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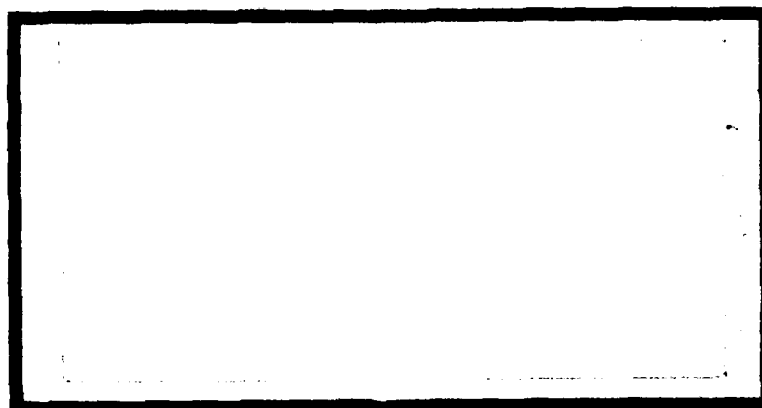
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TURNOVER OF JUNIOR OFFICERS

Ronald L. Blackburn, Major, USAF
Randall L. Johnson, Captain, USAF

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1 A current major problem facing Air Force managers is retention of junior officers. Little research has been directed toward the development of a conceptual framework of organizational turnover in military organizations. The present research developed a conceptual model of turnover by synthesizing existing theoretical frameworks from the sociological and industrial psychology literature. The model was tested using data from the 1977 Air Force Quality of Life survey focusing on a sample of male officers with less than seven years active service. The basic structure of the conceptual model was confirmed. However, several modifications were indicated and were incorporated in a revised conceptual model. The functions in the model of the variables tenure, satisfaction with pay, and perceived equity of the promotion system were found to be significantly different from those hypothesized. Additionally, perceived opportunity for civilian employment was confirmed as a significant intervening variable between job satisfaction and expressed intention to make the Air Force a career. Recommendations are made for modification and further development of the model as a possible aid for personnel policy decisions. R

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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 Logistics Management

By

Ronald L. Blackburn, BA
Major, USAF

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September 1978

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Major Ronald L. Blackburn

and

Captain Randall L. Johnson

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 LOGISTICS MANAGEMENT

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COMMITTEE CHAIRMAN

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CHAPTER I

INTRODUCTION

Overview

Turnover in the Air Force has always been a subject of importance and especially so since the advent of the All-Volunteer Force. As a result of the All-Volunteer Force policy, the Air Force must now compete more actively with civilian organizations for manpower resources (8:199). This competition can be especially keen when attempting to recruit the young college graduate for induction into the officer corps.

Competition with civilian organizations for manpower resources is also manifested in the retention problem of the Air Force. Once young people are recruited, they must be retained if they are qualified individuals. Loss of qualified personnel due to voluntary separation requires recruitment and training of replacements. This always results in costs to the Air Force.

A specific problem that is currently of high interest to the Air Force is the retention of C-141 pilots. Their separation rate is significantly high at the present time (16). A problem such as this can be more easily solved when managers at all levels have a better understanding of

turnover. If Air Force managers are to influence the career decisions of qualified officers, they must understand the many factors involved in the separation decision.

The first step in understanding organizational turnover is to review the existing body of literature on the subject. A great deal of research has been done on the subject of organizational turnover, and a large portion of this research has focused on voluntary withdrawal from organizations. In particular, research has identified numerous causal factors and intervening variables associated with voluntary turnover. Age, tenure, pay, and promotion were, for example, among the causal factors identified. In addition, three intervening variables have been identified: satisfaction, expectations, and opportunity.¹

Two useful conceptual frameworks for the study of turnover are *The Study of Turnover* by James L. Price (28), and "Organizational, Work, and Personal Factors in Employee Turnover and Absenteeism" by Lyman W. Porter and Richard M. Steers (26). Both frameworks describe relationships between causal factors (termed determinants), intervening variables, and voluntary turnover; it is the purpose of this study to determine if the relationships between the determinants,

¹Opportunity, as used in the literature, is the perception of alternative employment outside of the organization to which the individual belongs.

intervening variables, and turnover, as presented in the literature, hold when applied to the study of turnover of young Air Force officers.

Problem Statement

A need exists to determine if the relationships between the determinants, intervening variables, and turnover, as presented in the literature, hold when applied to turnover of young officers in the Air Force.

Scope

Many causal factors for organizational turnover have been identified in the literature. Of the causal factors identified, ten have consistent support. The ten factors are age, tenure, pay, promotion, peer group integration, role clarity, job autonomy and responsibility, task repetitiveness, supervisory style, and similarity of job and interests. These factors are termed determinants for this study.

Three additional factors identified in the literature are job satisfaction, expectations, and opportunity. These three factors are termed intervening variables for this study. Descriptions and definitions of the determinants and intervening variables can be found in Chapter II.

The study will only consider pay, promotion, role clarity, job autonomy and responsibility, supervisory

style, peer group integration, job satisfaction, and opportunity. Tenure was not included as a determinant because of the relatively homogeneous tenure of the individuals within the target population. The data base for evaluating the relationships between the determinants, intervening variables, and turnover was extracted from the *United States Air Force Quality of Air Force Life Active Duty Air Force Personnel Survey*. Data for the study of age, task repetitiveness, and similarity of job and interests were not available in the survey and these determinants were, therefore, not included in this study.

Correlations between the variables, as defined by the research objectives and hypotheses, will be determined. The nature of possible causal relationships between the variables is considered to be beyond the scope of this study.

Research Objectives

Four research objectives were developed in light of the relationships identified in the literature between the determinants of turnover, the intervening variables (job satisfaction and opportunity), and turnover. The objectives are: first, to determine the relationships between the determinants of turnover and job satisfaction; second, to determine the relationship between the determinants of turnover and expressed career intent (surrogate for turnover); third; to determine the relationship between job

satisfaction and expressed career intent; and last, to determine the relationship between opportunity and expressed career intent.

CHAPTER II

LITERATURE REVIEW

Introduction

Organizations play a major role in our modern society. They are the primary factors in our production system, our political system, and our religions. Through organizations, we individually earn our livelihoods and collectively choose our leaders. We even join organizations for our recreation and leisure activities. Indeed, there seems to be an organization tailor-made for any purpose imaginable. We join the organizations that play such a major role in our lives for many reasons, and, conversely, we withdraw from these organizations for many reasons (26; 28).

Withdrawal from organizations can manifest itself as either absenteeism or turnover, the latter being complete separation from the organization (28). Either of these forms of withdrawal (absenteeism or turnover) has generally negative effects on the organization, particularly on work organizations (15:61-87). Absenteeism may cause a temporary slowdown in an otherwise smooth running production operation and cause loss of production and, hence, loss of revenue or increased expense. Turnover generally requires that

replacements be recruited, trained, and given time to gain proficiency on the job—all of which represent costs to the organization. Of these two forms of withdrawal, turnover has the most far-reaching effects (28).

Turnover is generally categorized into several types, but, for this study, only voluntary turnover was considered. Price defined voluntary turnover as ". . . individual movement across the membership boundary of a social system which is initiated by the individual [emphasis added] [28:9]." In this study, the word turnover is used as synonymous with voluntary turnover.

Because of its "potentially critical consequences [26:151]," turnover has been the subject of much research and discussion (14; 15; 16; 18; 21; 26; 28; 29). Although the volume of research is great, individual studies typically explore only a small portion of the problem. The volume and piecemeal nature of individual research studies makes it difficult to get an overall perspective of turnover and the factors that lead to it. To get an overall perspective, one must turn to reviews or codifications of the literature.

Two such studies were found that are very thorough reviews of the literature and in which the authors advance conceptual frameworks for studying research results. Naturally enough, the authors' viewpoints and, hence, conceptual frameworks are different and probably reflect their different scientific disciplines. Lyman W. Porter and

Richard M. Steers, authors of the first review, "Organizational, Work, and Personal Factors in Employee Turnover and Absenteeism," are psychologists; James L. Price, author of the second review, *The Study of Turnover*, is a sociologist. In an effort to provide the broadest perspective of turnover, this chapter summarizes the Porter and Steers review and provides a model of their concept of turnover, then summarizes the Price codification and model. Finally, the models are compared and a synthesized model incorporating the concepts of both is presented.

Porter and Steers Conceptualization

Job Satisfaction

Porter and Steers noted that overall job satisfaction occupies the central role in the decision to withdraw from a job and, therefore, in turnover. They cited fourteen studies that confirm that overall job satisfaction is inversely related to turnover (26:154). In reviewing studies of more specific factors into four categories that are subsets of overall satisfaction. That is, a specific factor affects the employee's overall job satisfaction. If his job satisfaction is lowered, the employee is more likely to withdraw. Porter and Steers defined these categories as "(a) organization-wide factors, (b) immediate work environment factors, (c) job content factors, and (d) personal factors [26:152]."

Met Expectations

To explain the mechanism by which specific factors affect overall satisfaction, Porter and Steers applied the concept of met expectations.

The concept of met expectations may be viewed as the discrepancy between what a person encounters on this job in the way of positive and negative experiences and what he expected to encounter [26:152].

Every worker brings certain expectations to his job. His overall satisfaction will be determined by the extent to which the rewards provided by the job meet his expectations. Individuals will, quite naturally, perceive the rewards provided differently and thus view their expectations as being met or exceeded to different degrees. Figure 1 illustrates this point. Two workers may have identical expectation levels and receive identical rewards. Worker A may perceive the rewards as being at level R_1 and feel his expectations have been met and exceeded. Worker B, however, may view the rewards as being at level R_2 or R_3 and feel his expectations have not been met. Thus, Worker A would experience greater job satisfaction than Worker B and would have a lower propensity to withdraw or quit (26:171).

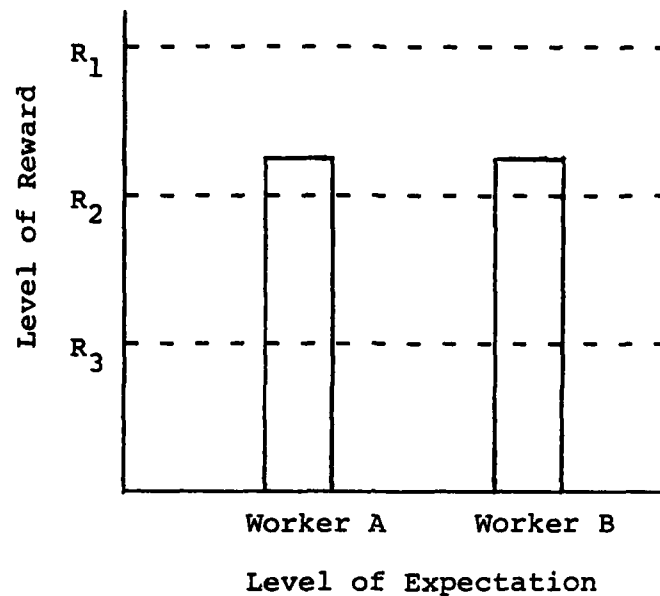


Figure 1

Hypothetical Example of Expectations—Perceived
Reward Interaction

Porter and Steers also note a corollary effect confirmed by three studies. In these studies, groups of new employees were provided realistic information about their new jobs before starting work; other groups were not given the information. Figure 2 illustrates the situation that developed. Workers who received the information generally lowered their expectations, while the expectations of workers not provided the information remained unchanged. Thus, even though the rewards provided by the job were perceived differently by individual workers, greater numbers of "informed" workers, with more realistic expectation levels, experienced

met expectations. As expected, greater numbers of informed workers stayed on the job (26:171-172).

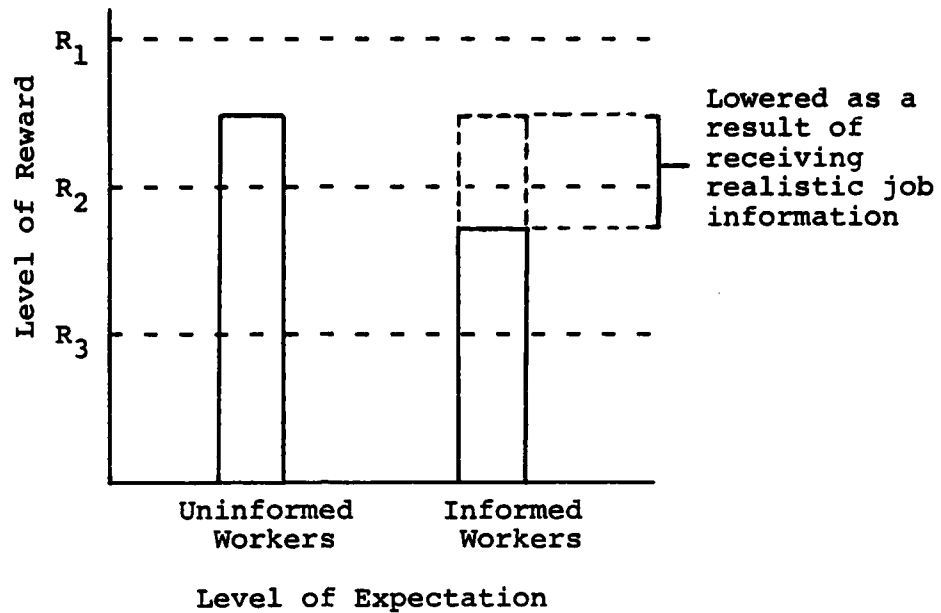


Figure 2

Effect of Realistic Job Information on Expectations—
Perceived Rewards Interaction

Specific Turnover Factors

Having established the central role of job satisfaction in the withdrawal decision, Porter and Steers turned to a consideration of "the roots of such satisfaction"—the specific factors that contribute to satisfaction or dissatisfaction (26:154). These factors will be discussed using Porter and Steers' categories.

Organization-wide factors. This category includes those factors outside the individual and his immediate work group. Porter and Steers identified two factors in this category: (1) pay and promotion, and (2) organization size (26:155). Pay and promotion, although not synonymous, are considered jointly. Hawk noted that pay has two dimensions: the wage rate and the perceived equity of the company wage structure. Wage rates below the area average lead to dissatisfaction. A wage structure perceived as arbitrary and inequitable as compared to the work required will lead to dissatisfaction (8:295). Porter and Steers also considered promotion to have two dimensions: the rate of promotion (to a position of higher pay, prestige, power, or responsibility) and the perceived equity of the organizational promotion system (26:155-156). To these two dimensions (for pay and promotion), Porter and Steers added consideration of the individual's expectations. That is, if the individual expects that continuing in his present job will result in greater rewards than any alternative behavior, this expectation will serve to intervene between withdrawal and dissatisfaction with pay and promotion. They cited several studies that confirmed the relationship of the first two dimensions and turnover; the third is hypothetical and untested (26:155).

Organization size, as a factor in turnover, is only weakly supported by research. Porter and Steers found only one study that related size to turnover. This study found

organization size to be directly related to rate of turnover. However, the research methodology was such that other factors could have been at work in the situation. Porter and Steers concluded that, while organization size has intriguing possibilities as a factor in turnover, it has no substantiated value in predicting turnover (26:156).

Immediate work environment factors. Predictably, the work setting is instrumental in the withdrawal decision.

Factors to be considered [in the immediate work environment] include (a) supervisory style, (b) work unit size, and (c) the nature of peer group interaction [26:157].

The significance of supervisory style was first noted in the Michigan and Ohio State leadership studies of the early 1950s (26:157). The Ohio State studies produced a model of leadership style that measures supervisory behavior in two dimensions—initiating structure, or task orientation; and consideration, or personal relationships (10:35). The studies reviewed by Porter and Steers consistently found that low supervisory consideration, regardless of the degree of task orientation, resulted in higher turnover. Interestingly, the researchers also found that increasing consideration decreased turnover only to a certain point. Beyond this critical point, there was little relation between the two.

In addition to supervisory level of consideration, Porter and Steers also cited studies that related increased

turnover to employee dissatisfaction with supervisory relations, inequitable treatment received from supervisors, receipt of insufficient recognition and feedback from supervisors, conflicting job goals, and lack of managerial experience among supervisors (26:158-159). Each of these factors (supervisory relations, inequitable treatment, etc.) were the subject of individual studies that concentrated on a specific aspect of supervisory style. No studies were found that attempted to study employee satisfaction with the overall leadership and supervision within the organization.

The relation of work unit size to turnover was investigated in five studies which generally found that increased work unit size resulted in increased turnover. These studies considered only blue-collar workers (26:159). Porter and Steers theorized that larger work units lead to "lower group cohesiveness, higher task specialization, and poorer communications [26:159]" which result in decreased need satisfaction and higher turnover.

The last factor in the immediate work environment is peer group interaction. In the view of Porter and Steers,

Such interaction can provide support and reinforcement necessary for adjustment and attachment to the work environment. Conversely, failure to secure such support may result in alienation from the workplace [16:159].

The research reviewed generally supported this hypothesis in that turnover increased as satisfactory peer group interaction decreased. There were exceptions, however.

Apparently, differences in the groups studied or the organizational setting mediated the effect of this factor (26:161).

