances the response was treated as a missing value. When the data were analyzed using SPSS subprograms FACTOR, T-TEST and PEARSON CORR, listwise deletion of missing data was used. The property of listwise deletion is that the only cases included in an analysis are those that have a valid response for each question considered in a particular analysis. This reduces the number of cases used in the SPSS subprograms. In the subprogram FACTOR it also prevents artificial factor analysis from correlations that could be computed from very different segments of the population (Nie, et al., 1975). In addition, when any question with a missing value was involved in computation of a new variable, the result was automatically assigned a missing value code and treated as missing data in analyses.

Variable Transformations

To ease the analysis for SPSS, all responses were recoded before being stored on computer disc. The recoding was of the form A=1, B=2, C=2, ..., Z=26. For question 5 which had a response set beyond one iteration of the alphabet, the form continued from Z=26 to 1=27 and 2=28.

During the analysis, several variables were again

recoded to facilitate computations. Questions concerning the valences and instrumentalities of Air Force and civilian careers (questions 61 through 87) were recoded to the form 1 = -5, 2 = -4, ..., 5=0, 6=1, 11=5. This allows positive and negative values with anchors at -5 (completely disagree or extremely undesirable) and +5 (completely agree or extremely desirable). It was not necessary to recode the instrumentality questions to the range -1 to 1 (see Chapter 1) as -5 to 5 is simply a scalar multiple of this range and does not affect the correlation analysis.

Summary

This chapter describes the methodology used by this writer to examine whether or not shifts in the institutional/occupational orientation of Air Force members have taken place and to determine the relationship between these orientations and the valences for an Air Force career and a civilian career. Of particular concern was the fact that one question which contributed to the institutional orientation score on the 1977 survey was unusable because of a typographical error in that question as it appeared on the 1980 survey. This limited the depth of the analysis somewhat but did not invalidate the results which are presented in the following chapter.

CHAPTER III

RESULTS

Introduction

The purpose of this chapter is to present the results of the statistical analysis that this writer conducted. The results of the reanalysis of the 1977 data with the reduced institutional orientation measure are presented first. The result of the factor analysis of the 1980 data follows. The results concerning the longitudinal hypotheses are then presented followed by the hypotheses concerning the relative differences of the selected groups. Finally, the correlation among institutional/occupational orientations and valences for Air Force/Civilian careers are presented. The sample size stated is always the weighted sample size.

Results of the Reanalysis of the 1977 Survey

The result of the factor analysis described in Chapter 2 of the institutional/occupational questions is shown in Table 1. This shows the seven questions are still an expression of two independent dimensions. The factor loadings are well separated, high in absolute value on those questions associated with the respective factor and trivial on the others. The two dimensions account for 45% of the total variance of the seven questions. Additionally,

TABLE 1
 Factor Loadings on Reduced Institution/Occupation
 Questions: 1977 Survey

Question	Factor 1 Institutional Orientation	Factor 2 Occupational Orientation
Comparable Job Opportunities	-.05	-.68
Desirability of Living on Base	.21	-.61
Non-Job-Related Activities	-.07	.51
Equity	-.11	.72
Mission Accomplishment	.56	-.18
Discipline in Air Force	.77	-.08
Need More Supervision	.71	.01

n = 9917

correlation analysis of the institutional orientation based on the original four questions and the reduced set of three questions was .92 (n = 10,008, significant at $p \leq .001$). A comparison of the correlations found by Stahl, et al., (1980) of the four-question institutional measure with career intent, seniority, job satisfaction and perceived prestige of the military and those same correlations based in the three-question measure is presented in Table 2. There were statistically significant differences concerning career intent of all personnel and seniority levels but these differences are more the result of being able to distinguish small differences with large sample sizes.

TABLE 2

Correlation Comparison of Career Intent, Seniority, Job Satisfaction and Perceived Prestige with the Institutional Orientation Based on the Original Four-Question Measure and the Reduced Set of Three Questions: 1977 Survey

Item	Institutional Orientation	
	Four-Question Measure ¹	Three-Question Measure
Career Intent		
All Personnel	.36	.39**
First Termers ²	.27	.24
Seniority	.32	.38*
Job Satisfaction	.24	.24
Perceived Prestige	.14	.15

n = 9733

1. Stahl, McNichols and Manley, 1980

2. n = 3996 for First Termers (personnel serving their first term of obligated service)

*Significant difference at $p \leq .01$, two-tailed test

**Significant difference at $p \leq .05$, two-tailed test

The actual differences are not "large".

Analysis of the 1980 Survey

The result of the factor analysis also described in Chapter 2 of the seven institutional/occupational orientation questions for the 1980 survey data is shown in Table 3. Again the loadings reveal that the seven questions are still defined by two independent dimensions and account for 45% of the total variance of the seven questions, the same as in the 1977 survey. Since the loadings are again approximately of equal magnitude for values greater than .5, the measures

TABLE 3

Factor Loadings on Institution/Occupation
Questions: 1980 Survey

Question	Factor 1 Institutional Orientation	Factor 2 Occupational Orientation
Comparable Job Opportunities	-.03	-.51
Desirability of Living on Base	.20	-.63
Non-Job-Related Activities	.02	.62
Equity	-.16	.68
Mission Accomplishment	.57	-.17
Discipline in Air Force	.80	-.06
Need More Supervision	.77	.03

n = 5250

are again formed by summing the respective responses. Table 3 also shows the need to reverse the polarity of the first two occupational orientation questions before summing.

Results of the Longitudinal Analysis

The null hypothesis tested was the same for all groups: The mean of the institutional orientation score (INST) for a group in 1977 is equal to the mean for the same demographic group in 1980 (no change of shift). In a like manner, the hypothesis that the mean of the occupational orientation score (OCCP) has not changed or shifted for a group was also tested. The alternate hypothesis in

both cases is that a change has occurred.

The first group tested was junior enlisted (E-1 - E-5). Junior enlisted were tested as a whole and in subgroups of 0-5 and 6+ years TAFMS. The results are shown in Table 4. This shows a significant increase at $p \leq .01$ in both the institutional and occupational orientations except for the institutional orientation of the 6+ year group which decreased but not at a significance of at least $p = .05$. Therefore, the null hypothesis is rejected in favor of the alternate hypothesis that an increase or shift upward in the institutional and the occupational orientations has occurred for all but the one above-named subgroup for the institutional orientation.

The second group tested was senior sergeants (E-6 - E-9). The two additional subgroups tested were 15 or less years and 16+ years TAFMS. The results for senior sergeants are presented in Table 5. As this table shows, the null hypothesis is not rejected for the institutional orientation but rejected in favor of the alternate hypothesis that an increase has occurred in the occupational orientation for the group as a whole and for the subgroups ($p \leq .01$).

The third group tested was junior officers (Lt. - Capt.). Subgroup tests by TAFMS were the same as for junior enlisted. Table 6 shows the results for this group. Just as with the junior enlisted, there was a significant

TABLE 4

Means Test - Junior Enlisted Institutional/Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-5	1980	2349	9.65	3.79	.000*
	1977	4423	9.39		
6+	1980	1014	10.88	-1.84	.066
	1977	1878	11.07		
All	1980	3402	10.05	2.73	.006*
	1977	6328	9.89		

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	2349	13.50	7.32	.000*
	1977	4423	12.96		
6+	1980	1014	12.89	3.08	.002*
	1977	1878	12.54		
All	1980	3402	13.33	8.04	.000*
	1977	6328	12.82		

*Significant at $p \leq .01$

TABLE 5

Means Test - Senior Sergeants Institutional/Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
<15	1980	359	11.96	1.61	.108
	1977	563	11.68		
16+	1980	580	12.48	1.34	.182
	1977	1249	12.31		
All	1980	939	12.28	1.61	.107
	1977	1812	12.12		

TAFMS	Group	n	Occp.	t	Two-Tailed p
<15	1980	359	12.78	4.79	.000*
	1977	563	11.92		
16+	1980	580	12.62	4.87	.000*
	1977	1249	11.92		
All	1980	939	12.68	6.80	.000*
	1977	1812	11.92		

*Significant at $p \leq .01$

TABLE 6

Means Test - Junior Officers Institutional/Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-5	1980	279	10.62	2.33	.020**
	1977	511	10.20		
6+	1980	282	11.15	1.66	.098
	1977	582	10.85		
All	1980	563	10.88	2.64	.008*
	1977	1098	10.55		

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	279	13.11	2.89	.004*
	1977	511	12.51		
6+	1980	282	13.32	4.16	.000*
	1977	582	12.54		
All	1980	563	13.23	5.01	.000*
	1977	1098	12.52		

*Significant at $p \leq .01$

**Significant at $p \leq .05$

increase in both the institutional and occupational orientations except for the institutional orientation of the 6+ year group. The null hypothesis is rejected in favor of the alternate hypothesis for all cases except the 6+ year group's institutional orientation. However, the null hypothesis concerning the institutional orientation for the 0-5 year group is rejected only at a significance of $p \leq .05$, all others were at $p \leq .01$.

The fourth group tested was senior officers. Separate tests by TAFMS were the same as for senior sergeants. The results for this group are shown in Table 7. The null hypothesis of no change is not rejected for the institutional orientation. As with senior sergeants, the null hypothesis that no change has occurred in the occupational orientation is rejected for senior officers in favor of the alternate hypothesis that an increase has occurred for the whole group and for subgroups ($p \leq .01$).

The fifth group tested was all members of the Air Force. The full range of subgroups by TAFMS were separately tested. Tables 8 and 9 contain the results of the means test for the institutional orientation and the occupational orientation respectively. The null hypothesis that no change has occurred in the institutional orientation of all members is rejected in favor of an increase for the 0-5 year group, the 16-20 year group and the group as a whole ($p \leq .01$). The null hypothesis concerning the occupational orientation

TABLE 7

Means Test - Senior Officers Institutional/Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
≤15	1980	145	11.09	-.37	.710
	1977	270	11.18		
16+	1980	197	12.03	1.16	.245
	1977	407	11.79		
All	1980	343	11.63	.51	.608
	1977	677	11.55		

TAFMS	Group	n	Occp.	t	Two-Tailed p
≤15	1980	145	12.98	4.48	.000*
	1977	270	11.83		
16+	1980	197	12.44	5.52	.000*
	1977	407	11.20		
All	1980	343	12.67	7.17	.000*
	1977	677	11.45		

*Significant at $p \leq .01$

TABLE 8

Means Test - All Members Institutional
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-5	1980	2639	9.75	4.31	.000*
	1977	4963	9.48		
6-10	1980	985	10.81	-.94	.347
	1977	1876	10.91		
11-15	1980	715	11.46	-.17	.865
	1977	1197	11.49		
16-20	1980	601	12.21	2.58	.010*
	1977	1158	11.88		
21-25	1980	209	12.68	.82	.412
	1977	566	12.51		
26+	1980	49	13.11	1.55	.124
	1977	106	12.44		
All	1980	5250	10.64	3.32	.001*
	1977	9915	10.48		

*Significant at $p \leq .01$

TABLE 9

Means Test - All Members Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	2639	13.46	7.82	.000*
	1977	4963	12.91		
6-10	1980	985	12.78	2.01	.044**
	1977	1876	12.55		
11-15	1980	715	13.12	8.18	.000*
	1977	1197	12.09		
16-20	1980	601	12.86	5.13	.000*
	1977	1158	12.14		
21-25	1980	209	12.35	4.44	.000*
	1977	566	11.38		
26+	1980	49	11.33	1.60	.114
	1977	106	10.60		
All	1980	5250	13.16	12.70	.000*
	1977	9915	12.53		

*Significant at $p \leq .01$

**Significant at $p \leq .05$

is rejected in favor of an increase for all subgroups except the 26+ year group. The increase was significant only at $p \leq .05$ for the 6-10 year group and $p \leq .01$ for the others.

