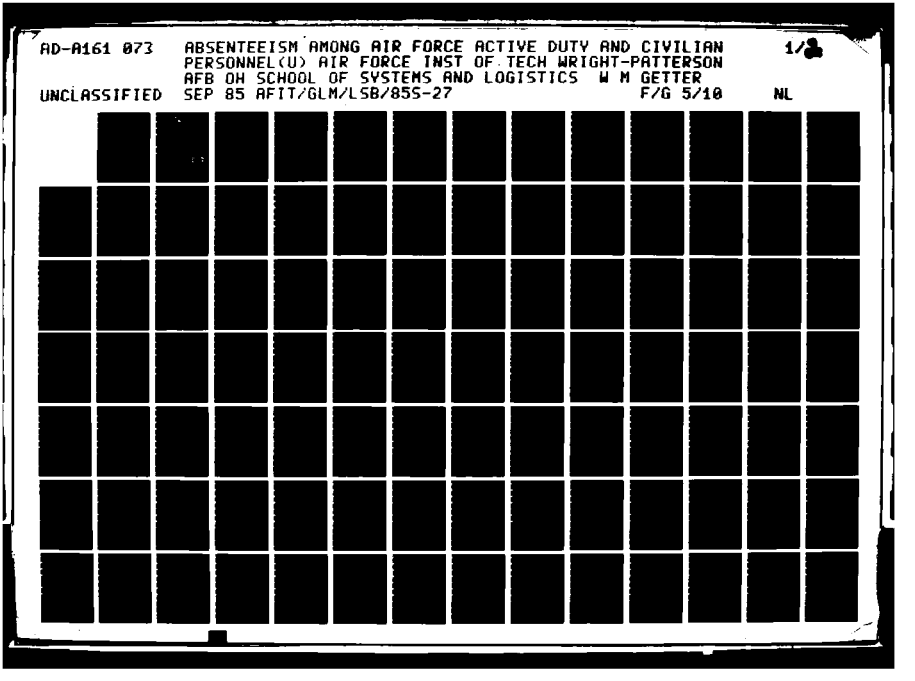
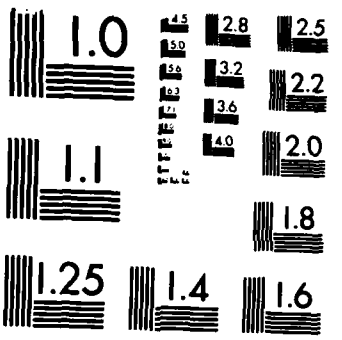

AD-A161 073 ABSENTEEISM AMONG AIR FORCE ACTIVE DUTY AND CIVILIAN PERSONNEL(U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF SYSTEMS AND LOGISTICS W M GETTER
UNCLASSIFIED SEP 85 AFIT/GLM/LSB/85S-27 F/G 5/10 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

ABSENTEEISM AMONG AIR FORCE ACTIVE DUT AND CIVILIAN PERSONNEL

THESIS

William M. Getter
Captain, USAF

AFIT/GLM/LSB/85S-27

DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY
AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

AFIT/GLM/LSB/85S-27

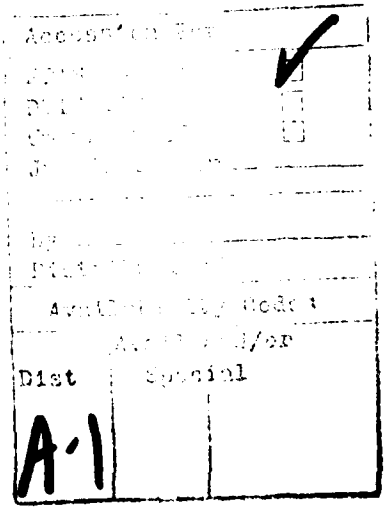
ABSENTEEISM AMONG AIR FORCE ACTIVE DUTY AND CIVILIAN PERSONNEL

THESIS

William M. Getter
Captain, USAF

AFIT/GLM/LSB/85S-27

The contents of the document are technically accurate, and no sensitive items, detrimental ideas, or deleterious information are contained therein. Furthermore, the views expressed in the document are those of the author(s) and do not necessarily reflect the views of the School of Systems and Logistics, the Air University, the United States Air Force, or the Department of Defense.



AFIT/GLM/LSB/85S-27

ABSENTEEISM AMONG AIR FORCE ACTIVE DUTY AND CIVILIAN PERSONNEL

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

William M. Getter, B.A.
Captain, USAF

September 1985

Acknowledgements

I wish to express my sincere appreciation to Lt Col James Lindsey for his guidance and technical assistance throughout the research and composition of this thesis and to Professor Donald Benoit for his assistance as reader. I would also like to give a very special thanks to my wife, Kathy, without who's loving and unselfish support this effort would not have been possible. Finally, a special thanks to my children, Katie and Daniel for putting up with all the times their dad was "too busy to play" and for brightening my life in moments of despair.