Job content factors. Porter and Steers viewed the duties and activities required for successful performance of a particular job as either "a vehicle for personal fulfillment and satisfaction or a continual source of frustration, internal conflict, and dissatisfaction [26:161]." They discussed four specific factors in this area: "(a) the overall reaction to job content, (b) task repetitiveness, (c) job autonomy, and (d) role clarity [26:161]." Overall reaction to job content is the general level of satisfaction with the assigned tasks. As might be expected, the relationship between this factor and turnover is straight-forward: greater satisfaction results in lower turnover (26:161-162).

A much more specific factor in job content is task repetitiveness. To achieve increased efficiency, jobs have tended to become fragmented and routine. Although not unanimous, the research generally supports the contention that increasing task repetitiveness increases turnover (26:162).

Job autonomy is another specific factor in job content. This factor involves higher order needs such as self-fulfillment. Where the individual's autonomy over his job is greater, his satisfaction with the job tends to be greater and his propensity for withdrawal decreases. Porter and Steers cited seven studies to support this relationship (26:163).

Role clarity, the final factor in job content, results from close congruence of the individual's expectations and the actual requirements of the job. Congruence of the individual's expectations and the actual job requirements are greatly influenced by the managerial policies on communications. When an accurate picture of the tasks required by the organization are presented to the employee prior to employment, those potential employees who feel that the rewards justify the tasks will join the organization. Once an individual becomes a member of the organization, accurate communication of what is expected of them (task clarification) can result in adjusted employee expectations, thereby reducing conflict between organizational and individual expectations and lessening role ambiguity. If role clarifying communications are not present, congruence between organizational and individual expectations will be lacking (26:163-164). Lack of congruence leads to ambiguity and, depending on the individual's tolerance for ambiguity, increases his tendency to withdraw. Porter and Steers concluded that this relationship is confirmed by the available research (26:163-164).

Personal factors.

Factors unique to the individual also appear to have a significant impact on . . . turnover Such factors include (a) age, (b) tenure with the organization, (c) similarity of job with vocational interest, (d) personality characteristics, and (e) family considerations [26:164].

Age and tenure with the organization have been subject to more study than the other specific factors. The research clearly indicates a strong inverse relation with turnover for both factors (26:164-166). Conversely, the similarity of job with vocational interest, as measured by standard interest inventories, has been studied relatively little. The available research indicates that close congruence between job and interests decreases the propensity for withdrawal (26:166). Research dealing with the fourth personal factor, personality characteristics, indicates that individuals with extremes of personality traits, at either end of the spectrum, are more prone to leave the organization (26:164-167). For example, individuals with extremely high or extremely low achievement need (opposite ends of the spectrum) are more prone to leave the organization than individuals with moderate achievement need.

The last personal factor, family considerations, involves two related variables—family size and family responsibilities. Family size appears to have opposite effects on turnover of men and women. Increased family size tends to increase turnover of female workers while decreasing turnover of males. This difference is a reflection of the traditional male-female roles in our society. The effect of family responsibilities was to increase female turnover but available research shows mixed findings for males (26:166-167).

A Proposed Model

In order to summarize Porter and Steers' conceptual framework and facilitate a comparison with the model proposed by Price, a proposed model is shown in Figure 3. The experience of the individual with each of Porter and Steers' specific factors is compared to his expectation for that factor and the result contributes to his overall satisfaction. [The individual's expectations act as a filter between his experiences and his overall satisfaction.] A net negative balance of satisfaction would lead to turnover.

The Price Model of Turnover

Price's *The Study of Turnover* is a codification of the literature on the subject of personnel turnover in organizations (28:6). In addition to codifying the literature on the subject of turnover, Price developed a model of the turnover problem through a systematic development and evaluation of the many factors identified with personnel turnover in organizations (28:3-91). In presenting Price's model of turnover, the factors he identifies as determinants, intervening variables, and correlates will be introduced and discussed. Next, the Price turnover model will be presented followed by a brief discussion of the relationship between the determinants, intervening variables, and the correlates.

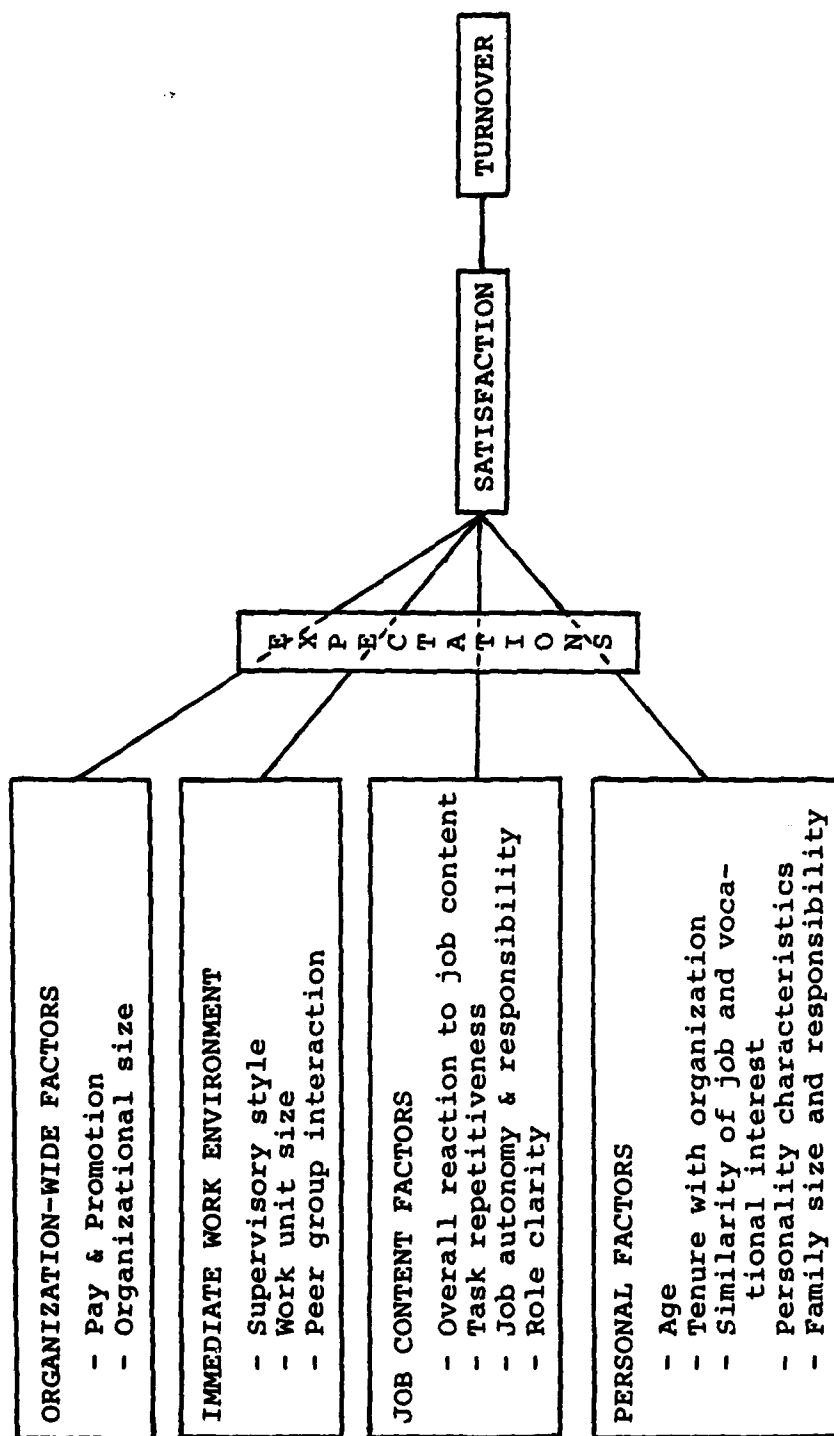


Figure 3
Model of Porter and Steers' Conceptual Framework

Determinants

Five strongly supported determinants of turnover were discussed in the codification: pay, integration, centralization, instrumental communication, and formal communication. Four weakly supported determinants were also discussed. The weak determinants are: professionalization, routinization, upward mobility, and distributive justice. These determinants are analytical variables, and, as such, cause or produce varying amounts of turnover. The Price codification included each determinant in a propositional statement, that was, in effect, a statement of cause (28:67-79). Each of the nine determinants and their associated propositional statements will be presented and, when necessary, clarified in this section.

Pay. Pay is defined as ". . . the money, fringe benefits, and other commodities that have financial value which organizations give to employees in return for their service [14:1]." The propositional statement for the determinant pay is: "Successively higher amounts of pay will probably produce successively lower amounts of turnover [28:68]."

Integration. The second determinant is integration, which is defined as ". . . the extent of participation in primary and/or quasi-primary relationships [28:5]." Primary relationships are those relationships that are ". . . diffuse, emotionally involved, biased, and governed by ascribed

criteria [28:71]." Quasi-primary relationships are those relationships that are ". . . specific, emotionally neutral, impartial, and [focused] on achieved criteria [28:71]."

Primary relationships are represented by small, cohesive, rewarding groups within the organization. Van der Merwe and Miller stated that:

. . . a major need satisfier is likely to be that of belonging to a cohesive and rewarding group, and if this need is not satisfied, the worker will very likely fail to adjust to the work situation and will therefore more readily withdraw from it [28:71].

The propositional statement for the determinant integration is: "Successively higher amounts of integration will probably produce successively lower amounts of turnover [17:70]."

Centralization. The third determinant is centralization.

Centralization is defined as ". . . the degree to which power is concentrated in a social system [27:43]." Maximum centralization exists when one individual within the organization exercises all the power. Minimum centralization, at the other end of the spectrum, exists when all the power is exercised equally by the members of the organization (28:76).

The concept of centralization is seen in Chris Argyris' statement:

In whatever language one uses, the impact of these factors [on individuals] can be summarized as *decreasing the individual's experience of control over his immediate work area, decreasing his use of the number of abilities, and increasing his dependence and submissiveness* [1:150].

Price interpreted Argyris' comment in this way:

An individual who encounters a decrease in his *'experience of control over his immediate work area'*, is probably working in a highly centralized organization. To increase an individual's *'dependence and submissiveness'* is, in all likelihood, to increase the extent to which power is concentrated in the hands of others—that is, centralization [28:77].

In other words, when the individual has some independence and control over his work (autonomy), he is less likely to leave the organization. The propositional statement for the determinant centralization is: "Successively higher amounts of centralization will probably produce successively higher amounts of turnover [28:76]."

Instrumental communication. The fourth determinant is instrumental communication and is defined as ". . . the transmission of information directly related to role performance . . . [28:74]." Price used communication as a measure of the degree or level at which information is transmitted between members of the social system (28:58). Instrumental communication is exercised, for example, when a supervisor explains to a subordinate what would be done on a given job or task. The objective of instrumental communication should be to clarify the individual's role in the organization, not necessarily to give detailed instructions on how the job is done. In addition, instrumental communication is usually formal in nature as contrasted to informal communication such as gossip. The propositional statement

for the determinant instrumental communication is: "Successively higher amounts of instrumental communication will probably produce successively lower amounts of turnover [28:73]."

Formal communication. The fifth determinant is formal communication. Since instrumental communication is a type of formal communication, a distinction should be made between the two determinants. As noted above, instrumental communication is communication directly affecting the individual's role in the organization. In effect, Price removed instrumental communication from the broader category of formal communication and made instrumental communication a separate determinant. An example of formal communication, as used in the Price codification, would be general directives issued to the members of the organization as a whole. The propositional statement for this determinant is: "Successively higher amounts of formal communication will probably produce successively lower amounts of turnover [28:73]."

Professionalization. The sixth determinant is professionalization and is defined as ". . . the extent to which an occupation is based on knowledge and a service organization [28:88]." The degree of professionalization is dependent on the level of systematization and generalization of the knowledge required for the profession. That is, ". . . the more systematized and generalized the knowledge, the greater

the degree of professionalism [28:88]." The propositional statement for the determinant professionalization is: "Successively higher amounts of professionalization will probably produce successively higher amounts of turnover [28:88]."

Routinization. The seventh determinant is routinization and is defined as ". . . the degree to which role performance in a social system is repetitive [28:88]." The nature of an individual's work is dealt with when considering the determinant routinization. Generally speaking, skilled jobs entail a lesser degree of routinization than semiskilled or unskilled jobs. For example, managers, as part of what may be considered professional occupations, have a lesser degree of routinization than, say, secretaries or clerical workers (28:88). The propositional statement for the determinant routinization is: "Successively higher amounts of routinization will probably produce successively higher amounts of turnover [28:88]."

Upward mobility. The eighth determinant is upward mobility and is defined as ". . . the amount of movement from low strata to high strata in a social system [28:88]." Promotional opportunities are frequently used as a substitute for upward mobility; both conceptually mean the same thing. When an individual moves from a lower strata to a higher strata in a social system, this move is usually to a position

of higher pay, prestige, or power. The upward move may, of course, include only one of the three (pay, prestige, or power) or a combination of the three (28:88). The propositional statement for the determinant upward mobility is: "Successively higher amounts of upward mobility will probably produce successively lower amounts of turnover [28:88]."

Distributive justice. The ninth and final determinant is distributive justice and is defined as: ". . . the degree to which conformity is followed by the receipt of positive sanctions [28:88]." Distributive justice, as used here, is concerned with the distribution of sanctions given by the system or organization. According to Price:

When there is a close link between merit and pay in organizations, the degree of distributive justice is high. Like pay, distributive justice is part of the sanction system of an organization. The difference is that pay is concerned with the amount of the sanctions [28:88-89].

The propositional statement for the determinant distributive justice is: "Successively higher amounts of distributive justice will probably produce successively lower amounts of turnover [28:89]."

Intervening Variables

The two intervening variables presented in the codification are satisfaction and opportunity. As the name implies, satisfaction and opportunity are variables that intervene between the determinants and turnover. Price

differentiates the two variables as sociopsychological (satisfaction) and structural (opportunity). Satisfaction and opportunity do not occur simultaneously in the Price model; satisfaction precedes opportunity (28:79).

Satisfaction. The first intervening variable is satisfaction and is defined as ". . . the degree to which the members of a social system have a positive affective orientation toward membership in the system [27:156]." Price viewed satisfaction as the product of the nine determinants and as an intervening variable between these determinants and turnover. Satisfaction, as used here, is a net balance of an individual's satisfactions and dissatisfactions developed over a period of time while a member of an organization (28:80). Price views satisfaction as an individual's attempt to maximize

. . . their net balance of satisfactions over dissatisfactions. Dissatisfactions are subtracted from satisfactions to arrive at a net balance of satisfactions over dissatisfactions. The higher the net balance of satisfactions over dissatisfactions, the more likely it is that individuals will continue as members of organizations [28:80].

In other words, satisfaction has an inverse relationship with turnover; as satisfaction increases, turnover decreases.

Studies in the area of satisfaction ". . . have consistently shown that dissatisfied workers are more likely than satisfied workers to terminate employment [15:85]."

Opportunity. The second intervening variable is opportunity and is defined as ". . . the availability of alternative

roles in the environment [28:81]." The alternative roles referred to in this definition are normally jobs available outside the organization. Although opportunity intervenes between the determinants and turnover, opportunity is not a product of the determinants. Opportunity is, instead, a characteristic of the environment in which the organization exists. The relationship between satisfaction and opportunity is a direct result of the net balance of dissatisfaction and satisfaction as perceived by the individual. That is, if the individual perceives that he is dissatisfied and an opportunity exists for a job outside the organization, this individual will tend to leave the organization. On the other hand, satisfied individuals will tend to remain in the organization whether or not opportunity exists outside the organization. In addition, two important assumptions about opportunity were made in the Price codification. First, the individual has knowledge of the opportunity available; second, the individual has the freedom to leave the organization. If both of these conditions do not exist, then opportunity will not be an intervening variable (28:83). One of the supporting codifications cited by Price clearly indicates a positive relationship between opportunity and turnover. That is, the greater the perceived opportunity, the greater the turnover (28:81).

Correlates

Price presented nine correlates; six strongly supported by the literature and three weakly supported. The relationship between the correlates and turnover is more difficult to define than the relationship between the determinants and turnover. There is no causal relationship between correlates and turnover. There is, however, a correlation between them. This is the basic difference between correlates and determinants. The correlates are empirical generalizations that indicate correlation between correlates and determinants. The correlates are empirical generalizations that indicate correlation between variables rather than causation (28:24). Only two of the nine correlates will be presented and discussed; length of service and age. The remaining six correlates will not be presented because, as stated above, they basically represent a different concept of relationship than the relationships between the determinants, intervening variables, and turnover. A complete presentation and discussion of all nine correlates would, therefore, not contribute significantly to this study. On the other hand, age and length of service need to be discussed because Porter and Steers defined age and tenure (length of service) as determinants of turnover, not correlates. As will be discussed later, age and length of service will be considered as determinants in this study.

Length of service. The first strongly supported correlate is length of service. The empirical generalization linking length of service to turnover is: "Members with low lengths of service usually have higher rates of turnover than members with high lengths of service [28:26]." This generalization is not meant to imply that only members with low lengths of service leave organizations. Individuals in both groups do leave. However, the rate at which individuals with low lengths of service leave the organization is usually higher for any given period of time (28:26).