The sixth group tested was members with a doctorate degree. Subgroups were 0-10 years TAFMS and 11+ years TAFMS. Table 10 shows the results of the means test for doctorates. The null hypothesis is not rejected in all cases for the institutional and occupational orientations.

The seventh group tested was physicians. Subgroups for physicians were divided between 0-10 years and 11+ years TAFMS. The results for physicians are presented in Table 11. The null hypothesis for both the institutional and the occupational orientations is not rejected.

The eighth group tested was officers possessing Research and Development and Scientific and Engineering AFSC's (26XX, 27XX, 28XX). Testing was conducted for the group as a whole and by year groups for three education levels; any education level, M. S. through Ph. D. degrees, and, education beyond M. S. degree through a Ph. D. degree. The results of all the means tests for the institutional and occupational orientations are presented in Tables 12, 13, 14, 15, 16 and 17. The null hypothesis that no change has occurred is generally not rejected for the institutional as well as the occupational orientation. Exceptions to this are; the institutional orientation for R/D and S/E officers increased for the 0-5 year group but only at $p \leq .05$, the

TABLE 10

Means Test - Members with Doctorate Degree Institutional/
Occupational Orientation Score: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-10	1980	46	10.79	1.51	.134
	1977	66	10.03		
11+	1980	26	11.48	.49	.625
	1977	44	11.16		
All	1980	72	11.04	1.40	.164
	1977	111	10.49		

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-10	1980	46	13.44	-.29	.774
	1977	66	13.59		
11+	1980	26	13.07	1.38	.173
	1977	44	12.19		
All	1980	72	13.30	.66	.513
	1977	111	13.03		

TABLE 11

Means Test - Physicians Institutional/Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-10	1980	14	10.26	.13	.899
	1977	21	10.14		
11+	1980	5	11.41	-.08	.942
	1977	7	11.55		
All	1980	19	10.56	.09	.926
	1977	28	10.49		

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-10	1980	14	14.12	.23	.818
	1977	21	13.88		
11+	1980	5	13.41	.84	.429
	1977	7	11.98		
All	1980	19	13.93	.59	.561
	1977	28	13.42		

TABLE 12

Means Test - Officers with R/D, Scientific or Engineering
AFSC's, Institutional Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-5	1980	16	11.03	2.04	.050**
	1977	34	9.63		
6-10	1980	12	10.16	-.51	.614
	1977	47	10.56		
11-15	1980	16	10.33	-.09	.933
	1977	32	10.40		
16-20	1980	9	11.21	.86	.405
	1977	34	10.39		
21-25	1980	5	11.79	.39	.701
	1977	11	11.31		
26+	1980	1	11.65	N/A	N/A
	1977	3	12.34		
All	1980	61	10.75	.98	.329
	1977	162	10.39		

**Significant at $p \leq .05$

TABLE 13

Means Test - Officers with R/D, Scientific or Engineering
AFSC's, Occupational Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	16	13.53	.54	.594
	1977	34	13.12		
6-10	1980	12	13.13	.85	.406
	1977	47	12.53		
11-15	1980	16	13.45	1.71	.099
	1977	32	12.08		
16-20	1980	9	12.85	.66	.518
	1977	34	12.31		
21-25	1980	5	14.30	1.81	.119
	1977	11	11.05		
26+	1980	1	12.41	N/A	N/A
	1977	3	9.64		
All	1980	61	13.35	2.67	.009*
	1977	162	12.34		

*Significant at $p \leq .01$

TABLE 14

Means Test - Officers with R/D, Scientific or Engineering
AFSC's and with M. S. through Ph. D. Degrees Institu-
tional Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-5	1980	4	12.25	1.75	.141
	1977	12	9.63		
6-10	1980	10	10.06	-.77	.451
	1977	29	10.80		
11-15	1980	13	10.00	-.57	.572
	1977	27	10.50		
16-20	1980	7	11.13	.69	.509
	1977	30	10.38		
21-25	1980	2	12.12	.50	.649
	1977	7	11.17		
26+	1980	0	N/A	N/A	N/A
	1977	2	12.28		
All	1980	39	10.66	.26	.797
	1977	111	10.54		

TABLE 15

Means Test - Officers with R/D, Scientific or Engineering
AFSC's, and with M. S. through Ph. D. Degrees Occupa-
tional Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	4	14.04	-.36	.734
	1977	12	14.56		
6-10	1980	10	12.94	.75	.460
	1977	29	12.37		
11-15	1980	13	13.80	2.09	.049**
	1977	27	11.98		
16-20	1980	7	12.93	.82	.427
	1977	30	12.19		
21-25	1980	2	14.08	1.46	.281
	1977	7	11.28		
26+	1980	0	N/A	N/A	N/A
	1977	2	10.29		
All	1980	39	13.42	2.41	.019**
	1977	111	12.35		

**Significant at $p \leq .05$

TABLE 16

Means Test - Officers with R/D, Scientific or Engineering
 AFSC's and with Education Beyond M. S. through Ph. D.
 Degrees Institutional Orientation
 Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p																																																			
0-5	1980	2	13.43	2.97	.025**																																																			
	1977	5	9.34			6-10	1980	2	9.33	-.70	.537	1977	8	10.84	11-15	1980	1	12.16	N/A	N/A	1977	6	9.51	16-20	1980	3	11.22	.48	.661	1977	9	10.13	21-25	1980	0	N/A	N/A	N/A	1977	1	10.92	26+	1980	0	N/A	N/A	N/A	1977	0	N/A	All	1980	10	11.28	1.17	.262
6-10	1980	2	9.33	-.70	.537																																																			
	1977	8	10.84			11-15	1980	1	12.16	N/A	N/A	1977	6	9.51	16-20	1980	3	11.22	.48	.661	1977	9	10.13	21-25	1980	0	N/A	N/A	N/A	1977	1	10.92	26+	1980	0	N/A	N/A	N/A	1977	0	N/A	All	1980	10	11.28	1.17	.262	1977	32	10.11						
11-15	1980	1	12.16	N/A	N/A																																																			
	1977	6	9.51			16-20	1980	3	11.22	.48	.661	1977	9	10.13	21-25	1980	0	N/A	N/A	N/A	1977	1	10.92	26+	1980	0	N/A	N/A	N/A	1977	0	N/A	All	1980	10	11.28	1.17	.262	1977	32	10.11															
16-20	1980	3	11.22	.48	.661																																																			
	1977	9	10.13			21-25	1980	0	N/A	N/A	N/A	1977	1	10.92	26+	1980	0	N/A	N/A	N/A	1977	0	N/A	All	1980	10	11.28	1.17	.262	1977	32	10.11																								
21-25	1980	0	N/A	N/A	N/A																																																			
	1977	1	10.92			26+	1980	0	N/A	N/A	N/A	1977	0	N/A	All	1980	10	11.28	1.17	.262	1977	32	10.11																																	
26+	1980	0	N/A	N/A	N/A																																																			
	1977	0	N/A			All	1980	10	11.28	1.17	.262	1977	32	10.11																																										
All	1980	10	11.28	1.17	.262																																																			
	1977	32	10.11																																																					

**Significant at $p \leq .05$

TABLE 17

Means Test - Officers with R/D, Scientific or Engineering
AFSC's, and with Education beyond M. S. through Ph. D.
Degrees Occupational Orientation
Scores: 1980 vs. 1977

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	2	16.28	.97	.372
	1977	5	14.76		
6-10	1980	2	12.67	-.02	.986
	1977	8	12.70		
11-15	1980	1	15.45	N/A	N/A
	1977	6	13.22		
16-20	1980	3	14.22	1.38	.243
	1977	9	12.63		
21-25	1980	0	N/A	N/A	N/A
	1977	1	12.28		
26+	1980	0	N/A	N/A	N/A
	1977	0	N/A		
All	1980	10	14.34	1.41	.176
	1977	32	13.10		

occupational orientation for R/D and S/E officers increased for the group as a whole ($p \leq .01$), the occupational orientation of R/D and S/E officers with M. S. through Ph. D. degrees increased for the 11-15 year group and for the group as a whole but only at a significance of $p \leq .05$, and the institutional orientation for R/D and S/E officers with education beyond an M. S. through a Ph. D. degree increased for the 0-5 year group but again only at $p \leq .05$.

The ninth group tested was rated officers. Separate tests were made by year groups. Tables 18 and 19 contain the results of these tests. The null hypothesis was not rejected for the institutional orientation in all tests but was rejected in favor of an increase for the occupational orientation in all tests except for the 26+ year group. Also the increase was significant only at $p \leq .05$ for the 6-10 and 21-25 year groups but significant at $p \leq .01$ for the 0-5, 11-15, 16-20 year groups and the group as a whole.

The tenth and last group tested for a shift in institutional/occupational orientations was non-rated officers. Subgroups by TAFMS were also tested separately. The results for this group are shown in Tables 20 and 21. For the institutional orientation, the null hypothesis was not rejected in all tests except for the 0-5 year group and the group as a whole. The 0-5 year group's increase was only at a significance of $p \leq .05$. The whole group had

TABLE 18

Means Test - Rated Officers Institutional
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-5	1980	89	10.01	.33	.738
	1977	219	9.91		
6-10	1980	94	10.53	.92	.358
	1977	198	10.24		
11-15	1980	73	10.89	-1.66	.100
	1977	117	11.49		
16-20	1980	58	11.59	.37	.715
	1977	142	11.45		
21-25	1980	39	12.45	.58	.564
	1977	95	12.18		
26+	1980	14	13.14	.74	.467
	1977	32	12.56		
All	1980	370	10.95	.54	.592
	1977	808	10.87		

TABLE 19
Means Test - Rated Officers Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	89	13.91	3.83	.000*
	1977	219	12.57		
6-10	1980	94	13.80	2.23	.026**
	1977	198	13.14		
11-15	1980	73	13.40	3.58	.000*
	1977	117	12.06		
16-20	1980	58	13.17	3.58	.000*
	1977	142	11.54		
21-25	1980	39	12.17	2.49	.015**
	1977	95	10.97		
26+	1980	14	11.41	1.69	.103
	1977	32	9.97		
All	1980	370	13.38	7.31	.000*
	1977	808	12.16		

*Significant at $p \leq .01$

**Significant at $p \leq .05$

TABLE 20

Means Test - Non-Rated Officers Institutional
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Inst.	t	Two-Tailed p
0-5	1980	197	10.89	2.17	.031**
	1977	312	10.42		
6-10	1980	104	11.38	1.15	.251
	1977	244	11.07		
11-15	1980	112	11.30	.48	.634
	1977	215	11.17		
16-20	1980	89	11.84	1.15	.252
	1977	134	11.46		
21-25	1980	24	12.34	1.10	.274
	1977	43	11.74		
26+	1980	5	12.45	.37	.723
	1977	13	11.94		
All	1980	537	11.31	2.57	.010*
	1977	966	10.98		

*Significant at $p \leq .01$ **Significant at $p \leq .05$

TABLE 21

Means Test - Non-Rated Officers Occupational
Orientation Scores: 1980 vs. 1977

TAFMS	Group	n	Occp.	t	Two-Tailed p
0-5	1980	197	12.77	1.02	.310
	1977	312	12.51		
6-10	1980	104	12.77	2.01	.046**
	1977	244	12.16		
11-15	1980	112	12.99	4.00	.000*
	1977	215	11.80		
16-20	1980	89	12.62	1.87	.063
	1977	134	11.95		
21-25	1980	24	12.43	2.66	.011**
	1977	43	10.74		
26+	1980	5	11.01	.37	.717
	1977	13	10.50		
All	1980	537	12.77	4.78	.000*
	1977	966	12.08		

*Significant at $p \leq .01$ **Significant at $p \leq .05$

a significant increase at $p \leq .01$.