Table of Contents

	Page
Acknowledgments	ii
List of Figures	vi
List of Tables	vii
List of Symbols	ix
Abstract	xii
I. Introduction	1
Research Issue	1
Background	2
Research Objective	3
Research Questions and Hypotheses	4
Research Question #1	4
Research Question #2	4
Research Question #3	4
Research Question #4	5
Research Question #5	5
Summary	5
II. Literature Review and Proposed Absence Model	6
Introduction	6
Civilian Studies/Theories	7
Gibson's Conceptualization of Absence Behavior	7
Nicholson's A-B Continuum Model of Attendance Motivation	9
The Steers and Rhodes Process Model of Employee Attendance	12
Military Studies/Theories	15
McCubbin, *et al.*	15
Hartnagel's Study of AWOL Offenders	17
Littlepage and Rappoport's Model of AWOL Decisions	19
Conclusions	21
Proposed Absence Model	24
Absence Frequency (ABS)	24
Absence Inducing Events (AIE)	25
Job Attachment (JA) and Non-Job Attachment (NJA)	25

Page

Dummy Variable (Military/ Civilian) (CIV) 25
Summary 26

III. Methodology 27

Overview 27
Survey Development 27
Dependent Variable 27
Independent Variables 29
Survey Administration 31
Statistical Analysis 31
Summary 32

IV. Results 34

Comparison of Population and Sample Characteristics 34
Comparison of Absence Patterns in Sample Subpopulations 36
Absence Patterns of Military and Civilian Respondents 36
Comparison of Absence Patterns Between Work Shifts 40
Survey Instrument Validity 41
Pearson Correlations Analysis 41
Factor Analysis 43
Summary of Correlation and Factor Analysis Results 45
Reliability Analysis 45
Reliability of the Non-Job Attachment Constructs 45
Reliability on Job Attachment and Absence Inducing Events Constructs 46
Correlation Analysis of Independent and Absence Variables 47
Pearson Correlation Procedure 2 47
Observations Concerning Pearson Correlations 50
Model Refinement 50
Job Attachment Construct 50
Non-Job Attachment Construct 51
Absence Inducing Events Constructs 52
Final Model 52
Multiple Regression on Refined Model 52
Results 52

Page

Residual Analysis 53

V. Discussion 54

Examination of Research Questions/Hypotheses 54
Research Question #1 54
Research Question #2 55
Research Question #3 56
Research Question #4 56
Research Question #5 57
Areas for Future Research 60
Implications of Findings for Managers 63
Summary and Conclusion 64

Appendix A: Survey Questions and Variables Labels 65

Appendix B: Multiple Regression 73

Bibliography 78

Vita 80

List of Figures

Figure		Page
1.	Steers and Rhodes (1978:293) Employee Attendance Model	13
2.	Secondary Deviance	18

List of Tables

Table		Page
1.	Comparison of the Proportion of Military and Civilian Members	35
2.	Comparison of Grade Spread	35
3.	Comparison of the Proportion of Males and Females	35
4.	Comparison of the Distribution of Personnel Between Shifts	36
5.	Comparison of the Proportion of Operations and Staff Personnel	36
6.	Sick Leave T-Test	37
7.	Regular Leave T-Test	37
8.	Emergency Leave T-Test	37
9.	Nonchargable Time-off T-Test	38
10.	Total Absence T-Test	38
11.	Average Absence Duration for Military and Civilian Respondents	39
12.	Proportion of Absence Category by Shift	40
13.	Difference of Means Test	40
14.	Cronbach's Alpha Reliability on Non-Job Constructs	46
15.	Cronbach's Reliability Alpha for Job Attachment and Absence Inducing Events Constructs	46
16.	Correlations with Frequency of Sick Leave (SICKT)	47
17.	Correlations with Nonchargable Time Off Frequency (NONCHT)	48
18.	Correlations with Regular Leave (REGT)	48

Table Page

19. Correlations with Emergency leave and leaves of absence (EMERT) 49

20. Correlations with Absent without leave/ unauthorized absence (AWOLT) 49

21. Correlations with Total Absence Frequency (TOFFT) 49

List of Symbols

The following symbols and abreviations are used throughout the text. A complete copy of the survey questions with associated variables is included in appendix A.

AGE	Respondent's age (survey question #1)
AIE	Absence inducing events construct (average of ROFF1-8)
AWOL	Absent without leave
AWOLD	Duration of unexcused absence (survey question #68)
AWOLT	Frequency of unexcused absence (survey question #67)
CAT	Respondent's service category (survey question #6)
CC	Attachment to community and church construct (average of NJCOM8, NJINT1, and NJINT4)
CIV	Dummy variable indentifying military and civilian personnel
CLI	Central life interest construct (average of NJCOM1, NJCOM2, and NJCOM3)
DEPEND	Number of dependents in respondent's household (survey question #4)
EDLEV	Respondent's educational level (survey question #5)
EMERD	Duration of emergency leave (survey question #64)
EMERT	Frequency of emergency leave (survey question #63)
GENDER	Respondent's gender (survey question #2)

GRADE	Respondent's grade (survey question #7)
HEALTH	Respondent's description of his/her health (survey question #12)
HOME	Attachment to family and friends construct (average of NJCOM6 and NJCOM7)
JATCH	Job attachment construct (average of JSAT1-6 and ORGA1-15)
JSAT1-6	Job satisfaction variables 1 - 6 (survey questions #13 - #18)
JSATC	Job satisfaction construct (average of JSAT1-6)
LOFFA	Duration of last absence (survey question #58)
LOFFR	Reason for last absence (survey question #57)
MSTAT	Respondent's marital status (survey question #3)
NJATCH	Non-job attachment construct (average of NJCOM1-9 and NJINT1-6)
NJCOM1-9	Non-job commitment variables (survey questions #34 - #42)
NJINT1-6	Non-job interest variables (survey question #43 - #48)
NONCHD	Duration of nonchargable time off (survey question #66)
NONCHT	Frequency of nonchargable time off (survey question #65)
ORGA1-15	Job (organizational) commitment variables 1 - 15 (survey questions #19 - #33)
ORGAC	Organazational commitment consturct (average of ORGA1-ORGA15)
PCS	Flag for change of station in last six months (survey question #11)