Age. The empirical generalization linking the strongly supported correlate age to turnover is: "Younger members usually have higher rates of turnover than older members [28:28]." Again, the word 'rate' is the key to interpreting this correlate. For any given period of time, the rate of leaving the organization is usually higher among younger members.

The Relationship Between the
Determinants, Correlates,
and Intervening Variables

While discussing the relationship between the determinants, correlates, and intervening variables, reference to Figure 4 will prove helpful. According to Price, the determinants and intervening variables could be able to explain or fortify the correlates (28:85). This does, generally, appear to be the case. For example, when the first correlate,

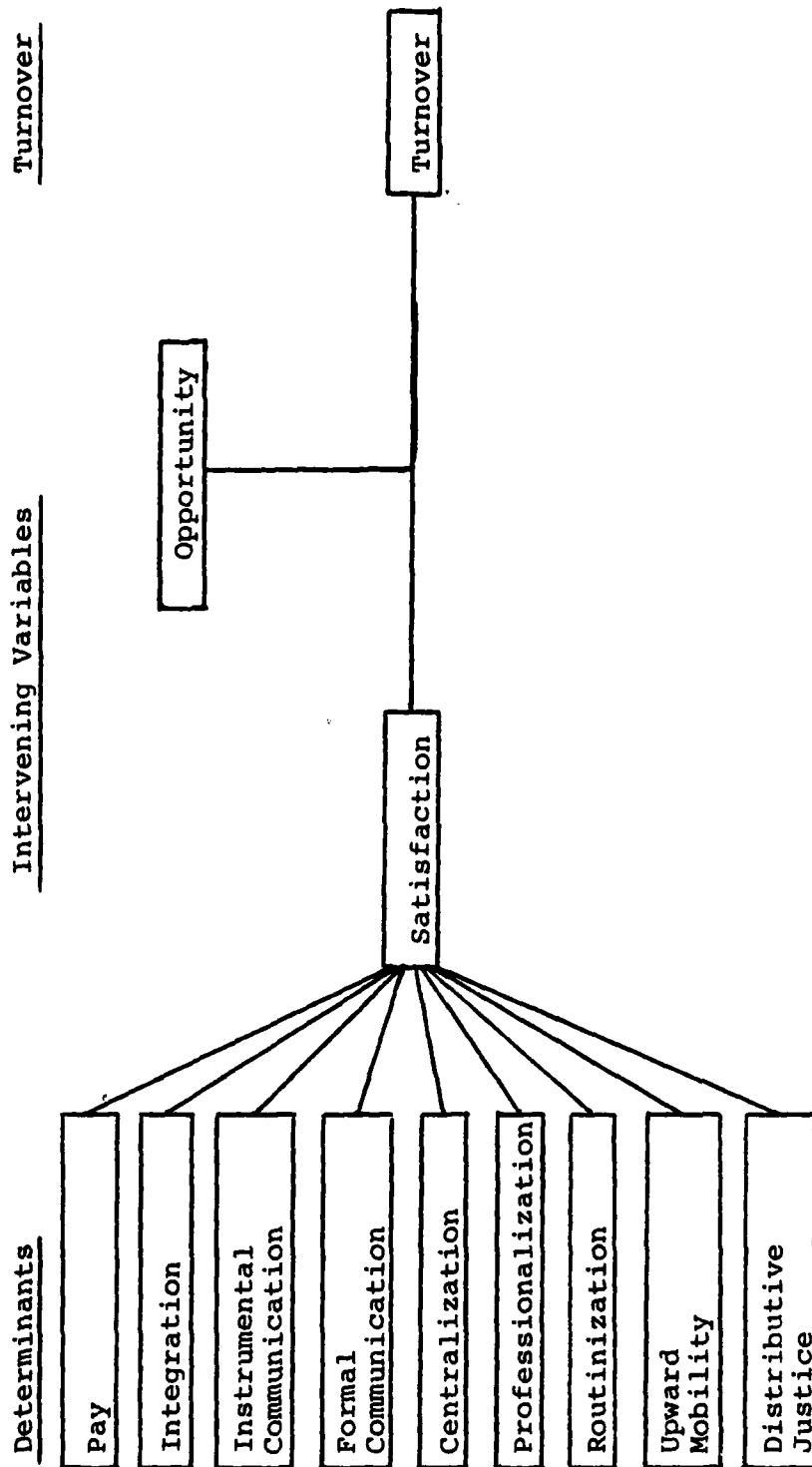


Figure 4

Price Turnover Model (28:84)

length of service, is examined in relation to the five determinants and two intervening variables, the relationships reinforce to varying degrees the model presented by Price. The first correlate's empirical generalization states "members with low lengths of service usually have higher rates of turnover than members with high lengths of service [28:26]." When attempting to explain this correlate with the determinants and intervening variables, the following general results were obtained (28:84-85):

1. Individuals with lower lengths of service will usually have lower pay than those with higher lengths of service, all other things being equal. Lower pay does tend to increase turnover.

2. Those individuals with lower lengths of service will usually have fewer friends and acquaintances within the organization than those with higher lengths of service, all other things being equal. These individuals will have fewer primary and/or quasi-primary relationships and this, in turn, can cause higher turnover rates.

Comparison of Models

In comparing the two turnover models described above, four areas of similarity or difference between them were noted: (a) consideration of factors external to the organization, (b) emphasis on the individual, (c) emphasis on expectancy theory, and (d) usefulness as a general theory of turnover.

Consideration of External Factors

These turnover models display a great difference in their consideration of factors external to the organization that logically could affect turnover. Porter and Steers, in developing their conceptual framework, explicitly excluded from consideration what they called "the obviously crucial set of external factors" (26:152). These external factors include general economic conditions, and job opportunity, for example, as an intervening variable, allows for the effect of these external factors (28:81-84). Thus, the Price model is an open-system model capable of reflecting changes in the external environment whereas the Porter and Steers model is a closed-system model reflecting organizational and individual factors in isolation.

Emphasis on the Individual

These two turnover models also differ significantly in their relative emphasis on the individual nature of turnover. The Porter and Steers model includes nine specific factors that focus on the individual. These are the factors grouped under job content and personal factors. Price considers only two of these: age and tenure. Since the decision to withdraw is an individual one based on the experiences and perceptions of the individual, the emphasis by Porter and Steers on individual factors seems both reasonable and desirable in a model of turnover.

Emphasis on Expectancy Theory

Porter and Steers emphasized expectancy theory while Price did not include it in his model. As was noted earlier, each worker brings certain expectations to his job and his overall satisfaction will be determined by the extent to which the rewards provided by the job meet his expectations. Since each individual will perceive his or her expectations as being met to different degrees, different degrees of satisfaction will be experienced. Therefore, it would seem reasonable and desirable to include expectations as an intervening variable in a model of turnover.

Usefulness as a General Theory

The scope of the codifications reviewed in this study makes it tempting to call them general theories of turnover. However, neither is generally accepted as such. Indeed, since both models incorporate only factors that have been verified by research, they are limited in the variables they relate to turnover. There may well be other factors not discussed in the literature that contribute in some way to turnover. Additionally, neither model accounts for all aspects of the external environment. In a continually evolving society such as ours, a general theory of turnover should be able to accommodate any change in the environment. Therefore, the models should not be considered general theories.

The usefulness of the models to students and managers is not significantly affected by such considerations, however. The depth and breadth of the research that supports each model makes them worthy of serious consideration. Either model, or a synthesis of both, will provide insights that, taking into consideration its limitations, will be valuable to anyone dealing with organizational turnover.

Synthesis of Models

Intervening Variables

Satisfaction. Satisfaction is an intervening variable in both models and is a good starting point for a synthesis of the Porter and Steers and Price turnover models. However, it should be kept in mind that the Porter and Steers model is a proposed model formulated for the purposes of this study. Porter and Steers did not formulate a model in their codification. They merely presented the determinants and intervening variables that were supported by the literature.

Opportunity. Opportunity, as an intervening variable, allows external factors to effect the turnover decision of the individual. This produces an open-system model that reflects the state of the external environment. Opportunity is included in the synthesized model.

Expectations. Without expectations as an intervening variable, the model would seem to indicate that the determinants

produce the same effect in all individuals. That is not the case, however. For example, low pay to one individual may not cause dissatisfaction, while it may cause dissatisfaction in another individual. The difference in the effect of the low pay will be a consequence of the involved individuals' expectations concerning pay. Because of individual differences, expectations is included in the synthesized model.

Determinants

Synthesis of the determinants would appear, at first glance, to be a rather difficult and subjective task. However, this is not the case. In developing his model, Price cited Porter and Steers as support for the five strong determinants in the model presented in his codification. Price also cited Porter and Steers for support of three of the four weak determinants in his model.

The problem of what would appear as somewhat different determinants in the two models is more a semantic problem rather than a conceptual difference. This semantic problem is evident when the determinants from each model are directly compared with their conceptual counterparts as depicted in Table 1. When the determinants from each model are viewed in this manner, the conceptual similarity is quite evident.

Age and tenure. Age, tenure, and length of service require special attention when attempting to synthesize the models. The Porter and Steers model defined age and tenure as causal

TABLE 1
COMPARISON OF DETERMINANTS

PORTER AND STEERS	PRICE
	Professionalism
Pay/Promotion	Pay Upward Mobility Distributive Justice
Peer Group Interaction	Integration
Role Clarity	Instrumental Communication Formal Communication
Job Autonomy and Responsibility	Centralization
Task Repetitiveness	Routinization
Age	Age
Tenure	Length of Service
Family Size and Responsibility	_____
Similarity of Job and Interests	_____
Supervisory Style	_____

factors or determinants and Price defined age and length of service as correlates. The literature in the Price codification strongly supported age and tenure as correlates of turnover. Similarly, the literature in the Porter and Steers codification strongly supported age and tenure as determinants. The Porter and Steers viewpoint has more conceptual appeal in a generalized synthesis of turnover; hence, these variables are considered to be determinants and are included in the synthesized model.

Professionalization. Due to the fact that professionalization was a weak determinant in the Price codification and not included in the Porter and Steers codification, professionalization is not included in the synthesized model.

In synthesizing the remaining determinants into a single model, two main criteria were used: first, the concepts behind the various determinants were to be maintained in the synthesized model; second, the most easily understood and straightforward terminology was to be used.

Pay. Pay is a common element to both models and is used as a determinant in the synthesized model.

Promotion. Promotion, as used in the Porter and Steers model, was not specifically defined to be upward mobility within the organization. Porter and Steers merely used the term and left the interpretation of its meaning to the reader.

However, the word promotion is considered in the synthesized model to represent the individual's perceived level of, and equity of, opportunity for upward movement in military rank and/or opportunity for a position within the organization with greater prestige, power, or responsibility. When used in this sense, promotion contains the concepts of opportunity and equity presented by Porter and Steers, and the concepts of upward mobility and distributive justice presented by Price.

Peer group integration. Integration, as used in the Price model, contains the concepts of peer group interaction as used in the Porter and Steers model. Both stress the peer group relationships within the organization, and both stress the point that turnover increases if the organizational environment does not allow the formation of primary groups. The determinant peer group integration is used in the synthesized model.

Role clarity. Role clarity, as used in the Porter and Steers model, contains the concepts of instrumental and formal communication used in the Price model. Both types of communication are necessary for role clarification within the organization. Role clarity is included in the synthesized model.

Job autonomy and responsibility. Centralization, as used in the Price model, contains the concepts of autonomy and

responsibility presented by Porter and Steers. Semantically, job autonomy and responsibility is easier to understand and more descriptive as a determinant than the term centralization. Job autonomy and responsibility is used in the synthesized model.

Task repetitiveness. Task repetitiveness, as used in the Porter and Steers model, contains the concepts of routinization used in the Price model. Again, task repetitiveness is semantically easier to understand and more descriptive than the term routinization. Task repetitiveness is used in the synthesized model.

Additional determinants. Supervisory style, similarity of job and interests, and family size and responsibility were not included in the Price model. Supervisory style and similarity of job and interests were reasonably well supported in the Porter and Steers codification and are, therefore, included in the synthesized model. Family size and responsibility was not well supported by the literature. In addition, research on family size and responsibility was contradictory. Therefore, family size and responsibility is not included in the synthesized model.

Figure 5 presents the synthesized model used in this study. The new model incorporates the concepts of Porter and Steers and Price and will be applied to the turnover problem of junior Air Force officers.

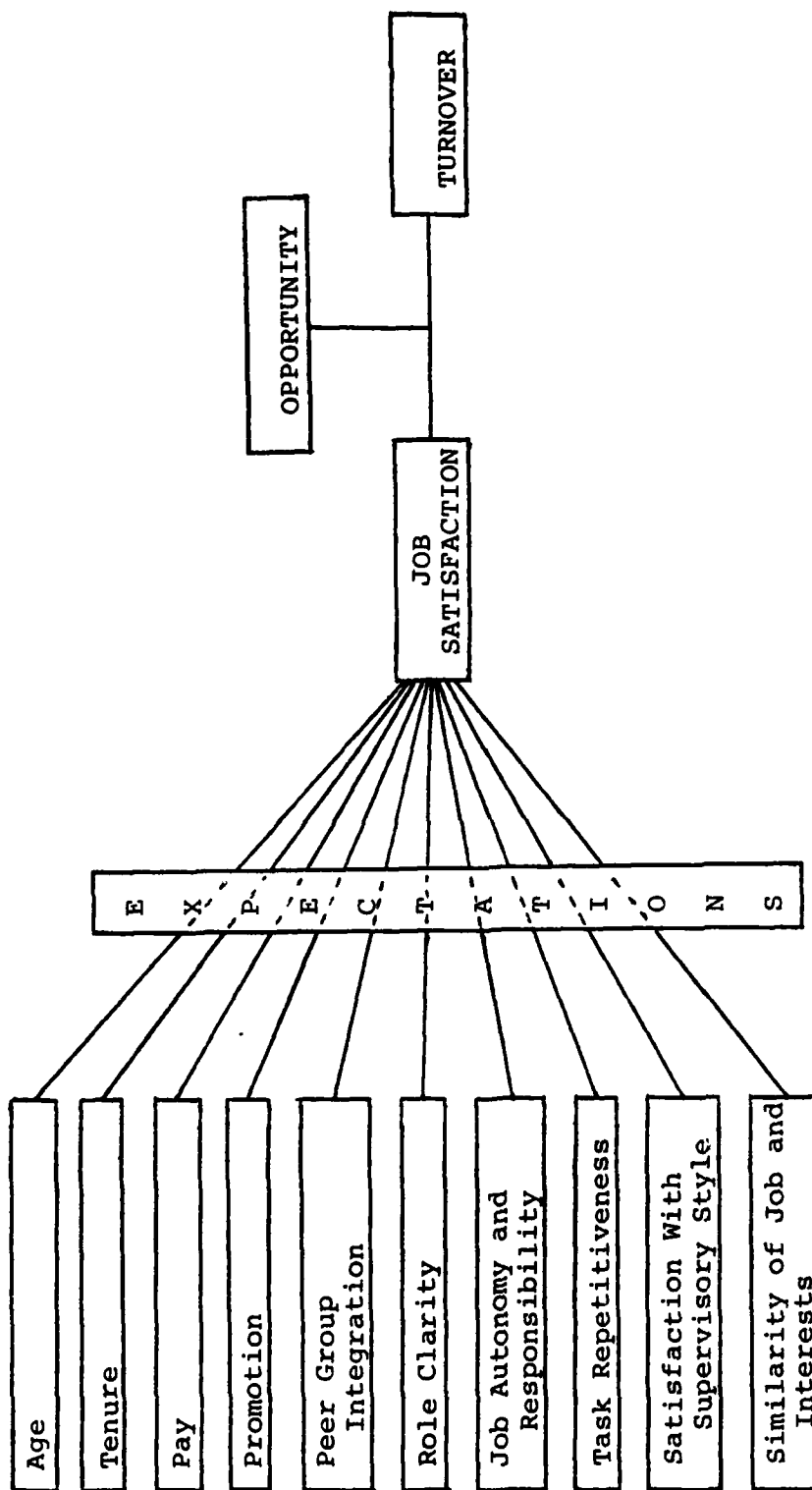


Figure 5
Synthesized Model

Correlation of Career Intent and Career Status

Career Intent Among Naval Enlisted Personnel

The Naval Health Research Center recently published research results on a study to identify the determinants of turnover of enlisted personnel (13). Although the study was primarily directed toward identifying the determinants, significant correlation between career status and career intent was established.

The subject population consisted of 1,270 enlisted naval personnel and the instrument was a 400 item questionnaire. The responses to one questionnaire item reflecting the attitude toward reenlistment were used to determine the correlation between career intent and career status. The questionnaire responses available to each individual ranged from "I definitely want to get out as soon as possible" to "I definitely plan to make, or have made, the Navy a career [13:205]." Of the individuals who expressed a desire not to make the Navy a career, 94% did not reenlist. Of the individuals who expressed a desire to make the Navy a career, 72% did reenlist. Therefore, of the total group, 86% acted in accordance with their expressed career intent.