The null hypothesis for the occupational orientation was rejected in favor of an increase for the 6-10 and 21-25 year groups at $p \leq .05$, and for the 11-15 year group and the group as a whole at $p \leq .01$.

Results of the Model Stationarity Analysis

The first two hypotheses tested were that senior sergeants are more institutionally and less occupationally oriented than junior enlisted personnel. The results of the tests for both orientations are in Tables 22 and 23. Both of the above hypotheses were supported.

The second two hypotheses tested were that senior officers are more institutionally and less occupationally oriented than junior officers. Test results of these two hypotheses are also shown in Tables 22 and 23. Again, both hypotheses were supported.

The third set of hypotheses tested was that members with doctoral degrees are more occupationally and less institutionally oriented than members with less formal degrees. The results for this set are again presented in Tables 22 and 23. Neither hypothesis in this set was supported.

The fourth set of hypotheses tests was that physicians are more occupationally and less institutionally oriented than others. The results for this pair are also

TABLE 22

Means Test - Senior Sergeants vs. Junior Enlisted, Senior Officers vs. Junior Officers, Members with Doctorate Degree vs. Other Members, Physicians vs. Others: Institutional Orientation

Group	n	Inst.	t	One-Tailed p
Senior Sergeants	939	12.28	22.93	.000*
Junior Enlisted	3402	10.05		
Senior Officers	343	11.63	4.37	.000*
Junior Officers	563	10.88		
Doctorate Degree	72	11.04	1.25	.109
Other Education	5149	10.63		
Physicians	19	10.56	-.11	.456
Others	5230	10.64		

*Significant at $p \leq .01$

shown in Tables 22 and 23. Neither hypothesis for physicians vs. others was supported.

The fifth hypothesis test was that rated officers are less institutionally oriented than non-rated officers. Subgroups by TAFMS were tested separately. Table 24 shows the results for these tests. The hypothesis was not rejected for the 0-5 and 6-10 year groups ($p \leq .01$) and for the group as a whole ($p \leq .05$).

The sixth hypothesis tested was that officers with research and development, scientific and engineering AFSC's

TABLE 23

Means Test - Senior Sergeants vs. Junior Enlisted, Senior Officers vs. Junior Officers, Members with Doctorate Degree vs. Other Members, Physicians vs. Others: Occupational Orientation

Group	n	Occp.	t	One-Tailed p
Senior Sergeants	939	12.68		
Junior Enlisted	3402	13.33	-6.32	.000*
Senior Officers	343	12.67		
Junior Officers	563	13.23	-3.15	.001*
Doctorate Degree	72	13.30		
Other Education	5149	13.16	.44	.331
Physicians	19	13.93		
Others	5230	13.16	1.12	.139

*Significant at $p \leq .01$

are more occupationally oriented than other officers. Separate tests were made for subgroups by TAFMS and three education levels. The results of these tests are shown in Tables 25, 26, and 27. The hypothesis was not supported for any case.

The seventh hypothesis tested was that officers are less occupationally oriented than enlisted personnel. Separate tests were made for year groups. Table 28 shows the results of these tests. The hypothesis was not

TABLE 24

Means Test - Non-Rated Officers vs. Rated Officers:
Institutional Orientation

TAFMS	Group	n	Inst.	t	One-Tailed p
0-5	Non-Rated	199	10.89	2.89	.002*
	Rated	89	10.01		
6-10	Non-Rated	104	11.38	2.52	.007*
	Rated	94	10.53		
11-15	Non-Rated	112	11.30	1.17	.121
	Rated	73	10.89		
16-20	Non-Rated	89	11.84	.59	.278
	Rated	58	11.59		
21-25	Non-Rated	24	12.34	-.19	.424
	Rated	39	12.45		
26+	Non-Rated	5	12.45	-.50	.316
	Rated	14	13.14		
All	Non-Rated	537	11.31	2.16	.016**
	Rated	370	10.95		

*Significant at $p \leq .01$

**Significant at $p \leq .05$

TABLE 25

Means Test - R/D, Scientific and Engineering Officers vs.
Other Officers, Occupational Orientation

TAFMS	Group	n	Occp.	t	One-Tailed p
0-5	R/D & S/E Officers	16	13.53	.67	.255
	Other Officers	270	13.10		
6-10	R/D & S/E Officers	12	13.13	-.21	.419
	Other Officers	186	13.27		
11-15	R/D & S/E Officers	16	13.45	.44	.331
	Other Officers	169	13.12		
16-20	R/D & S/E Officers	9	12.85	.01	.496
	Other Officers	138	12.84		
21-25	R/D & S/E Officers	5	14.30	1.32	.122
	Other Officers	58	12.09		
26+	R/D & S/E Officers	1	12.41	N/A	N/A
	Other Officers	18	11.23		
All	R/D & S/E Officers	61	13.35	1.06	.146
	Other Officers	845	12.99		

TABLE 26

Means Test - R/D, Scientific and Engineering Officers with
M. S. through Ph. D. Degree vs. Other Officers,
Occupational Orientation

TAFMS	Group	n	Occp.	t	One-Tailed p
0-5	R/D & S/E Officers ¹	4	14.04	.72	.255
	Other Officers	281	13.11		
6-10	R/D & S/E Officers	10	12.94	-.52	.306
	Other Officers	188	13.28		
11-15	R/D & S/E Officers	13	13.80	.89	.388
	Other Officers	172	13.10		
16-20	R/D & S/E Officers	7	12.93	.12	.453
	Other Officers	140	12.83		
21-25	R/D & S/E Officers	2	14.08	1.08	.197
	Other Officers	61	12.20		
26+	R/D & S/E Officers	0	N/A	N/A	N/A
	Other Officers	18	11.20		
All	R/D & S/E Officers	39	13.42	1.09	.140
	Other Officers	867	13.00		

¹R. D & S/E Officer with education of M. S. through Ph. D.
Degree

TABLE 27

Means Test - R/D, Scientific and Engineering Officers with
Education Beyond a M. S. Degree through Ph. D. Degree
vs. Other Officers, Occupational Orientation

TAFMS	Group	n	Occp.	t	One-Tailed p
0-5	R/D & S/E Officers ¹	2	16.28	4.64	.068
	Other Officers	284	13.10		
6-10	R/D & S/E Officers	2	12.67	-.38	.371
	Other Officers	196	13.27		
11-15	R/D & S/E Officers	1	15.45	N/A	N/A
	Other Officers	184	13.13		
16-20	R/D & S/E Officers	3	14.22	1.43	.124
	Other Officers	144	12.81		
21-25	R/D & S/E Officers	0	N/A	N/A	N/A
	Other Officers	63	12.26		
26+	R/D & S/E Officers	0	N/A	N/A	N/A
	Other Officers	19	11.24		
All	R/D & S/E Officers	10	14.34	1.75	.055
	Other Officers	896	13.00		

¹R/D & S/E Officers with education beyond a M. S. through
a Ph. D. Degree

TABLE 28

Means Test - Enlisted vs. Officers
Occupational Orientation

TAFMS	Group	n	Occp.	t	One-Tailed p
0-5	Enlisted	2352	13.50	2.13	.017**
	Officers	286	13.12		
6-10	Enlisted	785	12.66	-2.96	.002*
	Officers	199	13.26		
11-15	Enlisted	529	13.11	-.22	.414
	Officers	185	13.15		
16-20	Enlisted	452	12.87	.13	.448
	Officers	148	12.84		
21-25	Enlisted	145	12.38	.27	.395
	Officers	63	12.27		
26+	Enlisted	29	11.35	.06	.476
	Officers	19	11.30		
All	Enlisted	4342	13.19	1.74	.041**
	Officers	907	13.02		

*Significant at $p \leq .01$ **Significant at $p \leq .05$

rejected for the 0-5 year group and the group as a whole at a significance of $p \leq .05$. The null hypothesis was rejected in favor of an alternate hypothesis that officers are more occupationally oriented than enlisted personnel for the 6-10 year group at $p \leq .01$.

The last set of hypotheses tested concerning the stationarity of the institution/occupation model was that; no change had taken place between 1977 and 1980 in the correlations among institutional/occupational orientations and career intent, seniority, job satisfaction and perceived prestige of the military. The results of these tests are presented in Table 29. The null hypothesis was rejected in favor of a significant change in the correlations between the career intent of all personnel and the occupational orientation ($p \leq .05$) and, the career intent of first termers and both the institutional and occupational orientations ($p \leq .05$). The null hypothesis is also rejected in favor of a change in the correlations between job satisfaction and the occupational orientation, and perceived prestige of the military and the institutional orientation at a significance of $p \leq .01$.

Results of Correlation Tests Among Institutional/
Occupational Orientations and Valences for
Air Force/Civilian Careers

The first series of tests were tests of positive correlation between the institutional orientation and the

TABLE 29

Comparison of 1977 and 1980 Correlations of Career Intent,
Seniority, Job Satisfaction and Perceived Prestige
with the Institutional/Occupational Orientations

Item	Institutional Orientation		Occupational Orientation	
	<u>1977</u>	<u>1980</u>	<u>1977</u> ²	<u>1980</u>
Career Intent				
All Personnel	.39	.40	-.39	-.35**
First Termers ¹	.24	.30**	-.47	-.41**
Seniority	.38	.36	-.15	-.12
Job Satisfaction	.24	.25	-.32	-.27*
Perceived Prestige	.15	.05*	.16 ³	.18

n = 9733 (1977); 5133 (1980)

¹n = 3996 (1977); 2112 (1980) for first termers
(persons serving their first term of obligated service)

²Stahl, McNichols and Manley (1980)

³Stahl, et. al., 1980, reported a correlation of .00.
In conversations with the first two authors it was
learned that .00 was a typographical error. This
writer's recalculation of the same data is shown.