REC	Attachment to sports, recreation and hobbies (average of NJCOM4 and NJINT5)
REGD	Duration of regular leave (survey question #62)
REGT	Frequency of regular leave (survey question #61)
ROFF1-8	Absence inducing events variables (survey questions #49 - #56)
SCHOOL	Interest in off duty education variable (NJINT6)
SHIFT	Respondent's duty shift (survey question #10)
SICKD	Duration of sick leave (survey question #60)
SICKT	Frequency of sick leave (survey question #59)
TIO	Respondent's time in their present organization (survey question #9)
TIS	Respondent's total time in service (survey question #8)
TOFFD	Duration of total absence (sum of SICKD, REGD, EMERD, NONCHD, and AWOLD)
TOFFT	Frequency of total absence (sum of SICKT, REGT, EMERT, NONCHT, and AWOLD)

Abstract

This research effort was focused on identifying the critical variables which contribute to absence behavior among active duty and civilian Air Force personnel. A review of the absenteeism literature helped to identify several of these variables. They are job attachment, non-job attachment and absence inducing events.

A survey instrument was constructed and administered in an Air Force unit. The objective of the survey was to measure the three critical variables and absence frequency for a population of both military and civilian personnel for analysis. Statistical analysis suggested refinement of the job attachment and non-job attachment constructs into five, more specific variables -- job satisfaction, job commitment, central life interest, attachment to family and friends, and attachment to community and church.

Further analysis indicated that organizational policy is an important variable in determining the type of absences individuals take. The manner in which all the variables related with one another in the analyses gave rise to several areas for future research and also provided practical management insights for Air Force leaders.

ABSENTEEISM AMONG AIR FORCE ACTIVE DUTY AND CIVILIAN PERSONNEL

I. Introduction

Research Issue

The general focus of this research is absenteeism among Air Force military and civilian personnel. Estimates of the cost of absenteeism in the United States range from $8.5 to $26.4 billion per year (Steers and Rhodes, 1978:391). The cost of apprehending military members who are absent without leave (AWOL) alone is over $250 million per year (GAO, 1977:5). Personnel resources make up the single largest element of the Department of Defense Budget (GAO, 1977:7). Careful management of this resource is essential to the efficient and effective operation of a military organization. Absenteeism in the work force can significantly reduce personnel availability and impair the ability of an organization to carry out its mission.

The specific problem addressed by this research is identification of the forces causing Air Force military and civilian personnel to be absent from work. Numerous studies on absenteeism have been done in both civilian and military organizations. However, studies in military organizations have been limited to AWOLs and desertions and have not addressed other forms of absenteeism among active duty

personnel nor have they addressed absenteeism among civilian employees. This study provides the opportunity to apply organizational behavior theories based on studies in civilian organizations to both military and civilian personnel in an Air Force organization. Many Air Force managers assume absenteeism is strictly a problem within a civilian work force. Absence in the active duty force is given attention only if it takes the form of absence without leave (AWOL). However, inadequate management of other forms of active duty absence can significantly reduce a unit's available manpower. Also, some Air Force units have both military and civilian members and it is necessary to understand how organizational absence policy affects these two groups. A study to compare the absence behavior of active duty and civilian personnel is needed. The results can be used to better understand absence in both groups and can provide the link for applying theories of absence based on civilian organizations to absence behavior in military organizations.

Background

Absenteeism has been studied extensively in both civilian and military organizations over the last several decades. In civilian organizations, researchers have been concerned with a wide range of absence behavior and an equally wide range of variables in an attempt to determine why employees fail to come to work. Researchers in military

organizations, on the other hand, have concentrated almost exclusively on one form of absenteeism -- AWOL. Despite the similarities between the two bodies of research, little in the way of theory building or testing has been exchanged between these two groups. A review of both groups of literature shows that absence can be explained as a function of an individual encountering an absence inducing event and acting according to his levels of attachment to the job and to non-job responsibilities and activities. Chapter 2 is a review of past research in absenteeism and provides support for this concept of job and non-job attachment acting with absence inducing events to determine absence behavior.

Research Objective

By drawing on both the military and civilian absence research it is possible to identify the critical variables explaining absenteeism among both active duty Air Force personnel and civilian federal employees of the Air Force. The objective of this research is to identify these critical variables, to determine how they relate to absence behavior, and to arrange the variables into a model of absence frequency. To accomplish this objective several areas must be investigated. First, the actual frequency, duration and pattern of absences for a sample of military and civilian Air Force personnel must be obtained. Second, the relationship of absence inducing events with absence frequency must be established, based on individuals

reporting the likelihood of them being absent given a set of events. Next, the affect of job and non-job attachment on absence frequency must be determined. Finally, the role of organizational absence policy plays in absence patterns must be investigated. The requirement to investigate these areas leads to five research questions. Each research question is then used to generate specific hypotheses tested in this investigation.

Research Questions and Hypotheses

Research Question #1. What is the frequency, duration, and form of absences taken by military and civilian Air Force personnel? Are they the same for both populations? If not, how do they differ?

Hypothesis #1.1: The means of absence frequency are the same for military and civilian personnel.

Hypothesis #1.2: The means of absence duration are the same for military and civilian personnel.

Hypothesis #1.3: The types of absences taken are the same for military and civilian personnel.

Research Question #2. How do past patterns of absence relate to future absences?

Hypothesis #2.1: Stated intended absence frequency in the future is positively correlated with past absence frequency.

Research Question #3. How does attachment (dedication) to the job relate to absence frequency?

Hypothesis #3.1: Attachment to the job is negatively correlated with absence frequency.

Research Question #4. How does attachment to non-job activities relate to absence frequency?

Hypothesis #4.1: Non-job attachment is positively correlated with absence frequency.

Research Question #5. How does organizational absence policy relate to absence patterns?

Hypothesis #5.1: Organizational absence policy has little or no relationship with the amount of leave taken (frequency).