Career Intent Among Junior Air Force Officers

The Air Force Human Resources Laboratory evaluated predictability of the career decision by 5,609 junior

officers (30; 15). The officers entered active duty service in 1963—1964 and completed survey questionnaires before actual commissioning and once a year thereafter until their fifth year of active duty.

In general, the intent to make the Air Force a career decreased during the first three years and then began to stabilize. Stabilization continued through the fifth year. The decision not to make the Air Force a career, on the other hand, increased steadily to the fourth year and dropped during the fifth year (30:iii).

A follow-on evaluation of the survey data revealed a correlation between the individual's expressed career intent and actual retention as of December 1969 (31:1-9). The correlations between expressed career intent and career status ranged from .24, using all five surveys, to .65, using only the surveys from years four and five (31:7). The .65 correlation was thought to be an indication that the individuals involved had more reliable attitudes about a military career as a decision point is approached (31:8). The fourth or fifth year is normally the last year of an officer's initial obligated tour of active duty, and, as such, requires a decision by the individual to remain in the service or separate.

Although the correlation of career intent and career status was lower than that determined in the Naval Health Research Center study, the expressed career intent of

young officers was a reasonably accurate predictor of career status and, hence, turnover.

Research Implications and Hypotheses

The literature search in the preceding sections identified the predominant determinants and intervening variables of organizational turnover. A working model for use in this study was synthesized from the concepts presented.

The literature also supports expressed career intent as an accurate predictor of turnover. The strong correlation of expressed career intent with actual turnover makes expressed career intent a viable surrogate for turnover and expressed career intent is substituted for turnover when applying the synthesized model. When expressed career intent is used as a surrogate for turnover, the hypothesized relationship between job satisfaction and expressed career intent becomes direct, as opposed to the inverse relationship between job satisfaction and turnover. That is, as job satisfaction goes up, the individual will be more inclined to express a positive career intent.

In addition, findings of the Air Force Human Resources Laboratory support the assumption that career intent of Air Force officers is fixed in the first few years of active duty. Therefore, testing of the synthesized model on the population consisting of junior officers with one to seven

years active duty should provide insight into the problem of turnover of Air Force officers. Specifically, the following research hypotheses were developed from the relationships indicated in the synthesized model. The following hypotheses are concerned with the relationship of the determinants to job satisfaction (Objective 1):

Hypothesis 1—as satisfaction with pay increases, the level of job satisfaction increases.

Hypothesis 2—as perceived promotion equity increases, the level of job satisfaction increases.

Hypothesis 3—as role clarity increases, the level of job satisfaction increases.

Hypothesis 4—as job autonomy and responsibility increase, the level of job satisfaction increases.

Hypothesis 5—as satisfaction with supervisory style increases, the level of job satisfaction increases.

Hypothesis 6—as the level of peer group integration increases, the level of job satisfaction increases.

The following hypotheses are concerned with the relationship of determinants to expressed career intent (a surrogate for turnover) (Objective 2):

Hypothesis 7—as satisfaction with pay increases, the expressed intention to make the Air Force a career will be more positive.

Hypothesis 8—as perceived promotion equity increases, the expressed intention to make the Air Force a career will be more positive.

Hypothesis 9—as role clarity increases, the expressed intention to make the Air Force a career will be more positive.

Hypothesis 10—as job autonomy and responsibility increase, the expressed intention to make the Air Force a career will be more positive.

Hypothesis 11—as satisfaction with supervisory style increases, the expressed intention to make the Air Force a career will be more positive.

Hypothesis 12—as the level of peer group integration increases, the expressed intention to make the Air Force a career will be more positive.

The following hypotheses are concerned with the relationship of intervening variables and expressed career intent (Objectives 3 and 4):

Hypothesis 13—as job satisfaction increases, the expressed intention to make the Air Force a career will be more positive.

Hypothesis 14—as perceived opportunity increases, the expressed intention to make the Air Force a career will be less positive.

CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter presents the research design and methodology used for this study. The data gathering plan will be presented first, followed by variable definitions and measurement plans. Finally, the chapter will present the data analysis plan.

Data Gathering Plan

Data Collection Instrument

The data collection instrument used in this study was the 1977 *United States Air Force Quality of Air Force Life Active Duty Air Force Personnel Survey* (hereinafter referred to as The Quality of Life Survey). The 1977 survey was an updated version of the Air Force Management Improvement Group (AFMIG) survey conducted in 1975. The survey was administered to a random sample of Air Force personnel. Sixteen thousand survey questionnaires were distributed and 10,689 were returned (6).

The survey consists of 165 questions of which the first 19 provide demographic information. The remaining

146 questions relate to various aspects of Air Force life. A copy of the survey instrument is attached as Appendix A.

Survey bias. Females, higher ranks, and racial minorities were deliberately oversampled by AFMIG, thus creating the possibility of survey bias. It is felt, however, that such bias, if present, did not significantly affect this study because females and all ranks above Captain were eliminated from the target population, leaving only a greater than proportionate share of racial minorities. In addition, a previous study (utilizing the Quality of Life Survey) concerning job satisfaction and career intent indicated that racial bias was insignificant in any of the statistical analyses conducted (18:18).

Instrument validity and reliability. The 1975 and 1977 AFMIG Quality of Life Surveys were extensively used to evaluate many aspects of the quality of Air Force life. Past studies have obtained valid analytical results and it is assumed that the instrument is valid and reliable for the purposes intended in this study (18; 22; 33).

Description of the Population

The target population in this study consisted of male Air Force Line Officers with less than seven years of active duty. The total population size was 32,987 (2). Specifically excluded from the target population were female

officers, chaplains, lawyers, officers in the medical corps, and officers assigned to Air Force bands. Officers in these career fields were eliminated because it was felt that these officers may have differing perceptions of job satisfaction due either to their personal value systems or the uniqueness of their respective expertise or professional training.

Description of the Sample

The sample consisted of 1,056 members of the target population who responded to the 1977 Air Force Quality of Life Survey. A data-producing sample of 1,017 officers was obtained by eliminating all respondents who failed to answer the questions required for this study or who gave inconsistent demographic information. For example, if any respondent's rank did not correspond to the number of active duty years, his questionnaire responses were eliminated from the sample.

Inferences about the Population

Inferences about the population will be made only for the Air Force population represented by the sample described previously. That is, inferences about the Air Force population of male line officers with less than seven years active duty will be made. No inferences can be made about officers excluded from the sample population or Air Force personnel in general.

Variable Definition and Measurement

Expressed Career Intent

Expressed career intent is the dependent variable of the entire synthesized model presented in Figure 5, Chapter II, and as such, will be dealt with first. Expressed career intent is used as a surrogate for turnover and, as operationalized in this study, expressed career intent is the stated intent of an individual to make the Air Force a career. Each respondent's expressed career intent was measured by his response to survey question number 14, which read:

Which one of the following best describes your attitude toward making the Air Force a career?

The responses to the question were arrayed on a Likert five point scale and were given the values from 1 (definitely intend to make the Air Force a career) to 5 (definitely do not intend to make the Air Force a career).

The career intent question has proven to be valid and reliable. Similar questions were used in the Naval Health Research Center and Air Force Human Resources Laboratory studies. These studies indicated that expressed career intent, as measured on a Likert response scale, is a reliable and accurate predictor of behavior (13; 30; 31).

Job Satisfaction

Job satisfaction is defined as the degree to which a member of an organization has a positive affective orientation toward membership in the organization (27:156). As operationalized in this study, job satisfaction is the individual's perception of his satisfaction with his job and was measured by the Hoppock Job Satisfaction Measure.

The Hoppock Measure is a set of four questions relating to an individual's perception of satisfaction with various aspects of his job. Each of the four questions was given equal weight and a job satisfaction score was obtained by summing the responses to the following questions (numbers 57, 58, 59, and 60 in the survey):

Which one of the following shows how much of the time you feel satisfied with your job?

Choose the one of the following statements which best tells how well you like your job.

Which one of the following best tells how you feel about changing your job?

Which one of the following shows how you think you compare with other people?

The responses to these four questions were arrayed on a seven point Likert scale with values from one to seven. The sum of the responses ranged from four to twenty-eight. The sequence of responses on two of the questions were reversed and a correction for the reversal was made prior to summing the four responses (18:1-7). The Hoppock Job Satisfaction Measure has been widely used and provides a valid and reliable

measure of job satisfaction. McNichols, et. al., conducted a study on data bases of 28,000 responses from target populations including research and development professionals, secretaries, clerks, and managerial employees from all organizational levels. The research results of the McNichols, et. al., study indicate that the Hoppock Job Satisfaction Measure provides a meaningful measure of job satisfaction when evaluated in terms of reliability, construct validity, and face validity. In addition, the Hoppock Measure continues to provide a meaningful measure of job satisfaction when applied to different samples such as differing job categories, demographic groups, and organizational levels (18:1-7).

Opportunity

Opportunity, an intervening variable, represents, in effect, the external factors that contribute to an individual's turnover decision. In this study, opportunity specifically represents alternative job opportunities in the environment and is defined as the individual's perception of the availability of alternative jobs in private industry with pay, benefits, duties, and responsibilities comparable with their present Air Force job. Opportunity was measured by the responses to the statement (question number 30):

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.

The responses to question 30 were arrayed on a Likert five point scale and were given the values from 1 (strongly disagree) to 5 (strongly agree).

No previous studies could be located that utilized the opportunity question alone; thus, prior reliability and validity data were unavailable. However, the question specifically asks whether an individual agrees or disagrees with the fact that comparable employment would be difficult to find in private industry at the present time. Therefore, the question should be a valid measure of the individual's perception of the opportunity for comparable employment outside the Air Force. The reliability of the question and all the questions that will be described from this point on, can only be determined by the test of time or with techniques that are beyond the scope of this study. However, it seems reasonable to assume that this simple, direct question will produce reliable data. Furthermore, all the questions used to measure the variables that follow are equally simple and direct and are assumed to be reliable and valid for the purposes of this study.

Pay

Pay is one of the determinants of turnover that has consistent and strong support in the literature and is defined as the individual's perception of satisfaction of basic human needs such as food, shelter, clothing; the

ability to maintain an acceptable standard of living. Pay was measured by the responses to question 21 that read:

To what degree are you satisfied with the ECONOMIC STANDARD aspects of your life?

The responses to the question were arrayed on a Likert seven point scale and were given the values of 1 (highly dissatisfied) to 7 (highly satisfied).

The question has face validity primarily because the capitalized words ECONOMIC STANDARD are defined for the respondent prior to asking the question (see Appendix A). Defining the variable prior to the question should reduce the chances of the respondent reading more into the question than is asked for. The question is well-defined and direct, and the question should produce valid data for the measurement of the variable as defined.

Promotion

Promotion is also strongly supported as a determinant of turnover in the literature and, as defined in this study, represents the individual's perception of the effectiveness of the Air Force promotion system in terms of selecting the best qualified people for promotion. Promotion was measured by the responses to question 139. The responses, arrayed on a Likert seven point scale, were given the values of 1 (strongly disagree) to 7 (strongly agree). Question 139 read:

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

With respect to face validity, question 139 was uncomplicated and asked directly if the respondent thinks the Air Force selects the best qualified people for promotion, which should accurately measure the variable promotion as operationally defined.

Role Clarity

Role clarity is another determinant of turnover that is strongly supported in the literature and represents the individual's perception of various aspects of the clarity of his task within the organization. For the purposes of this study, role clarity is defined as the individual's perception of the amount and frequency of clarifying information received relative to job accomplishment and performance.

Role clarity was measured by the responses to the following questions (127, 131, and 132 in the survey):

I get the information I need to do my job in the best possible way.

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

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

The responses to 127, 131, and 132 were arrayed on Likert five point scales and each response was assigned numerical values in the following manner:

127—values from 1 (strongly disagree) to 5 (strongly agree).

131—values from 1 (never) to 5 (very frequently).

132—values from 1 (never) to 5 (very frequently).

A role clarity score was then developed by adding the three response values. Using the sum of the three responses gave each question equal weight.

The role clarity score should produce valid data for the measurement of the determinant as defined because each question deals with a type of clarifying information and the responses indicate the individual's perception of the amount or frequency of information received. The three questions (127, 131, and 132) are given equal weight because it is not the purpose of this study to determine which type of clarifying information contributes the most to role clarity.

Peer Group Integration

Peer group integration, a strongly supported determinant, is primarily determined by the extent of the individual's participation in a cohesive, rewarding, primary group. It is defined as the degree to which members of the individual's work group encourage participation, teamwork, and exchange of information.

Peer group integration was measured by the responses to the following questions (119, 121, and 128 in the survey):

Persons in my work group encourage each other to work as a team.

Persons in my work group offer each other new ideas for solving job related problems.

When I talk to people in my work group, they pay attention to what I am saying.

The responses to 119, 121, and 128 were arrayed on Likert five point scales and each response was given the value 1 (strongly disagree) to 5 (strongly agree). A peer group integration score was then developed by adding the three response values. Using the sum of the three responses gave each question equal weight. The questions were given equal weight because they deal with different aspects of peer group integration. As in the case of role clarity, it was not the purpose of this study to determine which aspect plays the predominant role. Furthermore, the three questions directly solicit the respondent's perception of the three aspects of peer group integration contained in the definition of the variable and should, therefore, produce valid data.

Job Autonomy and Responsibility

Job autonomy and responsibility, another strongly supported determinant of turnover, deals with the individual's perception of the amount of autonomy and responsibility allowed on his job. For this study, job autonomy and responsibility was defined as the individual's perception of the amount of freedom given to him to do a good job and was measured by the responses to question 135:

Are you given the freedom you need to do your
job well?

The responses were arrayed on a Likert five point scale and were given values of 1 (never) to 5 (always). This question

is a direct measure of the variable as it is defined and should, therefore, produce valid data.

Satisfaction With
Supervisory Style

Various aspects of satisfaction with supervisory style have strong support in the literature as determinants of turnover. The determinant satisfaction with supervisory style is defined as the individual's perception of satisfaction with the following aspects of leadership/supervision: Supervisor has employee interests and that of the Air Force at heart; supervisor is approachable and helpful rather than critical; supervisor has a good knowledge of the job. Satisfaction with supervisory style was measured by the response to question 88 which read:

To what degree are you satisfied with the
LEADERSHIP/SUPERVISION aspects of your life?

The responses to question 88 were arrayed on a Likert seven point scale and were given the values of 1 (highly dissatisfied) to 7 (highly satisfied). The capitalized words LEADERSHIP/SUPERVISION are defined for the respondent prior to asking question 88 (see Appendix A). Defining the variable prior to the question should have reduced the chances of the respondent misinterpreting the question or reading more into the question than was asked for. The question is well defined and direct, and should provide valid data for measurement of the variable as defined.

Data Analysis

Statistical Method

The synthesized model presented in Chapter II is the basis for the research hypotheses of this study and indicates directional relationships between the determinants, intervening variables, and expressed career intent. When such directional independent-dependent variable relationships are indicated, regression analysis is the appropriate statistical method.

Regression analysis measures the linear relationship between an independent variable, x , and a dependent variable, y , and is more efficient and powerful than nonparametric methods (9:510; 32:213). Regression analyses were accomplished using the Statistical Package for the Social Sciences (SPSS), subprogram REGRESSION (19:320-367).

Regression coefficient, B . B , the regression coefficient of the independent variable, is of primary concern in testing the statistical significance of the variable relationships evidenced by the regression analysis. The statistical significance of B , and, hence, of the regression analysis, was tested using the F statistic at the .05 level of significance. Furthermore, the sign of the B coefficient indicates a direct or inverse relationship between the regression variables. That is, if the sign of B is negative, an inverse relationship

is indicated. If the sign of B is positive, a direct relationship is indicated (23:391-425).

Coefficient of determination, R^2 . If the variable relationships evidenced by the regression analysis were shown to be statistically significant, the coefficient of determination, R^2 , was used to test the practical importance of the relationship between the dependent and independent variables identified in the research hypotheses. The R^2 value gives ". . . the proportion of variability in the dependent variable Y that is explained by the independent variable X [23:408]."

R^2 can take on values from zero to one. When $R^2=0$, the independent variable, X, has done nothing to explain the variability of Y. On the other hand, when $R^2=1$, X has explained all the variability of Y. Past research on job satisfaction has indicated that an R^2 value of 0.10 or above can be considered to have practical importance (3; 4; 5; 12; 20; 24). Therefore, the research hypotheses were considered supported by the data if the R^2 value of the regression was 0.10 or greater.

Multiple linear regression. In the research hypotheses, job satisfaction (or expressed career intent) is postulated to be dependent upon several independent variables. In such a situation, the independent variables often do not have completely independent effects on the dependent variable; that

is, the effects may overlap. The result of this overlap, or multicollinearity, is that the portion of the variability of the dependent variable explained by the combined effect of all the independent variables is less than the sum of the portions of the variability explained by each independent variable alone. In order to detect the existence of this overlap of independent variable effects, multiple linear regression was used. Separate regression analyses were conducted with the Hoppock Job Satisfaction Measure and expressed career intent as dependent variables. The independent variables used in each analysis were the testable determinants: pay, promotion, role clarity, satisfaction with supervisory style, peer group integration, and autonomy and responsibility.