*Difference significant at $p \leq .01$, two-tailed test

**Difference significant at $p \leq .05$, two-tailed test

valence for an Air Force career (VAF), and, a negative correlation between the institutional orientation and the valence for a civilian career (VCV). The method of computation for VAF and VCV is described in Chapter 2. These tests were for officer and enlisted career fields for which there does not appear to be strong civilian alternative to the Air Force job. Separate tests were made for 0-10 and 11+ years TAFMS. The results are presented in the following tables for the selected AFSC's (see Chapter 1 for AFSC descriptions):

<u>Officer AFSC</u>	<u>Table</u>	<u>Enlisted AFSC</u>	<u>Table</u>
40XX	30	47XXX	36
60XX	31	60XXX	37
64XX	32	61XXX, 62XXX	38
65XX, 66XX	33	64XXX	39
70XX	34	70XXX	40
73XX	35	73XXX	41

No significant correlations were found for officer AFSC's 40XX, 60XX, 70XX, 73XX, and enlisted AFSC 47XXX. The only significant correlation for the officer AFSC's was the positive correlation between the valence for an Air Force career and the institutional orientation for AFSC 65XX or 66XX, for the group as a whole ($p \leq .05$).

Concerning the enlisted AFSC's, significant positive correlations between the valence for an Air Force career and the institutional orientation were found for AFSC's 61XXX or 62XXX, the group as a whole ($p \leq .05$); AFSC 64XXX, the 0-10 year group and the group as a whole

($p \leq .01$), and the 11+ year group ($p \leq .05$); AFSC 70XXX, the 0-10 year group and the group as a whole ($p \leq .01$); and AFSC 73XXX, the 0-10 year group ($p \leq .05$), the 11+ year group and the group as a whole ($p \leq .01$).

Contrary to expectations, a significant negative correlation was found between the valence for an Air Force career and the institutional orientation for AFSC 60XXX the 0-10 year group and the group as a whole at a significance of $p \leq .01$.

Significant negative correlations between the valence for a civilian career and the institutional orientation were found only for AFSC 64XXX, the 0-10 year group and the group as a whole ($p \leq .01$), and the 11+ year group ($p \leq .05$).

TABLE 30

Correlations Between the Institutional Orientation and the Valences for Air Force/Civilian Careers for Officers with AFSC 40XX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	15	VAF	-.07	.404
		VCV	-.10	.363
11+	19	VAF	.09	.358
		VCV	.01	.485
All	34	VAF	.03	.437
		VCV	-.04	.406

TABLE 31

Correlations Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers
for Officers with AFSC 60XX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	7	VAF	.48	.148
		VCV	.18	.352
11+	5	VAF	.02	.486
		VCV	.12	.422
All	12	VAF	.33	.151
		VCV	.18	.290

TABLE 32

Correlations Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 64XX

TAFMS	n	Valences	Inst.	One-Tailed p
0-10	9	VAF	.05	.452
		VCV	-.29	.220
11+	5	VAF	-.28	.334
		VCV	.03	.480
All	14	VAF	.00	.500
		VCV	-.12	.348

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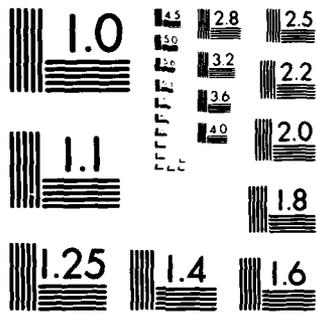
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TABLE 33

Correlations Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 65XX or 66XX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	5	VAF	.56	.146
		VCV	.36	.259
11+	12	VAF	.33	.152
		VCV	.31	.171
All	17	VAF	.41	.049**
		VCV	.32	.101

**Significant at $p \leq .05$

TABLE 34

Correlations Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 70XX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	17	VAF	-.01	.481
		VCV	-.01	.480
11+	15	VAF	.04	.442
		VCV	.06	.416
All	32	VAF	.08	.333
		VCV	.01	.484

TABLE 35

Correlation Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 73XX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	19	VAF	.16	.262
		VCV	-.17	.238
11+	8	VAF	-.12	.393
		VCV	-.18	.339
All	27	VAF	.10	.313
		VCV	-.17	.205

TABLE 36

Correlation Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 47XXX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	45	VAF	.00	.497
		VCV	.14	.172
11+	15	VAF	.12	.332
		VCV	.25	.179
All	61	VAF	.02	.430
		VCV	.17	.099

TABLE 37

Correlation Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 60XXX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	115	VAF	-.22	.009*
		VCV	-.04	.344
11+	22	VAF	-.28	.099
		VCV	-.11	.304
All	137	VAF	-.23	.003*
		VCV	.01	.472

*Significant at $p \leq .01$

TABLE 38

Correlation Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 61XXX or 62XXX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	33	VAF	.27	.065
		VCV	-.08	.336
11+	10	VAF	.46	.089
		VCV	.41	.114
All	43	VAF	.30	.026**
		VCV	-.06	.343

**Significant at $p \leq .05$

TABLE 39

Correlation Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 64XXX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	170	VAF	.37	.001*
		VCV	-.20	.004*
11+	70	VAF	.25	.018**
		VCV	-.20	.046**
All	240	VAF	.36	.001*
		VCV	-.23	.001*

*Significant at $p \leq .01$ **Significant at $p \leq .05$

TABLE 40

Correlation Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 70XXX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	207	VAF	.29	.001*
		VCV	-.01	.442
11+	69	VAF	.07	.289
		VCV	-.11	.189
All	276	VAF	.24	.001*
		VCV	-.05	.195

*Significant at $p \leq .01$

TABLE 41

Correlation Between the Institutional Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 73XXX

TAFMS	n	Valence	Inst.	One-Tailed p
0-10	161	VAF	.18	.013**
		VCV	.04	.318
11+	80	VAF	.38	.001*
		VCV	.00	.499
All	241	VAF	.21	.001*
		VCV	.03	.322

*Significant at $p \leq .01$

**Significant at $p \leq .05$

The second series of tests were tests of positive correlation between the occupational orientation and the valence for a civilian career, and, a negative correlation between the occupational orientation and the valence for an Air Force career for officer and enlisted AFSC's for which there is a strong alternative to the Air Force job. Separate testing was also done for 0-10 and 11+ TAFMS year groups. The results of these tests are shown in the following tables for the selected AFSC's (see Chapter 1 for AFSC descriptions):

<u>Officer AFSC</u>	<u>Table</u>	<u>Enlisted AFSC</u>	<u>Table</u>
10XX, 11XX, 12XX, 13XX 14XX, (Pilots)	42	20XXX	49
15XX, 22XX	43	27XXX	50
26XX, 27XX, 28XX	44	30XXX	51
30XX	45	32XXX	52
51XX	46	42XXX	53
93XX, 94XX 95XX, (Physicians)	47	43XXX	54
		46XXX	55
98XX (Dentists)	48	51XXX	56
		90XXX, 91XXX	57
		98XXX	58

Correlations for the officer AFSC's were all in the expected direction, however, all were not significant. Significant positive correlations between the valence for a civilian career and the occupational orientation were found for: pilot AFSC's, both year groups and the group as a whole ($p < .01$), 15XX or 22XX, the 0-10 year group and the group as a whole ($p < .01$), and the 11+ year group ($p < .05$); AFSC 26XX, 27XX, or 28XX, the 11+ year group and the group as a whole ($p < .01$); AFSC 30XX, the 11+ year group ($p < .01$) and the entire group ($p < .05$); and AFSC 51XX, the group as a whole ($p < .05$).

Significant negative correlation between the valence for an Air Force career and the occupational orientation was

TABLE 42

Correlations Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Officers with Pilot AFSC's

TAFMS	n	Valence	Occp.	One-Tailed p*
0-10	101	VAF	-.41	.001
		VCV	.37	.001
11+	83	VAF	-.31	.002
		VCV	.34	.001
All	183	VAF	-.38	.001
		VCV	.37	.001

*All correlations significant at $p < .01$

TABLE 43

Correlations Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 15XX or 22XX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	43	VAF	-.51	.001*
		VCV	.45	.001*
11+	27	VAF	-.37	.027**
		VCV	.34	.041**
All	70	VAF	-.45	.001*
		VCV	.40	.001*

*Significant at $p < .01$

**Significant at $p < .05$

TABLE 44

Correlations Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 26XX, 27XX, or 28XX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	29	VAF	-.42	.012**
		VCV	.17	.186
11+	31	VAF	-.46	.005*
		VCV	.42	.009*
All	60	VAF	-.44	.001*
		VCV	.32	.007*

*Significant at $p \leq .01$ **Significant at $p \leq .05$

TABLE 45

Correlations Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 30XX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	17	VAF	-.39	.058
		VCV	.11	.336
11+	19	VAF	-.32	.095
		VCV	.54	.009*
All	36	VAF	-.35	.017**
		VCV	.36	.016**

*Significant at $p \leq .01$ **Significant at $p \leq .05$

TABLE 46

Correlations Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Officers with AFSC 51XX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	9	VAF	-.45	.110
		VCV	.29	.216
11+	8	VAF	-.25	.277
		VCV	.58	.064
All	17	VAF	-.32	.101
		VCV	.44	.037**

**Significant at $p \leq .05$.

TABLE 47

Correlations Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers
for Physicians

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	16	VAF	-.47	.003*
		VCV	.40	.065
11+	5	VAF	-.68	.095
		VCV	.44	.222
All	21	VAF	-.55	.005*
		VCV	.35	.059

*Significant at $p \leq .01$

TABLE 48

Correlations Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers
for Dentists

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	17	VAF	-.50	.022**
		VCV	.06	.405
11+	4	VAF	-.24	.378
		VCV	.21	.395
All	21	VAF	-.46	.018**
		VCV	.10	.341

**Significant at $p \leq .05$

found for: pilot AFSC's both year groups and the group as a whole ($p \leq .01$); AFSC 15XX or 22XX, the 0-10 year group and the group as a whole ($p \leq .01$), and the 11+ year group ($p \leq .05$); AFSC's 26XX, 27XX, 28XX, the 0-10 year group ($p \leq .05$), the 11+ year group and the group as a whole ($p \leq .01$); AFSC 30XX, the group as a whole ($p \leq .05$); physicians, the 0-10 year group and the group as a whole ($p \leq .01$); and dentists, the 0-10 year group and the group as a whole ($p \leq .05$).

Correlations for the enlisted AFSC's were less consistent than the correlations for the officer AFSC's but most were in the expected direction. An extreme exception was the series of correlations for AFSC 20XXX where highly significant correlations opposite that which was expected were found between the occupational orientation and the valence for an Air Force career (0-10 year group), and between the occupational orientation and the valence for a civilian career (11+ year group and the group as a whole). This is assumed to be the product of a very small sample size. While the 0-10 year group has a weighted sample size of 8, the maximum unweighted size available for this subgroup is 3. The weighted sample for the 11+ year group is 5 even though the maximum unweighted size is 12. Some cases may have been dropped due to the listwise deletion of missing data option used in the analysis. This would reduce the base of the sample size from the maximum available. Because of this, these results are excluded from any further analysis or comment.