Hypothesis #5.2: Organizational absence policy is related to the type of absences taken.

Summary

Although a great deal of research has been done in the area of absenteeism, little besides AWOL research has been done in the military organization. The literature on absenteeism provides the basis for identifying the variables critical to absence behavior for both military and civilian personnel in military organizations. This research will focus on identifying these variables and testing their association with absence in both military and civilian populations in a military organization. Chapter 2 provides both a literature review and explains the variables used in this research.

II. Literature Review and Proposed Absence Model

Introduction

This chapter is a review of the civilian and military literature on absenteeism. Absenteeism is measured at least 41 different ways in the civilian literature (Breaugh, 1981:555). In general, however, the term refers to behavior where an employee is not present for work and is measured by either the frequency or duration of the absence (Smulders, 1980:368). Absence behavior is also often further differentiated as "certified" (approved by the company) or "uncertified" (unapproved) (Nicholson, 1976:8). The military has very specific definitions for each type of absence. Certified absences include passes up to 72 hours, approved administrative leaves (i.e., ordinary annual leave, medical leave and emergency leave), and compensatory time-off (Air Force, Dept of, 1979). Uncertified absences are any absences without official approval and are differentiated by duration. An absence of less then 3 days is ordinary AWOL (absent without leave), over 3 days but less then 30 days is aggravated AWOL, and over 30 days is desertion. All three types are considered military crimes under the Uniform Code of Military Justice (Manual for Courts-Martial, 1984:iv).

Three major areas of investigation into absenteeism from the civilian literature will be presented below followed by an overview of studies completed on military absenteeism.

Civilian Studies/Theories

The literature does not contain a unifying theory of absenteeism. The behavior has been described as "a social fact in need of a theory" (Nicholson, 1977:231). Numerous bivariate and several multivariate correlational studies have been conducted in the area. From these studies three models which attempt to specify determinates of absenteeism have emerged (Fitzgibbons and Moch, 1980:350). These are presented by Gibson (1966), Nicholson (1977), and Steers and Rhodes (1978). Each are reviewed in this section.

Gibson's Conceptualization of Absence Behavior. Gibson (1966) proposes a conceptualization of absence behavior based upon the concept of the need-oriented individual and the goal-oriented organization linked together by contract (Gibson, 1966:107). He illustrated the concept with several studies of public school personnel. The studies used absence as the dependent variable and examined both the traits of the worker (i.e., age, sex, and health) and environmental conditions (i.e., size of the organization, social climate, and supervisor characteristics) as independent variables. The studies found, "neither [personal] traits nor environmental factors adequately

explained the data on absences" (Gibson, 1966:108). A conceptualization is thus proposed to explain the findings.

Gibson (1966) bases the model on a number of concepts. The first is the idea of life-space, organizational-space, and work-space. Life-space is the set of time and space events affecting the individual. Organizational-space is the set of events unique to the organization irrespective of the individual. Work-space is where organizational-space and individual life-space overlap.

The work-space is where Gibson states the second concept -- the work contract -- is operative. The work contract is a mutual assent between the individual and the organization for exchange of satisfactions of the individual's needs (based on his belief-value system) for work towards the organization's goals. The work contract can be a formal contract (oral or written agreement) or a quasi-contract (implied agreements) (Gibson, 1966:120-121).

The last two concepts presented by Gibson are "authenticity" and "core identification." Authenticity is the attitude of faithfulness to the intent and terms of the contract (Gibson, 1966:131). Core identification is an individual's combined valences toward objects in and outside the work-space. Gibson (1966) argues if core identification toward objects in the work-space is weak or negative it will be easier for the person to legitimize his absence to himself (Gibson, 1966:1).

Gibson summarizes employee absence behavior as a function of four factors: the employee's perception of management's authenticity, the employee's work identification, the size of the organization, and the formality (certification) of the absence. (Gibson, 1966:132-133).

Nigel Nicholson critiques Gibson's theory for not bridging the "gulf between the high level of abstraction in [the] conceptualization and the methods and data related to [it]" (Nicholson, 1977:234). He proposes his own model and associated methodology in an attempt to bridge that gulf. Nicholson's model is examined next.

Nicholson's A-B Continuum Model of Attendance Motivation. Nicholson (1977) states, "a radically different orientation is needed [for the study of absenteeism]" (Nicholson, 1977:232). Both the methodology and the theoretical basis (or lack thereof) of prior research are criticized. The previous approaches are categorized as follows:

> 1. Pain-Avoidance Models, in which absence is portrayed as a flight from negatively valued aspects of work experience;
>
> 2. Adjustment and Maladjustment Models, in which absence is viewed as an outcome of organizational socialization and other adaptive processes to job demands; and
>
> 3. Decision Models, in which absence is described as a rational decision or choice process directed toward the attainment of valued goals. [Gibson belongs to this category] (Nicholson, 1977:232).

Nicholson (1977) goes on to point out, "Although there is much of interest in these writings, there is none that adequately encompasses the complexities of the behavior" (Nicholson, 1977:232). An alternate model is then presented to redress the proposed problems with methodology and theory.

The Nicholson model builds on two fundamental ideas: the "A-B Continuum" and attendance motivation through "attachment to work." The A-B Continuum is a relative ranking of events that might cause an individual to be absent from work. Nicholson argues such events are essential for an absence to take place and states, "The primary assumption of this theory is that attendance is 'normal' behavior in most forms of employment" (Nicholson, 1977:242). Therefore, one should search for those factors that disturb the regularity of attendance. These factors (called absence-inducing events) are placed on a continuum, from primarily unavoidable absences toward the 'A' pole of the continuum to primarily avoidable absences toward the 'B' pole. What makes this idea unique in absence research is that these forces will vary between persons and settings. Each person will, ideally, have his or her own A-B Continuum indicating how avoidable (or unavoidable) a given absence is, given the placement of the absence-inducing event on the continuum (Nicholson, 1977:242-243).