Hypotheses Testing

In this section, the research objectives and the associated hypotheses will be reviewed, the dependent and independent variables will be identified, and the statistical hypotheses will be introduced. The null statistical hypothesis in every case was tested at the .05 level of significance. If the null hypothesis could not be rejected (that is, if statistical significance was not established), it was concluded that there was insufficient evidence to support the research hypothesis in question. If the null hypothesis

was rejected and if R^2 was greater than or equal to .10, it was concluded that the data supported the research hypothesis.

Objective 1, hypotheses 1 through 6. Objective 1 and hypotheses 1 through 6 are concerned with the relationship of the determinants to job satisfaction. For this set of hypotheses, the independent variable is the determinant and the dependent variable is job satisfaction.

H1: The null statistical hypothesis (H_0) of hypothesis 1 is that pay is not directly related to job satisfaction. That is:

$$H_0: B = 0$$

$$H_A: B \neq 0$$

where B is the regression coefficient.

H2 through 6: Hypotheses 2 through 6 have similar null hypotheses and were tested at the same significance level.

Objective 2, hypotheses 7 through 12. Objective 2 and hypotheses 7 through 12 are concerned with the relationship of the determinants to expressed career intent. For this set of hypotheses, the independent variable is the determinant and the dependent variable is expressed career intent.

H7: The null hypothesis (H_0) of hypothesis 7 is that pay is not directly related to expressed career intent. That is:

$$H_0: B = 0$$

$$H_A: B \neq 0$$

where B is the regression coefficient.

H8 through 12: Hypotheses 8 through 12 have similar null hypotheses and were tested at the same significance level.

Objective 3 and hypothesis 13. Objective 3 and hypothesis 13 are concerned with the relationship of job satisfaction to expressed career intent. For this hypothesis, the independent variable is job satisfaction and the dependent variable is expressed career intent.

H13: The null hypothesis (H_0) of hypothesis 13 is that job satisfaction is not directly related to expressed career intent. That is:

$$H_0: B = 0$$

$$H_A: B \neq 0$$

where B is the regression coefficient.

Objective 4 and hypothesis 14. Objective 4 and hypothesis 14 are concerned with the relationship of opportunity and expressed career intent. For this hypothesis, the independent variable is opportunity and the dependent variable is expressed career intent.

H14. The null hypothesis (H_0) of hypothesis 14 is that opportunity is not inversely related to expressed career

intent. That is:

$$H_0: B = 0$$

$$H_A: B \neq 0$$

where B is the regression coefficient.

Assumptions

The following assumptions were made based on the literature review, survey data, and statistical analysis technique employed.

1. The data producing instrument was valid and reliable.
2. The questions utilized for variable measurement were valid and reliable.
3. The variables being tested were normally distributed.
4. The respondents answered the questions honestly and their responses reflected their true opinions.

CHAPTER IV

PRELIMINARY RESULTS AND ANALYSES

Introduction

The synthesized model of turnover developed in Chapter II defines relationships between the determinants of turnover, job satisfaction, and turnover. These postulated relationships were tested on a sample of Air Force line officers with less than seven years active duty. The data for this analysis were drawn from the 1977 Air Force Quality of Life Survey. This chapter presents the results of the analysis in terms of the research objectives and hypotheses of this study. Each objective is restated, the results pertinent to the objective are presented, the hypothesis testing is explicated, and the results summarized for the objective.

Determinants of Turnover → Job Satisfaction

Objective

The first research objective was to determine the relationship between the determinants of turnover and job satisfaction. Based on the synthesized model developed in Chapter II, hypotheses 1 through 6 were formulated to attain this objective. Each hypothesis was evaluated using simple linear regression techniques.

Regression Results

The results of the regression analysis are summarized in Table 2. In the paragraphs that follow, each hypothesis pertinent to the first objective is restated and the data analysis reviewed.

TABLE 2
REGRESSION RESULTS WITH JOB SATISFACTION AS
THE DEPENDENT VARIABLE

Determinant	B*	R ²
Pay	.53240	.02498
Supervisory Style	.99170	.14250
Autonomy/Responsibility	1.60117	.11946
Promotion	.67140	.05437
Peer Group Integration	.75117	.13312
Role Clarity	.75342	.17961

*All values are statistically significant at the .05 level.

Hypothesis Testing

The first hypothesis—as satisfaction with pay increases, the level of job satisfaction increases—was not supported by the data. Although the relationship of pay and job satisfaction determined by the regression analysis was statistically significant ($B=.53240$), R^2 fell considerably below the established practical importance criterion of 0.10. Thus, while the association between pay and job satisfaction was greater than a chance occurrence, the relationship was not strong enough to support the hypothesis.

The second hypothesis—as perceived promotion equity increases, the level of job satisfaction increases—was also not supported by the data. The relationship established by the regression analysis was statistically significant, but the R^2 value was well below the practical importance criterion of 0.10. Therefore, the relationship was not strong enough to support the hypothesis.

The third hypothesis—as role clarity increases, the level of job satisfaction increases—was supported by the data. The relationship between role clarity and job satisfaction was statistically significant and surpassed the practical importance criterion of 0.10 ($R^2=.17961$). In addition, the positive regression coefficient ($B=.75342$) indicated a direct relationship between the variables.

The fourth hypothesis—as job autonomy and responsibility increase, the level of job satisfaction increases—was supported by the data. The relationship between job autonomy and responsibility and job satisfaction determined by the regression analysis was both statistically and practically significant ($R^2=.11946$). Furthermore, the positive regression coefficient indicated a direct relationship as hypothesized ($B=1.60117$).

The fifth hypothesis—as satisfaction with supervisory style increases, job satisfaction increases—was supported by the data. Regression analysis yielded a statistically significant relationship between these two

variables that also satisfied the practical importance criterion ($R^2=.14250$). The positive regression coefficient ($B=.99170$) supported the direct relationship as hypothesized.

The sixth hypothesis—as the level of peer group integration increases, the level of job satisfaction increases—was supported by the data. The relationship was both statistically and practically significant ($R^2=.13312$) and the positive regression coefficient indicated a direct relationship as hypothesized ($B=.75117$).

Summary

The results of the data analysis presented in the preceding paragraphs confirmed relationships of practical importance between four of the six determinants tested and job satisfaction. The literature review in Chapter II led the researchers to expect all of the determinants to have practically important relationships with job satisfaction. However, neither of the hypothesized relationships between pay and job satisfaction or promotion and job satisfaction was supported by the data. Based on the data analysis for this group of Air Force junior officers, pay and promotion (as operationally defined) were not found to be significant determinants of turnover. Further, analyses of the roles of pay and promotion in the turnover model are presented in Chapters V and VI.

Determinants of Turnover +
Expressed Career Intent

Objective

The second objective was to determine the relationship between the determinants of turnover and expressed career intent. Based on the synthesized model, hypotheses 7 through 12 were formulated and evaluated using simple linear regression.

Regression Results

The results of the regression analysis are summarized in Table 3. Although all the regression analyses produced statistically significant results, none of the R^2 values met the established practical importance criterion of 0.10. Therefore, the relationships between the determinants of turnover and expressed career intent were not strong enough to support hypotheses 7 through 12.

TABLE 3
REGRESSION RESULTS WITH EXPRESSED CAREER INTENT
AS THE DEPENDENT VARIABLE

Determinant	B*	R^2
Pay	.11982	.01961
Supervisory Style	.14517	.04733
Autonomy/Responsibility	.23696	.04055
Promotion	.17088	.05459
Peer Group Integration	.06960	.01771
Role Clarity	.09574	.04495

*All values are statistically significant at the .05 level.

Summary

The results presented in the previous paragraph and in Table 3 are consistent with the synthesized model in Chapter II. When the determinants of turnover were related directly to expressed career intent in evaluating objective 2 and hypotheses 7 through 12, the relationships evidenced by the regression analyses were too weak to be considered practically significant. Therefore, since the determinants have been consistently related to turnover in the literature, the lack of significant direct relationships between the determinants and expressed career intent in this study suggested the presence of an intervening variable. In the synthesized model of turnover, the intervening variable was designated as job satisfaction.

Job Satisfaction → Expressed Career Intent

Objective

The third objective was to determine the relationship between job satisfaction and expressed career intent. Hypothesis 13—as job satisfaction increases, the expressed intention to make the Air Force a career will be more positive—was formulated to fulfill objective 3.

Regression Results

The relationship between job satisfaction and expressed career intent as hypothesized was supported by the data. The coefficient of determination was both

statistically significant at the $\alpha=.05$ level and practically important ($R^2=.16145$). In addition, the regression coefficient was positive ($B=.10206$) indicating a direct relationship between job satisfaction and expressed career intent.

Summary

The results presented in the preceding paragraph supported the hypothesized relationship between job satisfaction and expressed career intent. Since expressed career intent was used as a surrogate measure for turnover, these results confirm the relationship between job satisfaction and turnover.

When the results obtained in fulfilling the first three research objectives are considered *in toto*, the role of job satisfaction as an intervening variable and the basic structure of the synthesized model are confirmed. First, four of the six determinants tested evidenced a practically important relationship with job satisfaction. Second, none of the same six determinants evidenced a practically important relationship with expressed career intent. Third, the relationship evidenced between job satisfaction and expressed career intent was practically important. The chain of practically important relationships runs from the determinants to job satisfaction to turnover (expressed career intent). Thus, job satisfaction functions as an intervening variable and the basic structure of the synthesized model is confirmed.

Opportunity + Expressed Career Intent

Objective

The fourth objective was to determine the relationship between opportunity and expressed career intent, and was satisfied by evaluating hypothesis 14—as perceived opportunity increases, the expressed intention to make the Air Force a career will be less positive.

Regression Results

Although the R^2 value ($R^2=.05459$) determined by the regression analysis was statistically significant at the $\alpha=.05$ level, it failed to meet the established practical importance criterion of 0.10. Therefore, the relationship between opportunity and expressed career intent was not strong enough to support hypothesis 14.

Summary

The purpose for including objective 4 and hypothesis 14 in this study was to test the role of opportunity as an intervening variable in the synthesized model of turnover. As the preceding paragraph indicated, the hypothesis as stated—as perceived opportunity increases, the expressed intention to make the Air Force a career will be less positive—was not supported. However, further reflection and logical analysis by the researchers on the functioning of opportunity as an intervening variable led to the conclusion that hypothesis 14 was not an adequate description

of that function. Therefore, judgement as to the validity of opportunity as an intervening variable was reserved pending additional analyses. The additional analyses concerning the role of opportunity in a model of turnover are presented and discussed in the next two chapters.

CHAPTER V

ADDITIONAL ANALYSES AND RESULTS

Introduction

The analyses and results presented in Chapter IV indicated to the researchers that additional development and analyses were necessary. For example, the results of hypothesis testing involving pay and promotion contradicted the majority of research studies. Also, the hypothesis used to test opportunity as an intervening variable was deemed inadequate for that purpose. To further examine these areas and others suggested by the preliminary results, several additional analyses were performed. This chapter will present these additional analyses in the following order: first, additional analyses of the determinants' promotion and pay; second, assessment of multicollinearity and intercorrelation among the determinants; third, additional analyses of the variable opportunity. The chapter will conclude with further analysis of the relationship between job satisfaction and expressed career intent.

Determinants

Promotion

As stated in Chapter II, hypothesis 2—as perceived promotion equity increases, the level of job satisfaction

increases--was not supported by the data. Despite the fact that the hypothesis was not supported, it was felt by the researchers that promotion does play a significant role in the individual's career decision. As indicated in the Porter and Steers codification, the majority of studies indicated that an inverse relationship between promotion and turnover existed (16:155). Consequently, additional analysis of the variable promotion was conducted. The additional analysis consisted initially of an inspection of Multiple Linear Regression results presented in Tables 4 and 5.

The multiple regressions indicated that the relationships between promotion and job satisfaction and promotion and expressed career intent consistently increased in strength as the number of years of active duty (tenure)² increased. Of particular interest was the relationship between promotion and expressed career intent. As can be seen in Table 5, promotion jumps from the weakest position in the less than two year group, to the strongest position in the two to four and four to seven year groups. Furthermore, the relationship between promotion and expressed career intent in the four to seven year group actually reached a level that satisfied the practical criterion established in Chapter III ($R^2=.10152$).

²Tenure was tested as a determinant of turnover and failed to meet the practical significance criterion ($R^2=.01008$).

TABLE 4
MULTIPLE LINEAR REGRESSION WITH JOB
SATISFACTION AS THE DEPENDENT
VARIABLE

Tenure	Determinants with Job Satisfaction as the Dependent Variable		
	Determinants	R ²	ΔR ²
0-2 years	Role Clarity	.19523	.19523
	Autonomy/ Responsibility	.24531	.05009
	Peer Group		
	Integration	.25696	.01164
	Pay	.26239	.00543
	Supervisory Style	.26606	.00367
	Promotion	.26874	.00268
2-4 years	Role Clarity	.16516	.16516
	Peer Group		
	Integration	.21603	.05087
	Supervisory Style	.25072	.03469
	Autonomy/ Responsibility	.26173	.01101
	Pay	.26717	.00544
	Promotion	.27104	.00387
4-7 years*	Role Clarity	.16171	.16171
	Autonomy/ Responsibility	.20957	.04787
	Supervisory Style	.23669	.02712
	Peer Group		
	Integration	.25685	.02016
	Promotion	.26646	.00961

*Pay was statistically insignificant in this regression.

TABLE 5

MULTIPLE LINEAR REGRESSION WITH EXPRESSED
CAREER INTENT AS THE DEPENDENT
VARIABLE

Tenure	Determinants with Expressed Career Intent as the Dependent Variable		
	Determinants	R ²	ΔR ²
0-2 years	Autonomy/ Responsibility	.06915	.06915
	Pay	.10501	.03586
	Supervisory Style	.11400	.00899
	Role Clarity	.11964	.00563
	Peer Group		
	Integration	.13098	.01135
	Promotion	.13141	.00043
2-4 years	Promotion	.05318	.05318
	Role Clarity	.06965	.01648
	Autonomy/ Responsibility	.07687	.00721
	Pay	.07937	.00250
	Supervisory Style	.08000	.00063
	Peer Group		
	Integration	.08011	.00012
4-7 years *	Promotion	.10152	.10152
	Supervisory Style	.12821	.02669
	Peer Group		
	Integration	.13746	.00926
	Role Clarity	.14223	.00476
	Pay	.14231	.00009

*Autonomy and Responsibility was statistically insignificant in this regression.

As a consequence of the multiple regression analysis results, additional simple linear regression analyses were conducted by year groups to confirm the trend indicated in the previous paragraph. As anticipated, the relationships between promotion and job satisfaction and promotion and expressed career intent increased in strength as tenure increased (see Table 6). In other words, tenure appeared to operate as an intervening variable. In addition, the relationship between promotion and expressed career intent is considerably stronger than that of promotion and job satisfaction, indicating that the predominant relationship is between promotion and expressed career intent. Discussion of these results and conclusions are presented in Chapter VI.

TABLE 6
SIMPLE LINEAR REGRESSION WITH PROMOTION AS
THE INDEPENDENT VARIABLE

Tenure	R^2 (Promotion with job satisfaction as dependent variable)	R^2 (Promotion with career intent as dependent variable)
0-2 years	.02215	.01393
2-4 years	.05651	.05318
4-7 years	.08613	.10152

Pay

As presented in Chapter IV, the data analysis failed to support the hypothesis that as satisfaction with pay increases, the level of job satisfaction increases. This result indicated that pay does not play the role depicted in the synthesized turnover model in Chapter II. Maslow's Hierarchy of Needs Theory (2:42) suggests that once pay is adequate to satisfy the lower needs for survival and security, it decreases in importance to the individual and in its ability to influence job satisfaction. Thus, if pay is considered adequate to satisfy the need for survival and security, the failure of the data to support hypothesis 1 may be considered consistent with Maslow's theory.

Support for this idea of the decreasing importance of pay may be drawn from the multiple regressions presented in the preceding section (see Table 4). These multiple regressions, based on data divided by tenure of the respondents, shows the relationship between pay and job satisfaction becoming progressively weaker and the relationship between job satisfaction and the other determinants becoming relatively stronger as tenure increases. Thus, the multiple regressions also indicated that pay does not play the role indicated in the synthesized model.

However, the consistent support in the literature for a relationship between pay and turnover speaks strongly for a role for pay as a variable in a model of turnover

(26:155). The results of an analysis of the intercorrelations of all of the variables tested in this study suggested an alternate role for pay in a model of Air Force junior officer turnover. This intercorrelational analysis consisted of computing Pearson product moment correlation coefficients (r) for all possible pairs of variables present in the data (see Table 8). The criterion of practical importance for this analysis was established as $|r|=0.31$, which is equivalent to the criterion used for regression analysis, $R^2=0.10$. Of the bivariate correlations that satisfied the practical importance criterion, the pair of variables of interest here is pay and opportunity. This pair of variables was twice as strongly correlated as pay and job satisfaction ($r=-.3256$ vs $r=.1580$). Additionally, the correlation between pay and opportunity was the only practically important correlation involving pay. The implications of these results for the turnover model are discussed in Chapter VI.