Significant positive correlation between the occupational orientation and the valence for a civilian career was found for: AFSC 27XXX, 0-10 year group and the group as a whole ($p \leq .01$), and the 11+ year group ($p \leq .05$); AFSC 30XXX, the 11+ year group and the group as a whole ($p \leq .05$); AFSC 32XXX, all groups ($p \leq .01$); AFSC 43XXX, the 0-10 year group and the group as a whole

TABLE 49

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 20XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	8	VAF	.99	.001*
		VCV	-.90	.001*
11+	5	VAF	-.55	.179
		VCV	-.60	.153
All	12	VAF	-.27	.196
		VCV	-.55	.032**

*Significant at $p \leq .01$ **Significant at $p \leq .05$

TABLE 50

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 27XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	84	VAF	-.24	.015**
		VCV	.32	.001*
11+	46	VAF	-.35	.008*
		VCV	.25	.045**
All	131	VAF	-.27	.001*
		VCV	.31	.001*

*Significant at $p \leq .01$ **Significant at $p \leq .05$

TABLE 51

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 30XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	149	VAF	.10	.111
		VCV	.03	.338
11+	59	VAF	-.55	.001*
		VCV	.27	.018**
All	208	VAF	-.11	.056
		VCV	.12	.038**

*Significant at $p < .01$ **Significant at $p < .05$

TABLE 52

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 32XXX

TAFMS	n	Valence	Occp.	One-Tailed p*
0-10	210	VAF	-.52	.001
		VCV	.36	.001
11+	63	VAF	-.42	.001
		VCV	.40	.001
All	273	VAF	-.50	.001
		VCV	.38	.001

*All correlations significant at $p < .01$

TABLE 53

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 42XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	283	VAF	-.29	.001*
		VCV	-.01	.417
11+	82	VAF	-.48	.001*
		VCV	-.07	.273
All	364	VAF	-.34	.001*
		VCV	-.02	.338

*Significant at $p < .01$

TABLE 54

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 43XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	290	VAF	-.61	.001*
		VCV	.56	.001*
11+	89	VAF	-.33	.001*
		VCV	.20	.028**
All	379	VAF	-.56	.001*
		VCV	.49	.001*

*Significant at $p < .01$

**Significant at $p < .05$

TABLE 55

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 46XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	116	VAF	-.30	.001*
		VCV	.27	.002*
11+	38	VAF	-.33	.022**
		VCV	.17	.149
All	154	VAF	-.34	.001*
		VCV	.26	.001*

*Significant at $p < .01$ **Significant at $p < .05$

TABLE 56

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 51XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	55	VAF	-.34	.006*
		VCV	.16	.116
11+	19	VAF	-.53	.009*
		VCV	.26	.141
All	75	VAF	-.37	.001*
		VCV	.14	.119

*Significant at $p < .01$

TABLE 57

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC's 90XXX or 91XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	154	VAF	-.45	.001*
		VCV	.46	.001*
11+	44	VAF	-.18	.127
		VCV	.37	.006*
All	198	VAF	-.41	.001*
		VCV	.44	.001*

*Significant at $p < .01$

TABLE 58

Correlation Between the Occupational Orientation and
the Valences for Air Force/Civilian Careers for
Enlisted with AFSC 98XXX

TAFMS	n	Valence	Occp.	One-Tailed p
0-10	27	VAF	-.43	.012**
		VCV	-.01	.483
11+	4	VAF	-.66	.154
		VCV	-.22	.384
All	31	VAF	-.45	.005*
		VCV	-.06	.377

*Significant at $p < .01$

**Significant at $p < .05$

($p < .01$), and the 11+ year group ($p < .05$); AFSC 46XXX, the 0-10 year group and the group as a whole ($p < .01$), and AFSC's 90XXX or 91XXX, all groups ($p < .01$).

Significant negative correlation between the occupational orientation and the valence for an Air Force career was found for: AFSC 27XXX, the 0-10 year group ($p < .05$), and the 11+ year group and the group as a whole ($p < .01$); AFSC 30XXX, the 11+ year group ($p < .01$); AFSC 32XXX, all groups ($p < .01$); AFSC 42XXX, all groups ($p < .01$), AFSC 43XXX, all groups ($p < .01$), AFSC 46XXX, the 0-10 year group and the group as a whole ($p < .01$), and, the 11+ year group ($p < .05$); AFSC 51XXX, all groups ($p < .01$); AFSC's 90XXX or 91XXX, the 0-10 year group and the group as a whole ($p < .01$); and AFSC 98XXX, the 0-10 year group ($p < .05$) and the group as a whole ($p < .01$).

Summary

This chapter presents the results of the analysis this writer performed for this research effort. The 1977 data were reanalyzed with the reduced institutional orientation measure. A longitudinal analysis was made on several demographic groups to assess changes that may have occurred in their institutional/occupational orientations. The orientation means of seven groups were tested to determine if relative orientations that existed were still true in 1980. Finally, the relationship between the institutional/occupational orientations and the valences for Air Force/

Civilian careers were tested to determine if self-interest is a viable factor in the institutional model as it is in the occupational model.

The next chapter presents a summary of this research effort, the conclusions this writer has drawn from the results and some recommendations for further research.

CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

In this chapter, a summary of the results obtained by this writer is presented. Conclusions based on these results are discussed. Finally, recommendations concerning institutional/occupational orientations separately and in conjunction with the valences for Air Force/Civilian careers are made.

Summary of Research

Since Dr. Charles C. Moskos, Jr., first presented the concept of the military shifting from its traditional institutional format to one more like that of an occupation, military leaders and authors on military subjects have recognized the relevance of what a shift from "a way of life" to "just a job" could do to the state of the military. The shift Moskos described is a change from the notion of self-sacrifice, transcending individual self-interest in favor of a presumed higher good (the institutional model) toward a notion of concern with self-interest, contractual rights and obligations, primary allegiance to self, rather than to the organization and its goals (the occupational model).

The concepts of the institutional and occupational models have been operationalized, tested and measured by Stahl, Manley and McNichols and by Hagemann using questions developed by Stahl, et al., that were included in the 1977 Quality of Air Force Life Survey. The 1980 Quality of Air Force Life Survey also contained these institution/occupation questions that are summed together to form measures or scores of the institutional and the occupational orientations. The main purpose of this research effort was to determine if a measurable shift has occurred in the orientations of Air Force personnel between 1977 and 1980. Previous conclusions that a shift has been taking place were based on non-empirical evaluations. While not invalid, the longitudinal analysis undertaken in this research effort has provided a firmer basis on which discussions can be based.

Additionally, the 1980 survey contained questions that model Vroom's expectancy theory valences for an Air Force career and a civilian career. A premise of Vroom's theory is the maximization of self-interest. A secondary purpose of this research was to determine if self-interest could be identified with the institutional orientation for career fields which do not appear to have strong civilian alternatives. This is contrary to Moskos' assertion about the institutional orientation but is a keen point since career intent has been shown to be positively correlated

with the valence for an Air Force career. Also, career intent has been shown to be a valid predictor of actual turnover.

A difficulty arose when a typographical error in one of the four institutional orientation questions on the 1980 survey caused that question to be eliminated in forming the institutional measure. The integrity of the measure as a whole was not lost but some depth in the longitudinal analysis was given up. In two cases where the sample size was small, the results may have been affected. This was for members with doctorate degrees and physicians. This is discussed in more detail toward the end of this section.

The hypothesis testing for a longitudinal change or shift in the institutional/occupational orientations produced evidence of such changes in several groups analyzed by this writer. Junior enlisted and junior officers showed increases in both the institutional orientation and the occupational orientation. This is a good example of the dimensional independence of the two orientations. However, the increases in the occupational orientation scores were greater numerically than the institutional orientation increases and the t-statistic was consistently stronger for the occupational orientation increase. Also, both groups and the entire sample increased significantly in occupational orientation while the 6+ year group for both junior enlisted and junior officer's institutional orientation showed no significant increase. Senior sergeants and senior

officers had parallel results of a more definitive nature. Both groups showed significant increases in their occupational orientation for the two year groups considered and the entire sample while neither showed any significant change in their institutional orientation.

Another set of hypotheses testing that compared the entire 1977 and 1980 samples was all members. This set showed a significant increase in the institutional orientation for the 0-5 and 16-20 year groups and for the group as a whole. However, the resulting significant increase for the group as a whole may well be the ability to detect small differences with a large sample size. This is important to remember since most of the subgroups did not reject the null hypothesis of no change. On the other hand, all members showed significant increases in the occupational orientation for all but the 26+ year group.

Hypotheses tested for rated officers showed a significant increase in the occupational orientation but not in the institutional orientation. Non-rated officers tests did not show the same broad increases for the occupational orientation as did tests for rated officers. The 0-5, 16-20 and 26+ year groups did not appear to increase. Also, non-rated officers demonstrated an increase in the institutional orientation for the 0-5 year group and the group as a whole. Here again the entire group shows a significant increase while all but one subgroup does not.

Hypotheses tested for physicians and members with doctoral degrees supported the hypothesis of no change in both the institutional and occupational orientations. This was not unexpected.

Hypotheses that no change has occurred in the institutional and occupational orientations of R/D and S/E officers was generally supported for the institutional orientation. The only exception being the 0-5 year group without regard to the education level. The occupational orientation did increase significantly for the group as a whole for R/D and S/E officers with any education level and those with an M. S. through Ph. D. degree even though all but one subgroup showed no increase. Even so, this writer accepts this result without the reservation expressed in two earlier cases where subgroup tests supported the null hypothesis and the test of the entire subgroup rejected. The base for this acceptance is that the sample size for R/D and S/E officers is much smaller than in previous cases while the t-test remains nearly as strong.

Relative differences in orientations between groups that were found to exist from the 1977 survey were tested again from the 1980 survey to determine if these relationships still existed. Senior sergeants were again found to be more institutionally and less occupationally oriented than junior enlisted. Also, senior officers were found to still be more institutionally and less occupationally oriented than junior

officers. Rated officers were once more found to be less institutionally oriented than non-rated officers not only in the 0-5 and 6-10 year groups but also as an entire group. Additionally, enlisted personnel were still found to be more occupationally oriented than officers but only for the 0-5 year group and the group as a whole. Officers were found to be more occupationally oriented than enlisted for the 6-10 year group.

Members with doctorate degrees were no longer found to be less institutionally oriented than others. The same was true for physicians. The results here may be affected by the reduction of the base for the institution measure. In a re-examination of the 1977 institutional orientation scores for members with doctorates vs. others, the hypothesis that members with doctorate degrees are less institutionally oriented than others was not supported with the three-question measure even though it was supported with the original four-question measure. Also, the same test for physicians could not support a significant difference of institutional orientation with the three-question measure. Therefore, for the institutional orientation, the results should not be unexpected. The lack of support for the hypothesis that members with doctorate degrees or physicians are more occupationally oriented than "others" was not surprising in light of the longitudinal increase in the occupational orientation of those "others".

This can also partially explain why R/D and S/E officers were not found to be more occupationally oriented than other officers in any of the tests. A more complete explanation, though, is that when comparing R/D and S/E officers with other officers, many of the "others" are also rated officers which have most likely confounded the test because of their high occupational orientation.

There were significant changes in the correlations between the occupational orientation and, career intent and job satisfaction. Significant change was also found in the correlations between the institutional orientation and, career intent of first termers and perceived prestige of the military. This again may be more of an ability to detect small differences with large sample sizes since the change was only .06 or less for all but one which was .10 (institutional orientation with perceived prestige).

The correlation analysis between institutional/occupational orientations and valences for Air Force/Civilian careers did not present evidence to refute the assertions of Moskos concerning self-sacrifice and the institution model, especially for officers. For enlisteds however, the valence for an Air Force career and the institutional orientation were found to be significantly correlated in the positive direction for all of the groups as a whole and for most of the subgroups. Also a significant negative correlation was found between the valence for a civilian career and the

institutional orientation for AFSC 64XXX (supply). These results cast doubt on the notion of self-sacrifice of members who have no strong civilian alternative and who may in fact perceive the military as maximizing their self-interest.