The moderating force within the model is the individual's "attachment to work." Nicholson (1977) describes this as a type of "inertia" for people to "attend work regularly without any conscious decision-making until proximal events impel absence or force the person to make a decision about it" (Nicholson 1977:246). Four major sets of influences are proposed that determine the degree to which the employee is dependent upon the regularities of organizational life.

The four are:

1. Personality Traits, associated with or indexed by the contextual factors of the characteristics of the person.

2. Orientation to Work, underlain by extra-mural and biographical background factors.

3. Work Involvement, related to the design of work and job setting.

4. Employment Relationship, shaped by the design and impact of organizational control systems (Nicholson, 1977:246-247).

Lastly, with the exception of highly transient and unpredictable events (i.e., abnormal weather), the all-important bridge between the idea of attachment and absence behavior is the notion of susceptibility to potentially absence-inducing events. Nicholson proposes a highly attached employee (strong attendance motivation), is relatively unsusceptible to influence by the proximal cause of absence. This means that his or her resistance to absence-inducing events is powerful and will only be

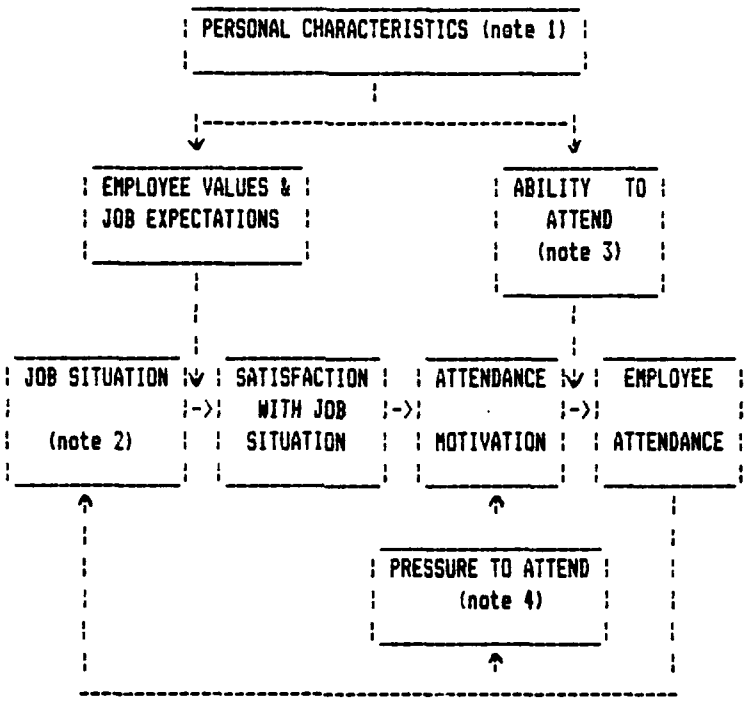
overridden by events well towards the 'A' end of the A-B Continuum. The opposite is proposed for the low attached employee, with low attendance motivation. He or she is susceptible to absence-inducing events at more points on the continuum (Nicholson, 1977:249-250). Steers and Rhodes (1978) suggested a more detailed and complex association of factors influencing absence behavior.

The Steers and Rhodes Process Model of Employee Attendance. Steers and Rhodes (1978) presented a model of major influences on employee attendance based on a review of 104 empirical studies (See figure 1).

Like Nicholson (1977), Steers and Rhodes (1978) begin by critiquing the studies done before. Two criticisms are made. First, "the current literature largely assumes that job dissatisfaction represents the primary cause of absenteeism. Unfortunately, however, existing research consistently finds only weak support for this hypothesis" (Steers and Rhodes, 1978:392).

Secondly, the implicit assumption, in most of the previous work on absenteeism, that employees are free to choose whether or not to come to work is challenged. Instead, it is argued "there appear to be a variety of situational constraints (e.g., poor health, family responsibilities, transportation problems) that can interfere with free choice in an attendance decision" (Steers and Rhodes, 1978:392). Steers and Rhodes (1978)

then present the process model in figure 1 in order to examine in a systematic and comprehensive fashion the various influences on employee attendance behavior (Steers and Rhodes, 1978:392).



Note 1: Includes education, tenure, age, sex, and family size.

Note 2: Includes job scope, job level, role stress, work group size, leader style, co-worker relations, and opportunity for advancement.

Note 3: Includes illness and accidents, family responsibilities, and transportation problems.

Note 4: Includes economic/market conditions, incentive/reward/ [punitive] systems, work group norms, personal work ethic, and organizational commitment.

Figure 1. Steers and Rhodes (1978:393) Employee Attendance Model

"A fundamental premise of the model suggested here is that an employee's motivation to come to work represents the primary influence on actual attendance, assuming one has the ability to attend" (Steers and Rhodes, 1978:393). The other interrelationships in the model are summarized as follows:

> The nature of the job situation interacts with employee values and expectations to determine satisfaction with the job situation. This satisfaction combines in an additive fashion with various pressures to attend to determine an employee's level of attendance motivation. Moreover, it is noted that the relationship between attendance motivation and actual attendance is influenced by one's ability to attend. . . . Finally, the model notes that feedback from the results of actual attendance behavior can often influence subsequent perceptions of the job situation, pressures to attend, and attendance motivation" (Steers and Rhodes, 1978:401).