Multicollinearity

As stated in Chapter III, multiple linear regression (MLR) was used to check for multicollinearity within the independent variables. Comparisons of the MLR results presented in Table 7 with the simple linear regression (SLR) results presented in Chapter IV, indicated the existence of significant multicollinearity. First, the total

TABLE 7
MULTIPLE LINEAR REGRESSION RESULTS
(Dependent Variable: Job Satisfaction)

Determinant	ΔR^2	R^2
Role Clarity	.17961	.17961
Autonomy and Responsibility	.04069	.22030
Peer Group Integration	.02566	.24596
Supervisory Style	.01781	.26377
Promotion	.00550	.26927
Pay	.00133	.27060

variation explained by the MLR analysis of job satisfaction with all of the testable determinants of turnover ($R^2 = 0.27060$) was considerably less than the sum of explained variation in the simple regressions of job satisfaction with each determinant ($\Sigma R^2 = 0.65404$). Second, individual determinants accounted for a much smaller portion of the explained variation in job satisfaction in the MLR than the same determinant explained in the simple regressions. For example, supervisory style and peer group integration explained, respectively, 14 percent and 13 percent of the variation in job satisfaction in the simple regressions. In the MLR they account for only an additional 1.8 percent and 2.5 percent, respectively, of the explained variation. These differences between the SLR and MLR results indicated

a high degree of multicollinearity, or intercorrelation, among the independent variables, the determinants of turnover.

To determine the extent of the indicated multicollinearity and the variables involved, further analysis was conducted to determine bivariate intercorrelations among the variables utilizing Pearson product moment correlation (r). Significant intercorrelations are presented in Table 8.³ These intercorrelations indicated that a high degree of multicollinearity exists, as evidenced in the multiple regression analysis.

The high multicollinearity among independent variables indicated a close relationship between the four determinants autonomy and responsibility, satisfaction with supervisory style, role clarity, and peer group integration. Furthermore, due to the high multicollinearity, it is possible that the variables measured the same thing or some dimension of the same thing.

In addition to revealing the high level of multicollinearity among the independent variables, multiple linear regression produced, to a very limited degree, a rank ordering of the variables. Table 7 depicts the determinants in order according to the magnitude of each variable's contribution in explaining the variation of the

³Promotion did not significantly correlate with any of the other variables. See promotion section, this chapter.

TABLE 8
INTERCORRELATIONS OF VARIABLES (PEARSON'S r)^{*}

	Role Clarity	Autonomy and Responsi- bility	Super- visory Style	Peer Group Inte- gration	Oppor- tunity
Autonomy and Responsibility	.3714	-	-	-	-
Supervisory Style	.4780	.4154	-	-	-
Peer Group Integration	.4388	.3397	.3223	-	-
Job Satisfaction	.4238	.3456	.3775	.3649	-
Pay	-	-	-	-	-.3256

^{*}Results were considered practically important if $|r| \geq 0.31$.

dependent variable job satisfaction. In addition, Table 4 depicts MLR results by year group (see promotion section, this chapter). As can be seen from the tables, role clarity enters the MLR equation first in every case. However, any additional rank ordering of the determinants was not possible because, as scrutiny of Tables 4 and 7 reveals, the order of the remaining variables differed significantly in each regression which precluded rank ordering any of the remaining determinants.

Opportunity

The data analysis failed to support hypothesis 14-- as perceived opportunity increases, the expressed intention to make the Air Force a career will be less positive. As noted in Chapter IV, this hypothesis may not be an adequate test of opportunity as an intervening variable in a turn-over model. To further explore the role of opportunity, several additional analyses were performed. These additional analyses are discussed in the paragraphs that follow.

Effect of Perceived Opportunity on Job Satisfaction-Career Intent Relationship

Further evaluation of the probable effect of an intervening variable led the researchers to conclude that an intervening variable should affect the *relationship* between the independent and dependent variables. In this

case, opportunity should affect the strength of the relationship between job satisfaction and career intent.

To test the hypothesis that the strength of the relationship between job satisfaction and expressed career intent (as measured by R^2) varies as the level of perceived opportunity varies, four groups of survey respondents were selected from the sample on the basis of their level of perceived opportunity and their score on the Hoppock Job Satisfaction Measure. The four groups selected are shown in Table 9. Within each group a simple regression analysis of expressed career intent with job satisfaction was accomplished. While none of these regressions were of practical importance ($R^2 < .10$) (one was also statistically insignificant), the mean expressed career intent for each group presented in Table 9 indicated to the researchers that they were on the right track.

To overcome the problems with the preceding analysis, the data was divided into three groups on the basis of perceived opportunity only. Again, regression analysis of expressed career intent with job satisfaction was accomplished for each group. The results of these regressions supported the hypothesis that the strength of the relationship between job satisfaction and career intent varies as perceived opportunity varies. As shown in Table 10, for those individuals who perceived moderate or high levels of opportunity, R^2 was greater than for those who perceived

TABLE 9
MEAN EXPRESSED CAREER INTENT FOR VARIOUS LEVELS OF
JOB SATISFACTION AND PERCEIVED OPPORTUNITY

Selection Criteria*		Expressed Career Intent** Mean Response	
Perceived Opportunity & Job Satisfaction	LOW LOW	2.88	(n=16)
Perceived Opportunity & Job Satisfaction	LOW HIGH	3.91	(n=173)
Perceived Opportunity & Job Satisfaction	HIGH LOW	2.45	(n=80)
Perceived Opportunity & Job Satisfaction	HIGH HIGH	3.73	(n=225)

*Perceived Opportunity: LOW = response D or E to survey question 30; HIGH = response A or B to survey question 30.

Job Satisfaction: LOW = score of 12 or lower on Hoppock Job Satisfaction Measure; HIGH = score of 20 or higher on Hoppock Job Satisfaction Measure.

**Expressed Career Intent: response to question 14 from "A. Definitely intend to make the Air Force a career" to "E. Definitely do not intend to make the Air Force a career." Coded as A=5, B=4, C=3, D=2, E=1.

TABLE 10
EFFECT OF PERCEIVED OPPORTUNITY ON R^2 , JOB
SATISFACTION REGRESSED ON EXPRESSED
CAREER INTENT

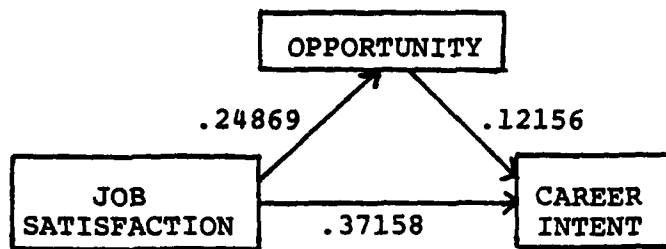
Perceived Opportunity*	R^2
HIGH	.15659 (n=566)
MEDIUM	.22020 (n=166)
LOW	.07716 (n=285)

* Perceived Opportunity: HIGH = response A or B to survey question number 30; MED = response C; LOW = response D or E.

low opportunity. In fact, for those who perceived low opportunity, the relationship between job satisfaction and career intent did not achieve practical importance.

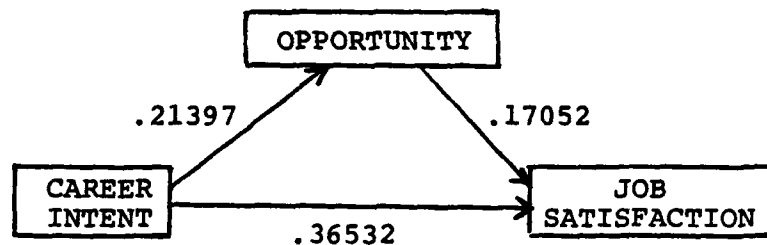
On the basis of the foregoing analysis, when opportunity is perceived to be moderate or high, there is a clear, practically important, and direct relationship between job satisfaction and career intent. The perception of lack of opportunity clouds and weakens this relationship. This analysis supports the hypothesis that perceived opportunity acts as an intervening variable in the turnover model.

Further support for opportunity acting as an intervening variable was drawn from a path analysis involving the variables job satisfaction, perceived opportunity, and expressed career intent. Path analysis is an extension of linear regression and is ". . . a method of working out the logical consequences . . . [19:383]" of a presumed causal ordering of variables. Path analysis utilizes standardized regression coefficients (beta weights) as effect coefficients to estimate the total direct and indirect effect of one variable on other variables. (The beta weights are part of the output of SPSS subprogram REGRESSION (19:320-367)). Path analysis was used to compare the presumed causal ordering depicted in the synthesized model of turnover with various feasible alternative orderings using the methodology suggested by Jermier and Schriesheim (11:332-335). Five alternate models of the job satisfaction—opportunity—career intent relationships were developed and subjected to path analysis. Only one of the alternate models evidenced a total effect coefficient as large as the presumed ordering. Figure 6 illustrates these two models. These models are mirror images of each other but, for purposes of assessing the role of perceived opportunity, they are equivalent. That is, perceived opportunity functions as an intervening variable in both models. In the other alternate models tested (not depicted), perceived opportunity did not function as an intervening variable and the total effect coefficients of



Direct Effect	.37158
Indirect Effect (.24869 x .12156)	.03023
Total Effect	<u>.40181</u>

a. Presumed Causal Order Model



Direct Effect	.36532
Indirect Effect (.21397 x .17052)	.03649
Total Effect	<u>.40181</u>

b. Alternate Causal Order Model

Figure 6

Path Analysis of Job Satisfaction—Perceived Opportunity—
Expressed Career Intent Relationships

these models were significantly smaller than the coefficients illustrated in Figure 6. Thus, this path analysis also supports the hypothesis that perceived opportunity acts as an intervening variable in the turnover model.

The results of all of the preceding analyses are consistent. Individually, each analysis supports the hypothesized role of perceived opportunity. Taken collectively, the researchers consider these analyses to confirm the role of perceived opportunity as an intervening variable between job satisfaction and expressed career intent in the synthesized model of turnover.

Job Satisfaction and Expressed Career Intent

The Naval Health Research Center and Air Force Human Resources Laboratory found that an individual's expressed career intent was a reasonably accurate predictor of career status (see Chapter II). In addition, the Air Force study indicated that expressed career intent became a stronger predictor of career status as an individual approached a career decision point (31:8). In light of these findings, and the proposed function of job satisfaction as the main variable affecting career intent, the researchers formulated the following hypothesis: as tenure increases, the relationship between job satisfaction and expressed career intent should become stronger (as evidenced by R^2). As tenure increases, and a career decision

point is approached, the individual's expressed career intent will, according to the career intent studies mentioned above, be a more accurate predictor of actual behavior, indicating that the individual may have more closely and accurately evaluated his satisfaction with his job.

To test this hypothesis, the sample was divided into three groups: group 1—those individuals with less than two years of active duty; group 2—those individuals with two but less than four years of active duty; and group 3—those individuals with four but less than seven years active duty. Linear regression was used with expressed career intent as the dependent variable and the results are presented in Table 11.

TABLE 11
YEAR GROUP ANALYSIS OF JOB SATISFACTION AND
EXPRESSED CAREER INTENT

Years/Group	Regression Results
0-2 years group 1	$R^2 = .11695$
2-4 years group 2	$R^2 = .22387$
4-7 years group 3	$R^2 = .14329$

As indicated in Table 11, the R^2 value increased significantly from group 1 to group 2, and then decreased in group 3. The increase in R^2 in group 2 indicated that the relationship between job satisfaction and expressed career intent did strengthen as tenure increased. The decrease in R^2 found in group 3 was, on the other hand, in contradiction to the hypothesis that the relationship between job satisfaction and expressed career intent should increase with tenure. Discussion of these conflicting results is presented in the following chapter.

CHAPTER VI

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

Chapters IV and V presented the results of the data analysis performed in testing the research hypotheses. The results of the data analysis, while generally satisfying the criterion for practical significance, were not particularly strong. The researchers feel that the weakness of the relationships shown in the data are in large part the result of the survey instrument used to collect the data. The instrument was not designed to test the variables and relationships investigated in this study. However, the researchers felt that this existing data base could and should be used to partially evaluate the theoretical turnover model developed in Chapter II. The data base included a large sample of the population of interest and was the most suitable recent data base available to the researchers. Thus, allowing the model of turnover to be tested on the population of junior officers and, in addition, possibly producing results relevant to current Air Force officer retention problems.

In this chapter the researchers discuss the implications of the results presented in Chapters IV and V.

First, promotion and pay will be discussed and new roles for these variables within the model of turnover will be presented. A discussion of the interrelationships of the remaining determinants will follow. Next, a discussion of the new role of opportunity in the model will be presented followed by a short discussion of the relationship between job satisfaction and expressed career intent. The chapter will conclude with a presentation of a revised model of turnover and recommendations for further research.

Determinants

Promotion

The lack of practically significant relationships between promotion and job satisfaction and promotion and expressed career intent may be explained by considering the social meaning of promotion in the officer corps of the Air Force. Within the Air Force social environment, "promotion" tends to connote promotion to the rank of Major and above. Advancements to First Lieutenant and Captain (the next higher ranks applicable to the majority of sample members) are virtually automatic since approximately 95 percent of all those officers eligible are advanced. These advancements are, therefore, seldom considered as part of the "promotion system." Thus, the perceived equity of the "promotion system" has little importance for the majority of the officers in the target population. Therefore, the

lack of a significant relationship between job satisfaction and perceived equity of the promotion system is consistent with the socialized meaning of the "promotion system."

Another explanation for the lack of a practically significant relationship between job satisfaction and promotion may be due to the individual's perception of the promotability of officers within his career field or his organization. The individual may be satisfied with his job, but he may also perceive that he and others may not be particularly promotable. For example, the individual may be in a career field, or a particular organization, where senior members of high rank have not been promoted from within the individual's career field or organization. This situation is frequently seen when a senior member of a support organization such as Maintenance, Supply, or Personnel is a pilot, promoted up through the operational flying organization rather than up through the respective support career field or organization. Such a situation as this could lead to a clouding of the job satisfaction/promotion relationship. That is, the individual may be satisfied with his job, and simultaneously dissatisfied with the equity of the promotion system. In addition, this situation may further cloud the relationship between job satisfaction and expressed career intent, in that the individual may be satisfied with his job but his

dissatisfaction with the equity of the promotion system may be strong enough to cause him to express a negative career intent. This, in turn, will probably simultaneously strengthen the relationship between perceived equity of the promotion system and expressed career intent.

The continual increase in the strength of the relationships between promotion and job satisfaction and promotion and expressed career intent may be partially explained by the fact that as tenure increases, understanding the promotion system and its operation probably increases. An increase in understanding the promotion system may, in turn, be followed by an increase in the importance of the promotion system to the individual. An increase in importance of the promotion system may be due to two primary reasons. First, the individual increases his awareness and knowledge as his tenure increases. Thus, he is getting closer to the "real" promotion to Major as presented previously in the discussion on the Air Force's socialized connotation of promotion. Second, the individual may perceive the system as inequitable. When he perceives the promotion system to be inequitable, such as when some deserving people are not promoted, this individual will probably talk, think, and read more about the promotion system, thereby increasing the importance of the promotion system to him. Increased knowledge, awareness, and importance of the promotion system may, in turn, clarify the

relationship between job satisfaction and promotion and expressed career intent and promotion. This was evidenced by the increased R^2 values of the research results as tenure increased.

In conclusion, tenure appeared to operate as an intervening variable between promotion and job satisfaction and promotion and expressed career intent. Furthermore, as stated in Chapter V, the predominant or strongest relationship appeared to be between promotion and expressed career intent. The role of tenure can be illustrated as in Figure 7. Tenure, as an intervening variable, appeared to act as an amplifier. That is, as tenure went up, the relationship between promotion and expressed career intent strengthened.



Figure 7

The New Roles of Promotion and Tenure

Pay

The lack of support for the hypothesis that as satisfaction with pay increases, the level of job satisfaction increases may, as indicated in Chapter V, be explained by reference to Maslow's Hierarchy of Needs theory (24:42). The lowest needs on Maslow's hierarchy are for survival and security. Pay is the principal means of satisfying these needs for most people in our society, including most Air Force

junior officers. Current military pay is generally considered comparable with civilian pay. Additionally, military pay increases with tenure at regular intervals, with promotion to higher rank, and through yearly cost of living increases. Given these factors, pay may be considered adequate (and destined to increase) to satisfy the individual's survival needs. When a lower need is satisfied, Maslow's theory predicts that the lower need decreases in importance to the individual and higher needs (social, self-actualization, etc.) become more important. The data seems to support this line of reasoning. In addition, the intercorrelational analysis presented in Chapter V indicated that the only practically important correlation involving pay was between pay and opportunity. The researchers propose, therefore, that satisfaction with pay be viewed as a variable that interacts with perceived opportunity outside the organization. Since the Pearson correlation coefficient cannot indicate causal directionality of a relationship, two logical explanations of the inverse relationship between pay and opportunity are possible. The first explanation considers satisfaction with pay to be dependent upon the perception of opportunity outside the organization. From this viewpoint, if an individual perceives the opportunity to earn more for the same effort outside the organization, he will tend to express dissatisfaction with his pay (8:295). If, on the other hand, the individual perceives that the same effort

would earn him no more (or perhaps less) than his current pay, he will tend to express satisfaction with his pay. The second explanation, developed by March and Simon (17:105), takes the opposite view. From this perspective, dissatisfaction with the material aspects of an individual's life-style because of the level of pay should lead to increased scanning of the environment for alternate employment. This increased environmental scanning often leads to greater awareness of the variety of alternate roles actually available and, hence, greater perceived opportunity. Thus, as satisfaction with pay decreases, perceived opportunity outside the organization will probably increase.