The correlations between the occupational orientation and valences for Air Force/Civilian careers were all in the expected direction and most were significant except for enlisted AFSC 20XXX which was disregarded due to the very small sample size. As expected, these results support the concept of self-interest as a premise of the occupational orientation and Vroom's valence model.

Conclusions

Based on the results and analysis of the statistical tests conducted by this writer, the following conclusions are presented:

1. Air Force personnel have become more occupationally oriented between 1977 and 1980. Members in the 0-5 and 16-20 year groups have also become more institutionally oriented in the same period.
2. The relative orientations of groups within the Air Force has remained stable between 1977 and 1980.
3. Enlisted members without a strong civilian alternative to their Air Force job may be acting in accordance with Vroom's expectancy theory and

self-interest instead of Moskos' theory of self-sacrifice and the institution model.

Recommendations

As a result of this research, this writer recommends that military leaders and planners at all levels be made aware that an increase in the occupational orientation of Air Force personnel which was first postulated by Moskos in 1976 and which has caused great concern at the highest levels of military authority, is continuing in 1980, at least in the Air Force. It is only through these leaders, working with the Congress and the President, that the proper responses to this situation can be affected. This writer's recommended response is to consider the organization changes necessary to insure that members of the more occupationally oriented groups are not driven from the military because they want to pursue their more specialized occupational skills instead of the generalized institutional skills of the traditional professional military. The alternative is for the Air Force to initiate programs aimed at reinstitutionalizing its members.

This writer's research was aimed at determining whether the hypothesis made by Moskos concerning the institution to occupation shift was occurring as measured by a set of survey questions. An attempt was also made to discuss some implications of an increase in the occupational orientation. Now that an increase has empirically shown to

be true, a rigorous examination of effects of a more occupationally oriented model is in order. Also in this research, an alternate view of the institutional orientation has been found to be operative for at least a segment of the Air Force. A complete examination of the institutional orientation in light of Vroom's original model and other variations may prove worthwhile.

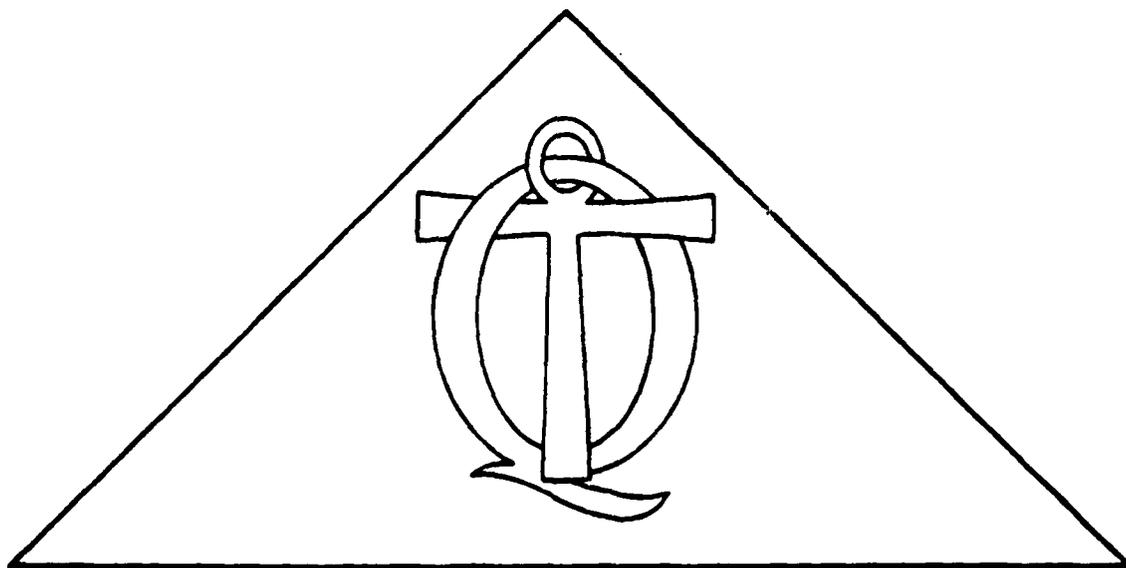
Finally, another examination in the next three or four years of the Air Force and of other services with respect to the institution/occupation model is essential. This will allow future determination of change in the institutional/occupational orientation of Air Force personnel.

APPENDICES

APPENDIX A

1980 UNITED STATES AIR FORCE QUALITY OF AIR FORCE LIFE
ACTIVE DUTY PERSONNEL SURVEY

**UNITED STATES AIR FORCE
QUALITY OF AIR FORCE LIFE
ACTIVE DUTY
AIR FORCE PERSONNEL SURVEY**



THIRD EDITION

USAF SCN 80-24

PRIVACY ACT STATEMENT

In accordance with paragraph 30, AFR 12-35, Air Force Privacy Act Program, the following information about this survey is provided:

- a. Authority. Federal Statute Title 10, United States Code, Section 8012, Secretary of the Air Force: Powers and Duties, Delegation by.
- b. Principal Purpose. This survey is being conducted to gain the attitudes and opinions of Air Force members on a variety of subjects of interest to Headquarters USAF.
- c. Routine Use. The survey data will be converted to statistical information for use by decision makers in development of future personnel plans and policies.
- d. Participation in this survey is entirely voluntary.
- e. No adverse action of any kind may be taken against any individual who elects not to participate in any or all of this survey.

GENERAL INSTRUCTIONS

Please do not fold, staple, or otherwise damage the answer sheet.

Select only one answer to each question.

Mark your answers on the answer sheet. It is not necessary to write on the survey itself. Please use a No. 2 pencil.

Be sure to mark your answers carefully so that you enter them opposite the same answer sheet number as survey question number.

Be sure that your answer marks are heavy and that you blacken the oval-shaped space. Erase all changes completely and carefully so as not to tear the answer sheet.

Right Way	1	
to Mark	2	
Answer Sheet	3	
	4	
Wrong Way	5	
to Mark	6	
Answer Sheet	7	
	8	

Special Instructions: Items one and two below will be used to identify your base of assignment. Refer to paragraph two of your cover letter to find the two-letter code for your base. The first letter will be the response choice for you to mark for Item one on your answer sheet; the second letter will be the response choice for you to mark for Item two on your answer sheet. Now proceed to Item three and be sure that your answer is marked in the appropriate space for Item three on your answer sheet.

1. (Please mark the answer sheet with code described above.)

2. (Please mark the answer sheet with code described above.)

3. What is your present active duty grade?

- | | |
|--------------------------|---------------------------|
| A. Colonel | I. Senior Master Sergeant |
| B. Lieutenant Colonel | J. Master Sergeant |
| C. Major | K. Technical Sergeant |
| D. Captain | L. Staff Sergeant |
| E. First Lieutenant | M. Sergeant |
| F. Second Lieutenant | N. Senior Airman |
| G. Warrant Officer | O. Airman First Class |
| H. Chief Master Sergeant | P. Airman |
| | Q. Airman Basic |

4. What is your command of assignment (the command that maintains your personnel records)?

- | | |
|--------------------------------------------|-----------------------------------------------|
| A. Alaskan Air Command | M. Air Force Data Automation Agency |
| B. U.S. Air Force Academy | N. Military Airlift Command |
| C. U.S. Air Forces in Europe | O. Pacific Air Forces |
| D. Air Force Accounting and Finance Center | P. Strategic Air Command |
| E. Air Force Logistics Command | Q. Tactical Air Command |
| F. Air Force Systems Command | R. Electronic Security Command |
| G. Air Reserve Personnel Center | S. Air Force Military Personnel Center |
| H. Air Training Command | T. Air Force Inspection and Safety Center |
| I. Air University | U. Air Force Audit Agency |
| J. Headquarters Air Force Reserve | V. Air Force Office of Special Investigations |
| K. Headquarters USAF | W. Other |
| L. Air Force Communications Command | |

5. How much total active federal military service have you completed?

- | | |
|------------------------------|------------------------------|
| A. Less than 1 year | O. 14 years but less than 15 |
| B. 1 year but less than 2 | P. 15 years but less than 16 |
| C. 2 years but less than 3 | Q. 16 years but less than 17 |
| D. 3 years but less than 4 | R. 17 years but less than 18 |
| E. 4 years but less than 5 | S. 18 years but less than 19 |
| F. 5 years but less than 6 | T. 19 years but less than 20 |
| G. 6 years but less than 7 | U. 20 years but less than 21 |
| H. 7 years but less than 8 | V. 21 years but less than 22 |
| I. 8 years but less than 9 | W. 22 years but less than 23 |
| J. 9 years but less than 10 | X. 23 years but less than 24 |
| K. 10 years but less than 11 | Y. 24 years but less than 25 |
| L. 11 years but less than 12 | Z. 25 years but less than 26 |
| M. 12 years but less than 13 | 1. 26 years but less than 27 |
| N. 13 years but less than 14 | 2. 27 years or more |

6. What is your highest level of education now (include accepted GED credits)?
- A. Some high school (did not graduate)
 - B. High school graduate (no college)
 - C. Trade or technical school (no college)
 - D. Some college, but less than one year
 - E. One year college, but less than two
 - F. Two years college, but less than three (including two-year associate degree)
 - G. Three years or more college, no degree
 - H. Registered nurse diploma program
 - I. College degree (BS, BA, or equivalent, except I.L.B)
 - J. Graduate work beyond bachelor degree (no master's degree)
 - K. Master's degree
 - L. Postgraduate work beyond master's degree
 - M. Doctorate degree (includes I.L.B, J.D., D.D.S., M.D., and D.V.M.)
7. What is your marital status?
- A. Married and spouse is not a member of a military service
 - B. Married and spouse is a member of a military service
 - C. Never been married
 - D. Divorced and not remarried
 - E. Legally separated
 - F. Widower/widow
8. What was the source of your commission?
- A. Not applicable, I am enlisted
 - B. OTS
 - C. OCS
 - D. ROTC
 - E. Aviation Cadet
 - F. Navigation Cadet
 - G. USAFA
 - H. USMA
 - I. USNA
 - J. Other
9. Which one of the following do you consider yourself?
- A. Black
 - B. Spanish Speaking Origin (Cuban, Puerto Rican, Mexican American, Spanish Descent)
 - C. American Indian
 - D. Asian Origin (Chinese, Japanese, Korean, Filipino, or Asian American)
 - E. White (Other than Spanish Speaking Origin)
 - F. Other
10. What is your sex?
- A. Male
 - B. Female

11. Which one of the following best describes your attitude toward making the Air Force a career?
- A. Definitely intend to make the Air Force a career
 - B. Most likely will make the Air Force a career
 - C. Undecided
 - D. Most likely will not make the Air Force a career
 - E. Definitely do not intend to make the Air Force a career
12. At the time you came on active duty in the Air Force, which one of the following best describes the attitude you had toward making the Air Force a career?
- A. Definitely intended to make the Air Force a career
 - B. Was inclined toward making the Air Force a career
 - C. Was undecided
 - D. Was not inclined toward an Air Force career
 - E. Definitely did not intend to make the Air Force a career
13. Which of the following best describes your attitude toward retirement at 20 years of military service?
- A. Not applicable have over 20 years service
 - B. Definitely will remain on active duty beyond 20 years
 - C. Probably will remain on active duty beyond 20 years
 - D. Undecided
 - E. Probably will retire at or soon after reaching 20 years
 - F. Definitely will retire at or soon after reaching 20 years
 - G. I will probably leave the service before 20 years of service
14. When does your active duty service commitment expire?
- A. No active duty service commitment
 - B. In less than 1 year
 - C. In greater than 1 year but less than 2 years
 - D. In greater than 2 years but less than 3 years
 - E. In greater than 3 years
15. How often do you think about quitting the Air Force?
- A. Never
 - B. Rarely
 - C. Sometimes
 - D. Often
 - E. Constantly
16. Enter the code for the first digit of your duty Air Force Specialty Code (AFSC) opposite item 16 on your answer sheet.
- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |
17. Enter the code for the second digit of your duty AFSC opposite item 17 on your answer sheet.
- | | |
|------|------|
| A. 0 | F. 5 |
| B. 1 | G. 6 |
| C. 2 | H. 7 |
| D. 3 | I. 8 |
| E. 4 | J. 9 |

18. Enter the code for the third digit of your duty AFSC opposite item 18 on your answer sheet.

- | | | | |
|----|---|----|---|
| A. | 0 | F. | 5 |
| B. | 1 | G. | 6 |
| C. | 2 | H. | 7 |
| D. | 3 | I. | 8 |
| E. | 4 | J. | 9 |

19. What is your current primary aeronautical rating?

- A. Pilot
- B. Navigator
- C. Flight Surgeon
- D. Other aeronautical rating
- E. Nonrated

The following questions address the subject of economic standard and security. Please rate your degree of satisfaction with them based on the descriptions shown below.