All three models reviewed above use some aspect of job attachment in their theories of absence. Gibson calls it work identification. Nicholson uses "attachment to work" as the major moderating force in the A-B continuum. Steers and Rhodes combine job satisfaction and pressures to attend to derive attendance motivation which is closely related to job attachment. The review of studies of absence in the military below also shows the importance of attachment to the job and introduce the element of attachment to non-job activities.

Military Studies/Theories

The services have conducted or sponsored a number of studies on military absenteeism. However, all the studies examined AWOL behavior only and do not address certified absences (i.e., leaves, passes and illness). Two thorough reviews of the military literature since World War II can be found in Angle (1978), and Sublett and Greenfield (1978).

Three studies are representative of the more recent work in this area: McCubbin, et al. (1971), Hartnagel (1974), and Littlepage and Rappoport (1977). McCubbin, et al. (1971) examined individuals' situational factors and leadership in Army units as factors in AWOLs. Hartnagel (1974) sees AWOL as a mechanism for the individual to escape from the job environment. Littlepage and Rappoport (1977) explains AWOLs as a function of personal factors, organizational factors, and problem events. A review of each follows.

McCubbin, et al.. McCubbin, et al. (1971) compared Army units with high AWOL rates (over 30 AWOL/1000 assigned/quarter) against units with low AWOL rates (less then 30 AWOLs). It was found that the differences could be classified into three major categories: the individual soldier, the situation he is in, and the leadership under which he serves. The study concludes that AWOL is the result of the interaction of these three primary factors.

This study examined 31 personal characteristics of the soldiers in each unit (e.g., age, education, time in service, family status, grade, etc.). The situational factors studied were:

Helpfulness of problem-solving agencies,
Opportunity for promotion,
Unit morale,
Personnel turbulence,
Social situation,
Work situation,
Recreational situation, and
Peer influence.

The leadership factors were:

Communications,
Leader/subordinate relationship,
Awareness,
Credibility,
Attitude,
Leader's experience,
Demonstrated concern,
Involvement in problem solving processes, and
Unit leadership.

The authors concluded the typical AWOL offender is a high school drop-out with a civilian history of arrests and convictions; personnel in low AWOL units feel their work is interesting and important; leaders in low AWOL units are person-oriented, problem-solvers (high AWOL units showed opposite results in both areas); and personnel turbulence and the lack of meaningful work are the two main situational variables affecting AWOL. (McCubbin, et al., 1971:ii). Hartnagel (1974), presented next, also examined personal characteristics and leadership in military units to explain AWOLs.

Hartnagel's Study of AWOL Offenders. Hartnagel (1974) presents another empirical study of AWOL and develops a simple model to illustrate the effect of AWOLs on future AWOL behavior. The author viewed AWOL as a form of deviant behavior and examined the behavior from a criminological view point. The study consisted of interviews and data collection on 244 prisoners in an army stockade who had been charged with AWOL. Three conclusions were drawn from the study.

First, it was sometimes argued at the time of the study, that going AWOL represented a form of protest against the Vietnam War and was motivated by certain moral and/or political convictions. The study dismissed this concept by demonstrating the profile of the "typical" AWOL -- typified by low educational level (80% high school drop-outs) and below average scores on the army's general intelligence tests -- was contrary to the profile of the politically active anti-war protester (Hartnagel, 1977:207-211).

Second, the author conceptualized a sizable percentage of the AWOLs studied as a form of innovative deviance. Innovative deviance is "a rejection of the institutionalized means to obtain a goal and the substitution of illegitimate means to reach that same goal under conditions where legitimate means are not available to the actor" (Hartnagel, 1974:207). Hartnagel (1974)

argues that, with low educational backgrounds and low intelligence levels, many AWOL offenders may not be able to cope with the complex, bureaucratic world of the Army. Faced with some family problem and rebuffed in an attempt to obtain emergency leave, they may be unable to search out other channels for obtaining what they desire. Going AWOL for them may be the only alternative. This showed the importance of attachment to non-job related responsibilities or activities in this form of absence behavior. (Hartnagel, 1974:212).

Finally, the study concluded that repetitive AWOL may represent, for many soldiers, a reaction to the military consequences of an initial AWOL (Hartnagel, 1974:2). Hartnagel (1974) calls this a form of "secondary deviation" where official reaction to the first AWOL sets in motion a "self-fulfilling prophecy mechanism." "The soldier may react to these consequences by engaging in additional AWOLs in order to escape from [the consequences of the first AWOL], both temporarily and ultimately, through obtaining an early discharge." (Hartnagel, 1974:2,217). Figure 2, depicts how this process might typically operate.

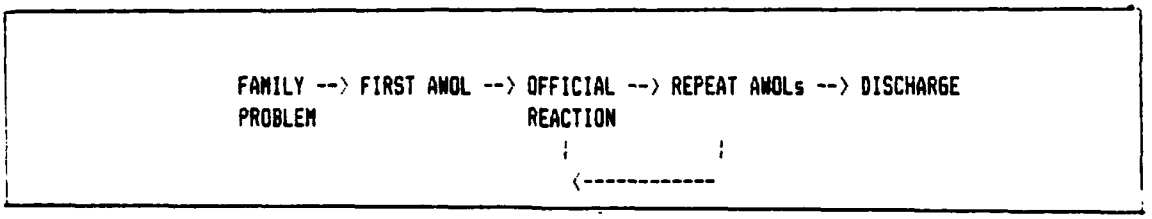


Figure 2. Secondary Deviance

This study lends support to the idea that absence inducing events (e.g., family problems) and reduction of job attachment (through the secondary deviance process) are important factors in military absences.