In light of the discussion and results presented in Chapters IV and V and the above discussion, the researchers propose that the role of pay in the turnover model is as shown in Figure 8.



Figure 8
The New Role of Pay

Other Determinants

The analyses reported in Chapter V, performed to assess the extent of multicollinearity in the determinants

of turnover showed four variables—role clarity, peer group integration, autonomy and responsibility, and satisfaction with supervisory style—to be strongly intercorrelated. The researchers believe that these four determinants define, to a considerable degree, a job in terms of the individual's perceptions. For example, it seems reasonable that an individual's satisfaction with supervisory style would be strongly affected by the degree of autonomy and responsibility allowed by the supervisor. Similarly, satisfaction with supervisory style would be strongly affected by how clearly the supervisor defined the role of the individual within the organization. The perceived clarity of an individual's role within the organization will, in turn, greatly affect the individual's ability to become fully integrated or socialized with his peers in the work group. Peer group integration, as measured in this research effort, is, in turn, strongly related to the level of mutual support and interaction of peers allowed and encouraged by the supervisor, and, thus, affects the individual's satisfaction with supervisory style. The interaction of these variables as described above indicates that these four determinants are aspects of the individual's perception of his job and explains the significant multicollinearity and intercorrelations found in the analyses of Chapter V.

In the multiple regression analyses reported in Chapter V, role clarity always entered the regression

first and accounted for the largest portion of explained variation. The consistently strong role played by role clarity indicated to the researchers that it is the dominant determinant of job satisfaction within the group of tested determinants. Additionally, a logical analysis of the intercorrelations led the researchers to tentatively conclude that role clarity may function as an intervening variable between job satisfaction and the other determinants. Such a hypothesized relationship is partially supported by House's Path Goal Theory of Leadership which basically asserts that the impact of leader behavior (supervisory style) flows through role clarity to job satisfaction (11:328-330). Data analysis to test the hypothesis that role clarity acts as an intervening variable is beyond the scope of this study. Therefore, role clarity is not treated as an intervening variable in the revised turnover model to be presented in a later section. Further research on this aspect of a turnover model seems warranted.

Opportunity

If, as indicated in Chapter V, opportunity functions as an intervening variable, then the level of job satisfaction, through the level of perceived opportunity, determines the level of career intent expressed. Thus, if perceived opportunity is truly an intervening variable,

the strength of the relationship between job satisfaction and expressed career intent should vary as the level of perceived opportunity varies.

The manner in which the job satisfaction-career intent relationship varies with the level of perceived opportunity may be deduced from a logical analysis within the framework of the model. If an individual is satisfied with his job, even if he perceives a high level of opportunity (alternate employment) outside the organization, he will probably express a positive career intent. If, on the other hand, this satisfied individual perceives very little opportunity, the lack of alternate employment will tend to reinforce his decision to remain with the organization. Thus, a satisfied individual's perception of opportunity will have little or no effect on his expressed career intent or the strength of the relationship between job satisfaction and expressed career intent. If an individual is dissatisfied with his job and perceives a high level of opportunity, he will probably express a negative career intent. The perceived availability of alternate employment tends to encourage the dissatisfied individual to express a negative career intent and to actually withdraw from the organization. In this situation, the relationship between expressed career intent and job satisfaction would be clear. However, if this dissatisfied individual perceives very little opportunity, the lack of alternate employment will tend to

cause the individual to reevaluate his career intentions and probably to express a more positive career intent than he would express if he perceived greater opportunity. This same individual would probably continue to express dissatisfaction with his job. In this case, the relationship between job satisfaction and expressed career intent would be clouded and the strength of the relationship decreased.

In light of the regression analysis and path analysis presented in Chapter V, and the logical analysis presented above, the researchers believe that there is sufficient evidence to warrant the inclusion of opportunity as an intervening variable in the turnover model. The new role of opportunity in the model can be represented as in Figure 9.

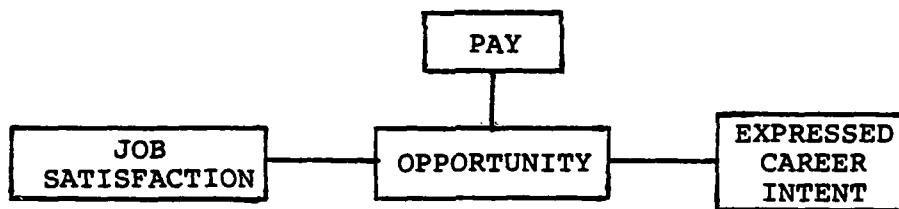


Figure 9

The New Role of Opportunity

Job Satisfaction and Expressed Career Intent

As indicated in Chapter IV, the increase in R^2 from group 1 to group 2 (2-4 years) supported the hypothesis that the relationship between job satisfaction and expressed career intent should become stronger as tenure increases. In addition, the Air Force and Navy career intent studies

indicated that an individual's expressed career intent is a reasonably accurate predictor of career status and becomes a stronger predictor of career status as a career decision point is approached. The regression results within groups 1 and 2 appeared to confirm the Air Force and Navy studies to the extent that a stronger relationship does appear to exist as the initial career decision point is approached. For example, group 2 contained officers that did not have an extended training period after commissioning and, therefore, had an obligated four-year tour of duty. This group also contained individuals, such as pilots and navigators, who required an extended period of training after commissioning, thus accruing at least one additional year of obligated duty beyond the basic four-year commitment. These individuals, with four or more years of obligated duty, were either approaching or approximately at the initial career decision point.

On the other hand, the R^2 value in group 3 (4-7 years) was less than that in group 2, thus contradicting the hypothesis that the relationship between job satisfaction and expressed career intent should increase with tenure. The researchers felt that this may be due, in part, to the fact that group 3 contains individuals that had passed the initial career decision point (at approximately four or five years depending on the training received). These individuals may have made the decision

to stay in the Air Force for a variety of reasons, yet may not have expressed a corresponding high level of job satisfaction. In other words, once beyond the initial career decision point, the relationship between job satisfaction and expressed career intent may have become clouded. The individual may express a positive career intent and yet remain dissatisfied with his job. This situation may exist, for example, when the individual perceives little chance for employment outside of the Air Force. It should be kept in mind, however, that this is strictly a conjecture on the part of the researchers. Further research concerning the initial career decision of young officers should be carried out to clarify what actually does happen beyond this initial decision point. In addition, it was not possible to determine the exact initial obligated tour of duty for individuals within the sample. The year groups used by the researchers were arbitrary and did not represent accurate divisions according to precise information about initial tours of duty.

In conclusion, the researchers believe that the data supports the hypothesis that the relationship between job satisfaction and expressed career intent will increase in strength as tenure increases up to the fourth year of active duty. Beyond this point, the hypothesis was not supported and the reasons for nonsupport are, at the time of this writing, unclear in the context of this research

effort. An explanation as to why the strength of the relationship between job satisfaction and expressed career intent appeared to peak at the two to four year point was not possible with the research data available.

Revised Model

In light of the synthesized model of turnover presented in Chapter II and the research results and conclusions presented in this chapter, a revised model of turnover for junior officers is presented in Figure 10. Although not evaluated in this study, expectations, task repetitiveness, and similarity of job and interests are included in the revised model because the researchers believe that sufficient evidence exists to warrant their inclusion in a turnover model. Since these variables were not evaluated, they are presented in their roles as depicted in the synthesized model. As can be seen from a comparison of the synthesized model and the revised model, the conceptual framework originally represented by the synthesized model was changed considerably as a consequence of the research results and analyses. The researchers consider the revised model as a more realistic conceptual framework for the study of turnover of junior Air Force officers.

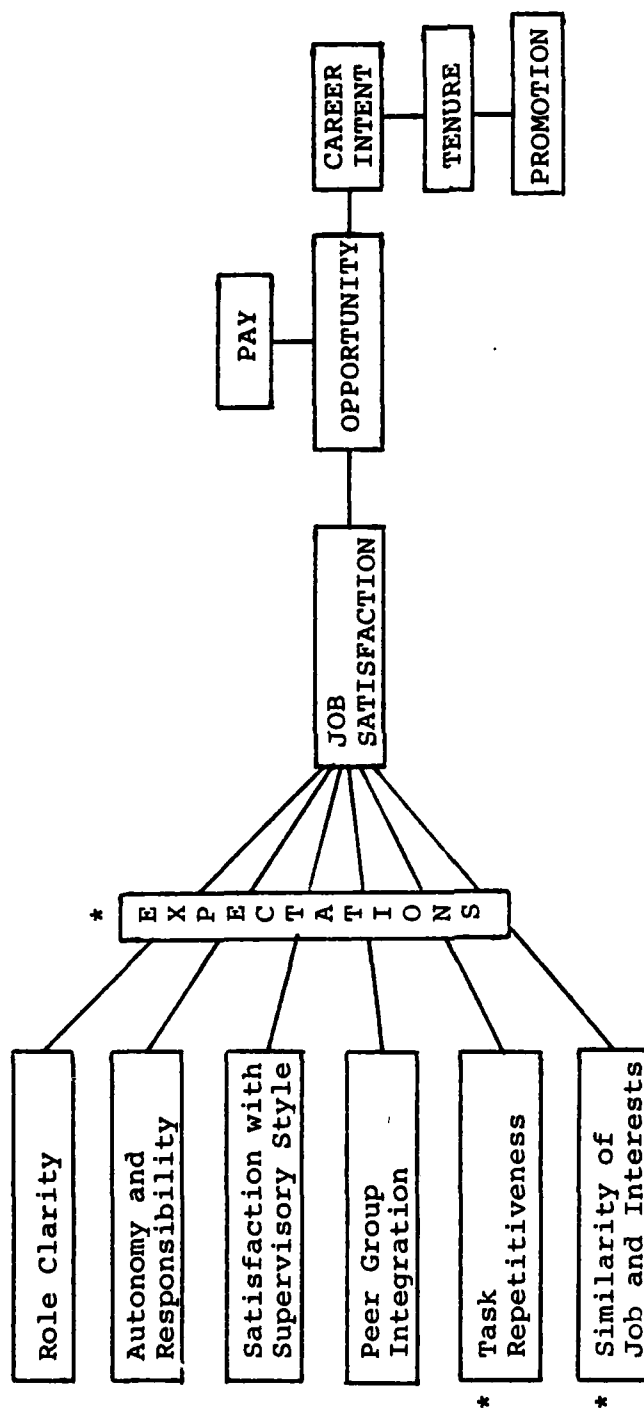


Figure 10
Revised Model of Turnover for Junior Officers

*Variables not tested in this study.

Recommendations for Further Research

As a result of conducting this study, the researchers feel that the traditional explanations of officer turnover, and hence, the steps taken to enhance retention of qualified personnel, may be based upon an inaccurate and outdated conceptual framework. This study has partially tested and confirmed a realistic conceptual framework with its basis founded in theoretical and empirical research. The framework developed in this study should provide the basis for further definitive research in the area of junior officer turnover.

During the course of this research, several addition variables, relationships, and analyses pertinent to the study of turnover of junior officers became apparent to the researchers. The recommendations that follow are divided into two groups: first, those recommendations for research utilizing the existing Quality of Life Survey data base used for this study; second, those recommendations requiring development of a new, comprehensive data base.

Further Analyses of Quality of Life Survey Data

Due to the limitations of time and the defined scope of this study, two analyses of the Quality of Life Survey data were not accomplished by the researchers. They are the basis of the recommendations that follow.

The first recommendation concerns the further analysis of the relationships between the determinants role clarity, satisfaction with supervisory style, peer group integration, and autonomy and responsibility. This analysis should concentrate on identifying the structure of the interrelationships of these variables. Special consideration should be given to further evaluation of the hypothesized function of role clarity as an intervening variable within the model.

The second recommendation is to divide the sample into flying and nonflying career fields in order to evaluate possible differences in perceptions between the two general occupational groups. Major perceptual differences would indicate the possible need for differentiated turnover models; lack of significant differences would support the general applicability of the revised turnover model.

Recommendations Requiring A New Data Base

As noted in the introduction to this chapter, the researchers believe the relatively weak results obtained in this study are attributable in large part to the survey instrument used to collect the data. The survey instrument was not designed to test the specific variables or relationships that were the basis of this study. In spite of the makeshift nature of the data, the researchers feel the results obtained are sufficiently strong to warrant further

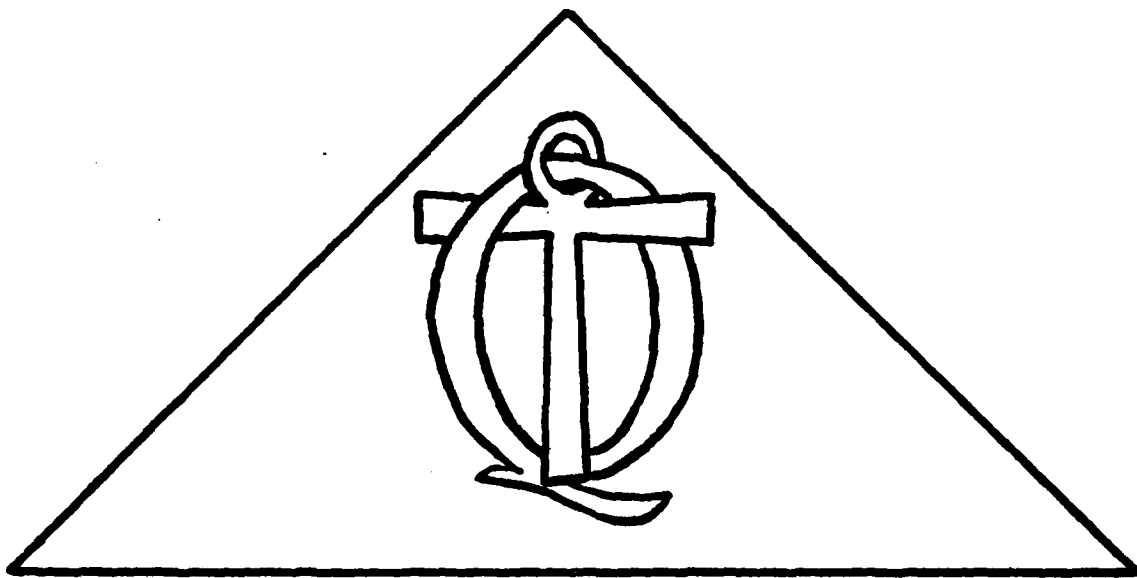
investigation. Specifically, the researchers recommend the development, validation, and use of a comprehensive new survey tailored for the study of the revised turnover model presented in this chapter.

Additionally, the relatively weak results obtained account for only a small percentage of the variation in expressed career intent ($R^2=.09885$). The large percentage of unexplained variation in this and other studies of turnover (7) suggest the existence of pertinent variables not previously identified and tested in the turnover literature. Identification and validation of these additional variables could significantly enhance the predictive power of a turnover model. Such variables could possibly be identified from the variety of attitudinal surveys conducted within the Air Force every year and relevant questions developed and included in the comprehensive survey recommended above. The researchers would suggest the following are likely candidates for inclusion in a model of turnover of junior Air Force officers:

1. the officer evaluation system
2. the enforced mobility
3. isolated assignments
4. temporary duty
5. family separations
6. erosion of benefits
7. duties not related to primary utilization field.

APPENDIX A

United States Air Force
Quality Of Air Force Life
Active Duty
Air Force Personnel Survey



SECOND EDITION

USAF SCN 77-37
MARCH 1977

LEADERSHIP/MOTIVATION DIVISION
HUMAN RESOURCES DEVELOPMENT
DIRECTORATE OF PERSONNEL PLANS
HQ UNITED STATES AIR FORCE

FOREWORD

This survey asks what you think about the Quality of Air Force Life. By completing it, you will provide Headquarters USAF with your attitudes and opinions about a number of areas of interest to the Air Force. Your responses are anonymous. They will be combined with the answers of all others taking the survey and compiled for use in forming future personnel plans and policies. Although the survey uses a special answer sheet for machine recording, a comments page is included at the end of the survey. You are encouraged to provide your comments on any subject of importance which you would consider helpful to Headquarters USAF in its efforts to insure the highest possible quality of Air Force life.

INSTRUCTIONS FOR COMPLETING SURVEY

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.

	A	B	C	D
Right Way				
to Mark	o	o	o	o
Answer Sheet	o	o	o	o
	A	B	C	D
	o	o	o	o
Wrong Way	o	o	o	o
to Mark	o	o	o	o
Answer Sheet	o	o	o	o
	o	o	o	o

Since this survey is strictly anonymous, please do not write your name or your SSAN on either your answer sheet or survey booklet.