ECONOMIC STANDARD: Satisfaction of basic human needs such as food, shelter, clothing; the ability to maintain an acceptable standard of living.

20. To what degree are you satisfied with the ECONOMIC STANDARD aspects of your life: (Select one of the seven points on the satisfaction scale.)

A . . . B . . . C . . . D . . . E . . . F . . . G

Highly Dissatisfied Neutral Highly Satisfied

21. Most of the time my military service pay is adequate to cover the basic expenses with at least a little left over.

- A. Strongly disagree
- B. Disagree
- C. Slightly disagree
- D. Neither agree or disagree
- E. Slightly agree
- F. Agree
- G. Strongly agree

22. In the future I believe my military income will provide me with an acceptable standard of living.

- A. Strongly disagree
- B. Disagree
- C. Slightly disagree
- D. Neither agree or disagree
- E. Slightly agree
- F. Agree
- G. Strongly agree

23. How do you see your future military pay keeping up with inflation as compared to the future pay of nongovernment civilians?

- A. Military much better able to keep up with inflation
- B. Military somewhat better able to keep up with inflation
- C. No difference between military and non-government civilians
- D. Non-government civilians somewhat better able to keep up with inflation
- E. Non-government civilians much better able to keep up with inflation

30. Do you hold a second job?
- A. No
- Yes, I work (choose one answer below)
- B. 1-5 hours per week
C. 6-10 hours per week
D. 11-20 hours per week
E. 21-30 hours per week
F. Over 30 hours per week
31. Does your spouse work?
- A. Not applicable, I am not married or I am legally separated
- I am married and my spouse
- B. Resides with me, and has a paying job
C. Resides with me, and does not work
D. Does not reside with me, and has a paying job
E. Does not reside with me, and does not work
32. The main reason that I have a second job, and/or that my spouse works is that we have to in order to make ends meet.
- A. Not applicable
B. Strongly disagree
C. Disagree
D. Undecided
E. Agree
F. Strongly agree
33. How do you think your military pay (including all allowances and fringe benefits) compares with pay in civilian employment for similar work?
- A. Military pay is far higher than civilian
B. Military pay is somewhat higher than civilian
C. Both about equal
D. Military pay is somewhat less than civilian
E. Military pay is far less than civilian
34. If I left the Air Force tomorrow, I think it would be very difficult to get a job in private industry with pay, benefits, duties, and responsibilities comparable with those of my present job.
- A. Strongly disagree
B. Disagree
C. Undecided
D. Agree
E. Strongly agree
35. An Air Force base is a desirable place to live.
- A. Strongly disagree
B. Disagree
C. Undecided
D. Agree
E. Strongly agree

Please rate the degree of satisfaction with your free time based on the following description:

FREE TIME: Amount, use, and scheduling of free time alone, or in voluntary associations with others; variety of activities engaged in.

36. To what degree are you satisfied with the FREE TIME aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

Highly Dissatisfied	Neutral	Highly Satisfied
------------------------	---------	---------------------

Please rate the degree of satisfaction with your work based on the following description:

WORK: Doing work that is personally meaningful and important; pride in my work; job satisfaction; recognition for my efforts and my accomplishments on the job.

37. To what degree are you satisfied with the WORK aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

Highly Dissatisfied	Neutral	Highly Satisfied
------------------------	---------	---------------------

38. To what extent are you satisfied with the relationship you have with your peers?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neutral
- D. Satisfied
- E. Highly satisfied

39. To what extent are you satisfied with the relationship you have with subordinates?

- A. Highly dissatisfied
- B. Dissatisfied
- C. Neutral
- D. Satisfied
- E. Highly satisfied
- F. Not applicable

40. On most work days, how often does time seem to drag for you?

- A. About half the day or more
- B. About 1/3 of the day
- C. About 1/4 of the day
- D. About 1/8 of the day
- E. Time never seems to drag

41. Some people are completely involved in the job -- they are absorbed in it night and day. For others, their job is simply one of several interests. How involved do you feel in your job?

- A. Very little; my other interests are more absorbing
- B. Slightly involved
- C. Moderately involved; my job and my other interests are equally absorbing to me
- D. Strongly involved
- E. Very strongly involved; my work is the most absorbing interest in my life

42. How often do you do extra work for your job which is not really required of you?
- A. Almost every day
 - B. Several times a week
 - C. About once a week
 - D. Once every few weeks
 - E. About once a month or less
43. Would you say you work harder, less hard, or about the same as other people doing your type of work in your work organization?
- A. Much harder than most others
 - B. A little harder than most others
 - C. About the same as most others
 - D. A little less hard than most others
 - E. Much less hard than most others
44. Which one of the following shows how much of the time you feel satisfied with your job?
- A. All the time
 - B. Most of the time
 - C. A good deal of the time
 - D. About half of the time
 - E. Occasionally
 - F. Seldom
 - G. Never
45. Choose one of the following statements which best tells how well you like your job.
- A. I hate it
 - B. I dislike it
 - C. I don't like it
 - D. I am indifferent to it
 - E. I like it
 - F. I am enthusiastic about it
 - G. I love it
46. Which one of the following best tells how you feel about changing your job?
- A. I would quit this job at once if I could
 - B. I would take almost any other job in which I could earn as much as I am earning now
 - C. I would like to change both my job and my occupation
 - D. I would like to exchange my present job for another one
 - E. I am not eager to change my job, but I would do so if I could get a better job
 - F. I cannot think of any jobs for which I would exchange
 - G. I would not exchange my job for any other
47. Which one of the following shows how you think you compare with other people?
- A. No one likes this job better than I like mine
 - B. I like job much better than most people like theirs
 - C. I like my job better than most people like theirs
 - D. I like my job about as well as most people like theirs
 - E. I dislike my job more than most people dislike theirs
 - F. I dislike my job much more than most people dislike theirs
 - G. No one dislikes this job more than I dislike mine

48. How do you evaluate your present Air Force job?
- A. Not at all challenging
 - B. Not very challenging
 - C. Somewhat challenging
 - D. Challenging
 - E. Very challenging
49. Do you think your present job is preparing you to assume future positions of greater responsibility?
- A. Definitely not
 - B. Probably not
 - C. Undecided
 - D. Probably yes
 - E. Definitely yes
50. What is your estimate of the average number of hours per week you spend on the job?
- A. Less than 30 hours
 - B. 31-35
 - C. 36-40
 - D. 41-45
 - E. 46-50
 - F. 51-55
 - G. 56-60
 - H. More than 60
51. The Air Force requires me to participate in too many activities that are not related to my job.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
52. Air Force members should take more interest in mission accomplishment and less interest in their personal concerns.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree
53. To what extent do you have trust in senior Air Force decision makers?
- A. None at all
 - B. Very little extent
 - C. Some
 - D. Great extent
 - E. Undecided
54. To what extent do you have confidence in senior Air Force decision makers?
- A. None at all
 - B. Very little extent
 - C. Some
 - D. Great extent
 - E. Undecided

55. The AF is a good organization to work for today.
- A. Strongly disagree
 - B. Disagree
 - C. Slightly disagree
 - D. Neither agree nor disagree
 - E. Slightly agree
 - F. Agree
 - G. Strongly agree
56. Five years ago, the AF was a good organization in which to work.
- A. Strongly disagree
 - B. Disagree
 - C. Slightly disagree
 - D. Neither agree nor disagree
 - E. Slightly agree
 - F. Agree
 - G. Strongly agree
 - H. Not applicable, I have served less than five years
57. Considering just the trends you observe today in the Air Force, five years from now, the AF will be a good place to work.
- A. Strongly disagree
 - B. Disagree
 - C. Slightly disagree
 - D. Neither agree nor disagree
 - E. Slightly agree
 - F. Agree
 - G. Strongly agree
58. I wish that Air Force members had a genuine concern for national security.
- A. Strongly disagree
 - B. Disagree
 - C. Inclined to disagree
 - D. Undecided
 - E. Inclined to agree
 - F. Agree
 - G. Strongly agree
59. Select the one factor which TODAY would influence you the most to make the Air Force a career.
- A. Opportunity for training and education in the Air Force
 - B. My Air Force job (challenging, provides sense of accomplishment, etc)
 - C. Pay and allowances
 - D. Housing
 - E. Promotion system and opportunity
 - F. Fringe benefits (medical and dental care, BX, commissary, etc)
 - G. Leadership and supervision in the Air Force
 - H. Travel and new experiences
 - I. Have "say" in future assignments
 - J. Security of Air Force life
 - K. Air Force policies and procedures
 - L. The retirement system
 - M. Opportunity to serve my country
 - N. Some other factor
 - O. I do not intend to make the Air Force a career

72. A career in the Air Force provides interesting and challenging jobs.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K
COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

73. In the Air Force, you will be subject to a set of rules and regulations governing personal behavior in areas such as dress and appearance and associations with other members of the organization.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K
COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

74. You will be able to retire from the Air Force after 20 years service with a monthly pension of 40% of your total salary (equivalent to approximately 50% of your base pay).

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K
COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

75. Effective use will be made of your abilities and training throughout an Air Force career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K
COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

76. Extended separation from your immediate family (if married) or from home and friends (if unmarried) is one aspect of an Air Force career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K
COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

77. Your spouse (if married) or your immediate family (if unmarried) has a favorable attitude regarding you having an Air Force career.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K
COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

78. An Air Force career will require you to attain positions of increased rank and responsibility in order to remain a member of your organization.