Littlepage and Rappoport's Model of AWOL Decisions. The final model reviewed here is proposed by Littlepage and Rappoport (1977). This model addresses factors thought to affect military AWOL decisions. The model is centered around three classes of independent variables affecting AWOL decisions: characteristics of units, the individual's history of AWOL, and problem events frequently encountered by soldiers (Littlepage and Rappoport, 1977:177).

The empirical study, used to develop the model, asked two groups of soldiers (subject and control) to indicate their chances of going AWOL from a set of 16 hypothetical army units. Each unit was described using five unit characteristics: job satisfaction, unit (social) atmosphere, leader consideration, leader ability, and problem solving help. In addition, half of each group received statements describing specific problem events (e.g., having a leave request denied). The subject group was made up of prisoners awaiting trial on AWOL charges and the control group was made up of soldiers with no known history of AWOL (Littlepage and Rappoport, 1977:119).

Analysis of the correlation between unit characteristics and AWOL decisions provided two results.

First, the more negative the characteristic, the higher the rated probability of AWOL (Littlepage and Rappoport, 1977:122). Second, "problem solving help" was the unit characteristic most closely related to AWOL decisions followed by: leader consideration, job satisfaction, unit atmosphere, and leader ability (Littlepage and Rappoport, 1977:121-122).

"Large differences [were observed] between the responses of the AWOL and control subjects, suggest[ing] dispositional properties may be important factors predisposing persons to AWOL behavior" (Littlepage and Rappoport, 1977:122). The AWOL group consistently responded with a greater likelihood to go AWOL in each of the hypothetical situations.

Littlepage and Rappoport contend that "findings from this study support a model of AWOL behavior including three categories of variables: personal factors, organizational factors, and problem events" (Littlepage and Rappoport, 1977:124). Problem events can also be seen as possible absence inducing events.

The concluding section of this chapter is a discussion of how the concepts of the six studies presented here can contribute to a general model of absenteeism among both active duty and civilian personnel in the military.

Conclusions

The above review of the absenteeism literature provides a basic framework from which to develop the requirements of a general model of absence behavior in military organizations.

In comparing the different results from the studies with civilian and military subjects, it quickly becomes evident the civilian models attempt to account for all forms of absence while the military models do not. Gibson (1967) makes no distinction between the type of absence. Nicholson (1977) classified absences only by their location on the A-B continuum without regard to organizational classification. Steers and Rhodes (1978) measure attendance implying absence is simply the complement behavior. All of the military studies, however, address only one category of absence -- AWOL. AWOL is a unique absence behavior, with severe penalties for the individual, but it constitutes only one of many kinds of absences among active duty military personnel. A comprehensive model of military absenteeism should be able to explain other forms of absence for both active duty and civilian personnel.

In the review of the literature just presented it appears that absence is determined in large part by three major forces: presence of potentially absence inducing events, job attachment, and attachment to non-job responsibilities and interests.

Nicholson (1977) formally presented the concept of potentially absence inducing events as the centerpiece of the A-B continuum, but the other authors also allude to the idea. The Steers and Rhodes (1978) variable "ability to attend" is made up of potentially absence inducing events (illness, accidents, family responsibilities, and transportation problems). On the military side, Hartnagel (1974) repeatly refers to family problems as a leading cause of initial AWOLs. Littlepage and Rappoport also include "problem events" as one of their three categories of AWOL variables. Additionally, McCubbin, et al. (1971) accounts for this variable in both their "individual soldier" and "specific situation" categories of differences between high and low AWOL units. Assuming Nicholson's proposition is correct that attendance is the norm, the presence of absence inducing events to disrupt normal attendance is an essential element of a model of absenteeism.

Job attachment is also a common thread in much of the reviewed literature. Gibson (1966) presents work identification as one of four factors affecting absence. He describes work identification as the work-space portion of core identification. Core identification is the combined valences the individual has toward the objects inside and outside the work-space. Similarly, Nicholson (1977) describes attachment to work as the inertia keeping

people attending work regularly without any conscious decision-making. In addition, job satisfaction and a unit's atmosphere are among the top unit characteristics identified by Littlepage and Rappoport as significant in AWOL predication. Both are related closely to job attachment. Job attachment, therefore, also appears to be an important factor in developing a comprehensive absence model.

Finally, job attachment alone does not fully explain how an individual will react to a potentially absence inducing event. Job attachment can draw the individual toward attending work, but the individual's attachment to non-job responsibilities and activities may be simultaneously pulling the individual toward absence. Gibson (1966) includes this type of relationship within his explanation of core identification. In Gibson's theory, non-job attachment is the valences to objects outside the workspace. A weakness in Nicholson's model is that it does not include this variable. Non-job attachment might be able to explain, for example, why a single parent with young children at home would take more time off then another individual with equal job attachment but no family responsibilities. The military studies do not take non-job attachment into account. However, family and financial problems are often ranked as the most common reason given by military members for going AWOL [Angle, 1978].

In summary, a model of absence in a military organization should explain absence in terms of: the individual's likelihood of encountering absence inducing events, the level of the individual's attachment to the job, and the level of the individual's attachment to non-job responsibilities and activities. Such a model will now be presented.

Proposed Absence Model

The proposed model is:

$$ABS = B1 + B2*AIE - B3*JA + B4*NJA + B5*CIV + E$$

ABS:	Absence Frequency
B1,2...5:	Beta Levels
AIE:	Absence Inducing Events
JA:	Job Attachment
NJA:	Non-Job Attachment
CIV:	Military/Civilian Dummy Variable
E:	Error

This model describes absence frequency for any given individual as a function of his or her attachment to the job (dedication to duty), the individual's attachment to non-job activities or concerns, and pressures brought upon the individual to be absent (or likelihood of encountering absence inducing events). The model assumes attending work is the norm and some absence inducing event must be encountered for the individual to be absent (based on Nicholson, 1977).