PRIVACY ACT STATEMENT

In accordance with paragraph 30, AFR 12-35, Air Force Privacy Act Program, the following information about this survey is provided as required by the Privacy Act of 1974:

a. Authority. This survey information is authorized for solicitation by Federal Statute Title 10, United States Code, Section 8012, Executive Order 9397, 22 Nov 1943, DoDI 1100.13, 17 Apr 1968, and AFR 30-23, 22 Sep 1976.

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.

1-2. Your survey administrator will provide you with a 2-letter code for your base. Mark the first letter of this code in item 1 and the second letter in item 2 of your answer sheet.

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

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

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

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 LL.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 LL.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. Was (or is) your father a career military member?
- A. No
 - B. Yes
9. Are you a regular or reserve officer?
- A. Not applicable, I am enlisted
 - B. Reserve
 - C. Regular
10. What was the source of your commission?
- A. Not applicable, I am enlisted
 - B. OTS
 - C. OCS
 - D. ROTC
 - E. AECF
 - F. Aviation Cadet
 - G. Navigation Cadet
 - H. USAFA
 - I. USMA
 - J. USNA
 - K. Other
11. How many dependents do you have? Do not include yourself.
- A. None
 - B. One
 - C. Two
 - D. Three
 - E. Four
 - F. Five
 - G. Six
 - H. Seven
 - I. Eight or more
12. 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
13. What is your sex?
- A. Male
 - B. Female

14. 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

15. Enter the code for the first digit of your duty Air Force Specialty Code (AFSC) opposite item 15 on your answer sheet.

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

16. Enter the code for the second digit of your duty 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 third 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. What is your current primary aeronautical rating?

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

19. What shift do you normally work?

- A. Day shift
- B. Swing shift
- C. Graveyard shift
- D. Rotate shifts

The following four questions address the subjects of economic standard and security. Please rate the degree of importance of these concepts to you and 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. What degree of importance do you attach to the above? (Select one of the seven points on the importance scale)

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

21. 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						Highly
Dissatisfied			Neutral			Satisfied

ECONOMIC SECURITY: Guaranteed employment; retirement benefits; insurance; protection for self and family.

22. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

23. To what degree are you satisfied with the ECONOMIC SECURITY aspects of your life?

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

24. Do you hold a second job?

A. No

Yes, I work

- 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

25. 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

26. 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
27. Do you or your dependents, if any, currently receive Federal, state, county, civic, or community (public) assistance?
- A. No
 - B. Yes, food stamps only
 - C. Yes, monetary payments only
 - D. Yes, food only
 - E. Yes, combination of the above
 - F. Yes, other
28. Are you now eligible for and do you receive food stamps?
- A. I am not eligible for food stamps
 - B. I am eligible for food stamps but do not use them
 - C. I am now receiving and using food stamps
 - D. I do not know if I am eligible for food stamps; but, I would not use them if I were eligible
 - E. I do not know if I am eligible for food stamps; but I would use them if I were eligible
29. 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
30. 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

31. The Air Force is providing enough information to its members to permit them to determine the current status of actions which may impact on their fringe benefits (commissary, retirement, medical care, etc.)

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

The following is a list of some Air Force benefits. Using the scale shown below, please indicate the importance of each benefit to you and your family now. Be sure the item number on your answer sheet is the same as the item number you are answering on the survey booklet.

	<u>Low</u> <u>Importance</u>		<u>Medium</u> <u>Importance</u>			<u>High</u> <u>Importance</u>		<u>Undecided,</u> <u>Don't know</u>
32. 30-days annual leave	A	B	C	D	E	F	G	H
33. Base exchange	A	B	C	D	E	F	G	H
34. Base housing	A	B	C	D	E	F	G	H
35. Military hospitals	A	B	C	D	E	F	G	H
36. Commissary	A	B	C	D	E	F	G	H
37. CHAMPUS	A	B	C	D	E	F	G	H
38. Legal assistance	A	B	C	D	E	F	G	H
39. Education and training	A	B	C	D	E	F	G	H
40. Survivor benefits	A	B	C	D	E	F	G	H
41. Dependents indemnity compensation	A	B	C	D	E	F	G	H
42. Retirement	A	B	C	D	E	F	G	H
43. Travel and transportation entitlements	A	B	C	D	E	F	G	H
44. Income tax advantage	A	B	C	D	E	F	G	H
45. Insurance discounted	A	B	C	D	E	F	G	H
46. Recreation facilities	A	B	C	D	E	F	G	H
47. Veterans benefits (GI Bill, etc.)	A	B	C	D	E	F	G	H

Listed below are a number of factors which have been associated with favorable attitudes toward an Air Force career.

FAVORABLE FACTORS

- 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

48. Select the one factor which TODAY would influence you the most to make the Air Force a career.

Listed below are a number of factors which have been associated with unfavorable attitudes toward an Air Force career.

UNFAVORABLE FACTORS

- A. Family separation
- B. My Air Force job (little challenge, little sense of accomplishment, etc.)
- C. Pay and allowances
- D. Housing
- E. Promotion selection system
- F. Promotion opportunity
- G. Fringe benefits (medical and dental care, BX, commissary, etc.)
- H. Leadership and supervision in the Air Force
- I. Frequent PCS moves
- J. Little "say" in future assignments
- K. Insecurity of Air Force life
- L. The people
- M. Air Force policies and procedures
- N. Some other factor
- O. Nothing unfavorable

49. Select the one factor which TODAY would influence you the most NOT to make the Air Force a career.

50. 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 importance of free time to you and your degree of satisfaction with it 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.

51. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

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

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

53. What percent of your friends are Air Force members?

- A. None
- B. 1-19%
- C. 20-39%
- D. 40-59%
- E. 60-79%
- F. 80-99%
- G. All

The following is a list of Federal holidays:

1 Jan 77 - New Year's Day	11 Oct 76 - Columbus Day
16 Feb 77 - President's Day	25 Oct 76 - Veterans' Day
31 May 76 - Memorial Day	25 Nov 76 - Thanksgiving Day
4 Jul 76 - Independence Day	25 Dec 76 - Christmas Day
6 Sep 76 - Labor day	

54. During the past year how many of these nine holidays were you not able to take off because you were required to be at work in a duty status?

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

Please rate the degree of importance of your work to you and your degree of satisfaction with it 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.

55. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

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

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly						Highly
Dissatisfied			Neutral			Satisfied

57. 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
58. Choose the 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
59. 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
60. Which one of the following shows how you think you compare with other people?
- A. No one likes his job better than I like mine
 - B. I like my 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 his job more than I dislike mine

Listed below are six characteristics which could be present on any job. Using the scale below, indicate the degree to which you would like to have each characteristic present in your job.

	Moderate or Less		High		Extremely High
61. Stimulating and challenging work	A B		C D E		F G
62. Chances to exercise independent thought and action in my job	A B		C D E		F G
63. Opportunities to learn new things from my work	A B		C D E		F G
64. Opportunities to be creative and imaginative in my work	A B		C D E		F G
65. Opportunities for personal growth and development in my job	A B		C D E		F G
66. A sense of worthwhile accomplishment in my work	A B		C D E		F G

67. Which one of the following factors do you consider the most essential for having a satisfying job?
- A. Challenging work
 - B. Recognition for my work
 - C. Sense of achievement
 - D. Encouragement to use initiative and creativity
 - E. Having responsibility for a job
 - F. Having a good supervisor
68. 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
69. My present job makes good use of my training and ability.
- A. Strongly disagree
 - B. Disagree
 - C. Undecided
 - D. Agree
 - E. Strongly agree
70. Do you think your present job is preparing you to assume future positions of greater responsibility?
- A. Definitely no
 - B. Probably no
 - C. Undecided
 - D. Probably yes
 - E. Definitely yes
71. For your next assignment, do you want a job which has greater responsibility than your current job?
- A. Definitely no
 - B. Probably no
 - C. Not sure
 - D. Probably yes
 - E. Definitely yes
72. Do you feel that the work you are now doing is appropriate to the grade you hold:
- A. My grade is much too high for the work I am doing
 - B. My grade is somewhat too high for the work I am doing
 - C. My grade is about right for the work I am doing
 - D. My grade is somewhat too low for the work I am doing
 - E. My grade is much too low for the work I am doing
73. 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

74. 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
75. 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
76. I wish that more 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

Listed below are 10 concepts which can be related to your Air Force life (questions 77-86). Rank them in order of their importance to you. Example: If you believe that "A comfortable life" (number 77) is the most important to you of the 10 concepts, you would mark an "A" for question 77 on your answer sheet. If you believe that "loyalty" is the second most important concept, you would mark a "B" for question 81 on your answer sheet. Continue ranking until you have marked a "J" for the concept of least importance to you.

- | | |
|-------------------------|-------------------------|
| A. Most important | F. Sixth most important |
| B. | G. |
| C. | H. |
| D. | I. |
| E. Fifth most important | J. Least important |

- 77. A comfortable life (a good salary, few worries about money)
- 78. A sense of accomplishment (making a meaningful contribution)
- 79. Family security (taking care of my family)
- 80. Individual freedom (independence, being free to choose)
- 81. Loyalty (dedication to military and its mission)
- 82. Personal recognition (having personal accomplishments recognized and rewarded)
- 83. National security (protection from attack, an effective military)
- 84. Integrity (absolute honesty, devotion to duty)
- 85. Trust (being able to depend on those around me, including my leaders, my peers, and my subordinates)
- 86. Job satisfaction (doing work that I like)

Please rate the degree of importance of leadership/supervision to you and your degree of satisfaction with it based on the following description:

LEADERSHIP/SUPERVISION: My supervisor has my interests and that of the Air Force at heart; keeps me informed; approachable and helpful rather than critical; good knowledge of the job.

87. What degree of importance do you attach to the above? (Select one of the seven points)

A.....	B.....	C.....	D.....	E.....	F.....	G.....
Moderate			High			Very High
Importance			Importance			Importance

88. To what degree are you satisfied with the LEADERSHIP/SUPERVISION aspects of your life? (Select one of the seven points)

A.....	B.....	C.....	D.....	E.....	F.....	G.....
Highly						Highly
Dissatisfied			Neutral			Satisfied

89. What is your opinion of the leadership ability of your immediate supervisor?

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

90. 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

91. The high degree of responsibility assigned to younger, lower ranking Air Force members places too great a strain upon them.

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

Of the following descriptions of discipline, select the one which most nearly corresponds to your definition of what discipline should be on the part of an individual in a peacetime Air Force.

92. Discipline is the willingness of the individual to:

- A. Respond quickly and without question to the direct lawful orders of a superior
- B. Adapt his behavior to the expectations of the organization
- C. Self-direct his behavior so that it helps in the accomplishments of the mission of the organization.

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

Listed below are 23 factors or policies which affect Air Force personnel. Using the scale listed immediately below, please rate each of the factors. Mark only one response for each item.

- A. Standard too strict, enforcement too strict
- B. Standard too strict, enforcement about right
- C. Standard too strict, enforcement too lax
- D. Standard about right, enforcement too strict
- E. Standard about right, enforcement about right
- F. Standard about right, enforcement too lax
- G. Standard too lax, enforcement too strict
- H. Standard too lax, enforcement about right
- I. Standard too lax, enforcement too lax

- 94. Overall personal appearance.
- 95. Wear of the uniform.
- 96. Haircuts.
- 97. Mustaches.
- 98. Beard policy.
- 99. Military courtesy and customs.
- 100. Personnel weight control program.
- 101. What my immediate supervisor expects of me.
- 102. My commander's policies and procedures.
- 103. Officer/enlisted on-the-job relationships.
- 104. Drills and ceremonies.
- 105. Respect for supervisors.
- 106. Safety procedures.
- 107. Working hours.
- 108. Leave procedures.
- 109. Living in on-base family housing
- 110. Living in on-base dormitories
- 111. Quality of work expected on the job.
- 112. Quantity of work expected on the job.
- 113. Officer supervisor/subordinate relationships.
- 114. Enlisted supervisor/subordinate relationships.
- 115. Unit mission accomplishment.
- 116. Air Force life in general.

The following is a list of statements about leadership/supervision. Please indicate whether you agree or disagree with each statement using the scale shown.

	<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Undecided</u>	<u>Agree</u>	<u>Strongly Agree</u>
117. The Air Force does a good job of keeping me informed about what is going on.	A	B	C	D	E
118. More supervision of member performance and behavior is needed at lower levels within the Air Force.	A	B	C	D	E
119. Persons in my work group encourage each other to work as a team.	A	B	C	D	E
120. My supervisor tries to get my ideas before making decisions that are important to me.	A	B	C	D	E
121. Persons in my work group offer each other new ideas for solving job-related problems.	A	B	C	D	E
122. My supervisor encourages the people in my work group to exchange opinions and ideas.	A	B	C	D	E
123. I would say that the lowest level supervisors in my organization usually have enough say or influence on what goes on.	A	B	C	D	E
124. When decisions are being made in my organization, the persons who will be affected most are asked for their ideas.	A	B	C	D	E
125. Persons who do not supervise others in my organization have an adequate amount of say or influence on what goes on.	A	B	C	D	E
126. Information is usually widely shared in my organization so that those who make the decisions will base their decisions on the best available know-how.	A	B	C	D	E
127. I get the information I need to do my job in the best possible way.	A	B	C	D	E
128. When I talk to people in my work group, they pay attention to what I am saying.	A	B	C	D	E
129. My supervisor is friendly and easy to approach.	A	B	C	D	E
130. My supervisor pays attention to what I have to say.	A	B	C	D	E

131. 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
132. How often are you given feedback from your supervisor about your job performance?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Very frequently
133. Does your immediate supervisor give you recognition for a job well done?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Frequently
 - E. Always
134. What kind of influence does your immediate supervisor have on your organization?
- A. Very favorable
 - B. Favorable
 - C. Neutral
 - D. Unfavorable
 - E. Very unfavorable
135. Are you given the freedom you need to do your job well?
- A. Never
 - B. Seldom
 - C. Sometimes
 - D. Often
 - E. Always

Please rate the degree of importance of the concept of equity to you and your degree of satisfaction with it 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.

136. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High		Very High	
Importance			Importance		Importance	

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

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly			Neutral		Highly	
Dissatisfied					Satisfied	

138. 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

139. 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

140. What of the following best represents your opinion of the E-5/6/7 WAPS factors?

- A. Not enough weight is given to performance reports
- B. Not enough weight is given to tests
- C. Not enough weight is given to seniority
- D. Not enough weight is given to decorations
- E. Too much weight is given to performance reports
- F. Too much weight is given to tests
- G. Too much weight is given to seniority
- H. Too much weight is given to decorations
- I. No opinion

141. 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

142. 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. Gives women workers the easy jobs, and the hard jobs to men

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. Gives women workers the easy jobs, and the hard jobs to the men

Please rate the degree of importance of personal growth to you and your degree of satisfaction with it 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.

143. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High		Very High	
Importance			Importance		Importance	

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

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly			Neutral		Highly	
Dissatisfied					Satisfied	

145. For the most part, how suitable for your needs was the course material in the NCO Orientation Course (Phase I, NCO PME)?

- A. Excellent
- B. Good
- C. Fair
- D. Poor
- E. Have not attended the course
- F. Not applicable, I am an officer

146. Overall, my attendance at the NCO Orientation Course (Phase I, NCO PME) was a good, useful investment of my time and effort.

- A. Strongly disagree
- B. Disagree
- C. Inclined to disagree
- D. Undecided
- E. Inclined to agree
- F. Agree
- G. Strongly agree
- H. Have not attended the course
- I. Not applicable, I am an officer

147. Air Force training programs do not do a very good job of preparing people to get along with other people.

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

148. Technical School Training does not do an adequate job of preparing an airman for his first duty assignment.

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

149. Basic Military Training does not do an adequate job of preparing airmen for their first duty assignment.

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

150. Today's Air Force training programs should devote some time to help prepare people to get along with each other better.

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

151. Human Relations Education courses are effective in bringing about better working relations on the job.

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

Please rate the degree of importance of the concept of personal standing to you and your degree of satisfaction with it based on the following description:

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

152. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

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

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly			Neutral			Highly
Dissatisfied						Satisfied

154. I have a lot of respect for most of the Senior NCOs (E7-E9) I know.

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

155. Recent changes in Air Force personnel programs have been aimed at enhancing NCO prestige. Do you believe these efforts will be successful?

- A. Definitely yes
- B. Probably yes
- C. Undecided
- D. Probably no
- E. Definitely no

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

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

157. Most of the Senior NCOs (E7-E9) understand and are able to communicate with the people who work with them.

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

158. 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 the degree of importance of health to you and your degree of satisfaction with it 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.

159. What degree of importance do you attach to the above?

A.....	B.....	C.....	D.....	E.....	F.....	G
Moderate			High			Very High
Importance			Importance			Importance

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

A.....	B.....	C.....	D.....	E.....	F.....	G
Highly			Neutral			Highly
Dissatisfied						Satisfied

161. 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

162. 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

163. 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
164. 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
165. 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

COMMENTS SHEET

QUALITY OF AIR FORCE LIFE SURVEY

Please provide any comments which you feel would be of value to Hq USAF in our efforts to improve the quality of Air Force life. If you use this sheet, please detach it and return it with your answer sheet.

Grade: _____

MAJOR COMMAND: _____

THANK YOU FOR COMPLETING THIS SURVEY

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