A . . . B . . . C . . . D . . . E . . . F . . . G . . . H . . . I . . . J . . . K
COMPLETELY UNDECIDED COMPLETELY
DISAGREE AGREE

92. What is your opinion of the quality of leadership in the Air Force?

- A. Excellent
- B. Above average
- C. Average
- D. Below average
- E. Poor

93. What is your opinion of discipline in today's Air Force?

- A. Too strict
- B. Somewhat strict
- C. About right
- D. Somewhat lenient
- E. Too lenient

94. More supervision of member performance and behavior is needed at lower levels within the Air Force.

A B C D E

STRONGLY DISAGREE DISAGREE UNDECIDED AGREE STRONGLY AGREE

95. How often do you and your supervisor get together to set your personal performance objectives?

- A. Never
- B. Seldom
- C. Sometimes
- D. Frequently
- E. Very frequently

96. How often are you given feedback from your supervisor about your job performance?

- A. Never
- B. Seldom
- C. Sometimes
- D. Frequently
- E. Very frequently

97. How often does your immediate supervisor give you recognition for a job well done?

- A. Never
- B. Seldom
- C. Sometimes
- D. Frequently
- E. Always

98. How often are you given the freedom you need to do your job well?

- A. Never
- B. Seldom
- C. Sometimes
- D. Often
- E. Always

Please rate your degree of satisfaction with equity based on the following description:

EQUITY: Equal opportunity in the Air Force; a fair chance at promotion; an even break in my job/assignment selections.

99. To what degree are you satisfied with the EQUITY aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY
DISSATISFIED

NEUTRAL

HIGHLY
SATISFIED

100. An individual can get more of an even break in civilian life than in the Air Force.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

101. The Air Force promotion system is effective (i.e., the best qualified people are generally selected for promotion).

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree

102. On the same jobs as men, do Air Force women tend to do more, less, or about the same amount of work?

- A. Much more
- B. More
- C. About the same
- D. Less
- E. Much less

103. How does your supervisor deal with your women co-workers?

A. Not applicable, there are no women in my unit

My supervisor is a woman and she:

- B. Expects more from the women workers than the men
- C. Treats men and women workers the same
- D. Expects more from the men workers than the women

My supervisor is a man and he:

- E. Expects more from the women workers than the men
- F. Treats men and women workers the same
- G. Expects more from the men workers than the women

Please rate your degree of satisfaction with personal growth based on the following description:

PERSONAL GROWTH: To be able to develop individual capacities; education/training; making full use of my abilities; the chance to further my potential.

104. To what degree are you satisfied with the PERSONAL GROWTH aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY
DISSATISFIED

NEUTRAL

HIGHLY
SATISFIED

Please rate your degree of satisfaction with personal standing based on the following description:

PERSONAL STANDING: To be treated with respect; prestige; dignity; reputation; status.

105. To what degree are you satisfied with the PERSONAL STANDING aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY
DISSATISFIED

NEUTRAL

HIGHLY
SATISFIED

106. The prestige of the military today is good.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

107. The prestige of the military has declined over the past several years.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

108. Senior NCOs (E7-E9) are usually given jobs with less responsibility than they should have.

- A. Strongly disagree
- B. Disagree
- C. Undecided
- D. Agree
- E. Strongly agree

Please rate your degree of satisfaction with health based on the following description:

HEALTH: Physical and mental well-being of self and dependents; having illnesses and ailments detected, diagnosed, treated and cured; quality and quantity of health care services provided.

109. To what degree are you satisfied with the HEALTH aspects of your life?

A . . . B . . . C . . . D . . . E . . . F . . . G

HIGHLY
DISSATISFIED

NEUTRAL

HIGHLY
SATISFIED

110. Generally, how satisfied are you with the medical care you received at military medical facilities during the past 12 months?
- A. Highly dissatisfied
 - B. Dissatisfied
 - C. Neither satisfied nor dissatisfied
 - D. Satisfied
 - E. Highly satisfied
 - F. Not applicable, did not visit military medical facility in past 12 months
111. Generally, how satisfied are you with the medical care your children received in military medical facilities during the past 12 months?
- A. Highly dissatisfied
 - B. Dissatisfied
 - C. Neither satisfied nor dissatisfied
 - D. Satisfied
 - E. Highly satisfied
 - F. Not applicable
112. Generally, the amount of time I have had to wait for treatment at military medical facilities during the past 12 months has been reasonable.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
 - F. Not applicable
113. Generally, medical personnel at military medical facilities are pleasant and concerned about patients.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
114. Approximately how many times did you and/or your children visit a military medical facility during the past 12 months?
- A. None
 - B. 1-4 times
 - C. 5-8 times
 - D. 9-12 times
 - E. More than 12 times
115. Short tours and long tours count equally for overseas tour credit. Although certain overseas areas are more popular than others, given the same tour length, do you feel more overseas credit should be given to service in hard-to-man areas than service in more popular areas?
- A. Yes, 1 1/2 for 1
 - B. Yes, 2 for 1
 - C. Yes, 3 for 1
 - D. No
 - E. Undecided
116. Would you be more likely to volunteer for hard-to-man overseas duty if you could get extra credit for such duty?
- A. Yes
 - B. No
 - C. Undecided

117. Overseas volunteers may now specify only a country of choice. Would you be more likely to volunteer for overseas duty if you were assured of receiving the specific base of your choice?

- A. Yes
- B. No
- C. Undecided

118. If you were authorized to apply for an overseas Base of Preference (BOP), would you apply?

- A. Yes
- B. No
- C. Undecided

119. Would you accept a hard-to-man short tour if upon completion of the short tour you were guaranteed a Consecutive Overseas Tour (COT) in a long tour area of your choice?

- A. Yes
- B. No
- C. Undecided

120. If you were informed of all the overseas assignment options open to your AFSC and grade, would you more likely volunteer for overseas duty?

- A. Yes, definitely, I would more likely volunteer
- B. Yes, probably, I would more likely volunteer
- C. Yes, to a slight extent I would more likely volunteer
- D. No, I would not volunteer
- E. Undecided

121. Listed below are a number of alternatives for priority matching overseas returnees to available assignments. Which alternative do you prefer?

Alternative A

- 1st Consideration: Short Tour Returnees
- 2nd Consideration: Long Tour Returnees (Unaccompanied)
- 3rd Consideration: Long Tour Returnees (Accompanied)

Alternative B

- 1st Consideration: Short Tour Returnees and Long Tour Returnees (Unaccompanied) considered equally
- 2nd Consideration: Long Tour Returnees (Accompanied)

Alternative C

- 1st Consideration: Short Tour Returnees
- 2nd Consideration: Long Tour Returnees (Unaccompanied and Accompanied) considered equally

Alternative D

- 1st Consideration: Long Tour Returnees (Unaccompanied)
- 2nd Consideration: Remote Tour Returnees
- 3rd Consideration: Long Tour Returnees (Accompanied)

Alternative E

All overseas returnees receive equal consideration

FAMILY PATTERNS: Questions 122 to 134 are to be completed only by those who have a spouse. Questions 135 to 144 are to be completed only by those who have children.

122. My spouse is:

- A. Military (USAF)
- B. Military (Other)
- C. Civilian

123. My spouse has a career or is pursuing a career in the sense that he/she has prepared himself/herself with special skills, has a commitment to that line of work and has some future plans for development of that career.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
124. What is your feeling toward your spouse having a job/career?
- A. Prefer my spouse to work outside the home
 - B. All right as long as my spouse prefers to work and there are no seriously negative effects
 - C. No opinion
 - D. Would prefer he/she not work outside the home
 - E. Prefer my spouse not pursue a career
125. Would you say that your spouse's career is compatible with your military career?
- A. Very compatible
 - B. Somewhat compatible
 - C. Slightly compatible
 - D. Not compatible
126. Have you ever mentioned your spouse's career to your resource manager either in discussion or on your assignment preference form?
- A. Yes
 - B. No
127. Resource managers should consider civilian spouse's career when assigning the military member.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
128. How many times have you been separated for more than a month from your family as a result of your military duty?
- A. 0
 - B. 1-2
 - C. 3-4
 - D. 5-6
 - E. In excess of 6 times
129. What is the primary reason your spouse works outside the home?
- A. Head of household
 - B. Required income
 - C. Nice to have extra income
 - D. Independence
 - E. Self-esteem
 - F. Enjoyment in work itself
 - G. Personal desire to work
 - H. Not applicable, spouse does not work outside the home

130. If you are a two-career family, how many years have you maintained the two-career family lifestyle?

- A. 1 but less than 2 years
- B. 2 but less than 3 years
- C. 3 but less than 4 years
- D. 4 but less than 5 years
- E. More than 5 years

131. How many hours per week does your spouse spend on the job?

- A. Less than 40 hours
- B. 40 but less than 50 hours
- C. 50 but less than 60 hours
- D. Over 60 hours

132. Independent of your spouse's feelings about an Air Force career, which would you prefer?

- A. To stay in the Air Force until retirement
- B. To leave the Air Force before retirement
- C. Undecided

133. Have you and your spouse agreed upon his/her career plans?

- A. Yes
- B. No

134. Have you and your spouse agreed upon your career plans?

- A. Yes
- B. No

Questions 135 to 144 are to be completed only by those having children.

135. Are you a single member parent?

- A. Yes
- B. No

136. How many children do you have living at home?

- A. 1
- B. 2
- C. 3
- D. 4
- E. More than 4

137. What is the age of your youngest child?

- A. Preschool 0-5 years
- B. Young school age 6-12 years
- C. Teenager 13-18
- D. Over 18

138. Would you use a professionally run childcare facility which was available for use 24 hours a day whenever you needed it?

- A. Yes
- B. No

139. To what degree would you say you need such a facility?

- A. To a great extent
- B. To some extent
- C. Maybe
- D. To a little extent
- E. Not at all

Listed below are a number of factors which may represent your objections to overseas duty. Use Items 140-144 to rank your objections. First, select the reason which represents your most important objection and mark the appropriate letter on your answer sheet for Item 140. Then select the second most important reason and continue ranking until the least important reason is marked for Item 144.

- A. Financial costs (costs of relocation, living overseas or loss of additional income from second job/spouse's employment).
- B. Family considerations (school, medical care, separation from parents, etc).
- C. Quality of life overseas (housing, support facilities, cultural differences).
- D. Inability to have my spouse/family accompany me.
- E. I'm satisfied where I am and don't want to move.
- F. A reason other than those listed above.

- 140. ___ First ranked reason (most important)
- 141. ___ Second ranked reason
- 142. ___ Third ranked reason
- 143. ___ Fourth ranked reason
- 144. ___ Fifth ranked reason (least important)

APPENDIX B
LIST OF WEIGHTS USED FOR 1980 SURVEY

<u>Grade</u>	<u>Total Strength</u>	<u>Sample Strength</u>	<u>Weighting Factor</u>
Col.	5,136	435	11.806896
Lt. Col.	12,627	440	28.697727
Maj.	18,141	398	45.580402
Capt.	36,900	398	97.713567
1 Lt.	9,571	322	29.723602
2 Lt.	12,938	348	37.17816
CMSgt.	4,511	424	10.63915
SMSgt.	8,863	451	19.651884
MSgt.	33,083	454	72.870044
TSgt.	51,994	410	126.81463
SSgt.	99,921	371	269.32884
Sgt. & SRA	101,688	358	284.04469
A1C	100,328	460	218.10434
Amn.	27,209	84	323.91666
AB	31,615	12	2634.5833

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