Absence Frequency (ABS). Absence frequency is the number of times an individual is absent for a full day

or more during the period of the study.

Absence Inducing Events (AIE). This variable measures the likelihood that absence inducing events will occur in an individual's life. An absence inducing event is anything which might cause an individual to be absent from work. The individual's personal characteristics and life situations are used to quantify this variable. Personal characteristics include: family size, married/single, individual's health level, health level of the family, whether he or she has an outside job/business or hobby, recreational opportunities, and home ownership. Each of these can cause absence inducing events to which an individual must react.

Job Attachment (JA) and Non-Job Attachment (NJA). The likelihood of an absence inducing event causing an absence is determined by these two variables. If the event is associated with a non-work concern or activity with which the individual is highly attached it is more likely to cause an absence than one in which he is not. Conversely, if the individual is highly attached to work, an event of great magnitude will be required to cause an absence.

Dummy Variable (Military/Civilian) (CIV). This is a dummy variable which identifies the military (CIV=0) and civilian (CIV=1) subsets of the survey sample for analysis purposes.

Summary

Six studies/models of absenteeism from both the civilian and military literature have been reviewed. From this review three major factors affecting absenteeism were identified: absence inducing events, job attachment, and non-job attachment. These three variables have been combined to form a model with absence frequency as the dependent variable. The next chapter will address the methodology used to test the model.

III. Methodology

Overview

The approach to solving the research questions and testing the hypotheses in chapter 1 was a five step process. First, a model of absenteeism was developed drawing from the existing literature. Second, a survey instrument was developed to measure the dependent and independent variables in the model. Third, a test population was selected and the survey was administered. Fourth, statistical procedures were performed to describe the data collected during the survey and to determine if the model adequately explained absence behavior. Finally, the model was adjusted where the theoretical framework indicated this was appropriate and a multiple linear regression was performed to test the final model.

Survey Development

A survey is the most appropriate method for collecting the data necessary to test the model proposed in chapter 2. It provides an accurate way to collect data on the dependent variable and is the only method available for measuring the independent variables.

Dependent Variable. Traditionally, data on frequency and duration of absence is collected from organizational records rather then by a survey instrument. However, for the active duty military personnel in the study, complete

absence records are not kept. Leave records accounted for only ordinary leaves. Nonchargable "time off" was not tracked. If organization records were used for the absence data base, nonchargable absences would not have been captured. It, therefore, became necessary to rely on an individual's own report of attendance and absence. There was a concern about the accuracy of individuals' report of their own absences. This concern had to be counter-balanced against the inherent incomplete nature of organizational records. The more comprehensive self-reported absence technique was chosen.

Although more complete records are kept on the attendance of federal civilian employees, records on nonchargable absences are also not available. An additional consideration was that in order to accurately compare the military and civilian absence rates the data had to be collected in a similar manner. In view of this situation, self-reported data was also relied upon for the civilian subject group. For both populations an absence event was counted when the individual was not at work for a full day or more. Civilian personnel absences include full day annual leaves, sick leaves, and leaves of absence, unauthorized absence, and nonchargable "free time" given by the individual's supervisor. Military absences include administrative leaves, passes/liberties, medical leaves, "time-off," and AWOLs.

Independent Variables. Constructing a valid survey instrument to measure the independent variables was the most significant hurdle of this research.

Job Attachment. Measuring job attachment by survey is a well established procedure in the literature and valid instruments are available. Part of an instrument developed by the faculty of the Air Force Institute of Technology, Department of Organizational Sciences was used to develop questions to measure this variable. A combination of six job satisfaction questions and 15 organizational commitment questions were adapted from the AFIT/LSB survey. However, measurement of absence inducing events and non-job attachment required creation of new questions.

Absence Inducing Events. No established survey instrument existed for measuring the likelihood an individual will encounter a potentially absence inducing event. For the purpose of this research, an absence inducing event was quantified by asking respondents to estimate the likelihood of them taking an absence during the month following the survey for each of the following reasons:

I get too sick to come to work,

I must stay home to care for a member of my family,

I want to take part in an activity with my family or friends,

I need to attend classes or work on school work,

I want to participate in a community or church activity,

I need to take care of some personal business,

I want to take part in sports, recreation or a hobby, and

I want to get away from my job for a while.

Each of the above factors can possibly cause an absence inducing event. The respondents indicated the likelihood of each causing an absence on a six point scale ranging from extremely unlikely to extremely likely.

Non-Job Attachment. Development of questions to assess an individual's attachment to non-job responsibilities and events required creation of two new sets of survey questions. The first set of nine questions (NJCOM1 - NJCOM9) measured the individual's commitment to non-job activities compared to commitment to the job. For example, "The Major satisfactions in my life come from OUTSIDE my job" (respond on a six point scale from "strongly agree" to "strongly disagree"). The second set of six questions (NJINT1 - NJINT6) asked the respondants to indicate the importance each placed in the following non-job interests:

Community or church activities,

A second job outside the Air Force,

Activities with family or friends,

Hobbies, sports, or recreation, and

Outside education.

Survey Administration

The security police squadron at a midwestern Air Force base was selected as the survey population. This organization was chosen because it's membership is composed of both military and civil service employees. Of the 231 members of the squadron, 135 are military (58%) and 97 are civilians (42%). Both military and civilians are assigned to each of the 27 workcenters in the squadron with both subpopulations performing about the same tasks.

All members of the squadron were given the opportunity to take part in the survey. Surveys were distributed through the workcenter supervisors. The completed surveys were returned in sealed envelopes to a squadron project officer who in turn forwarded them unopened to the author.

Statistical Analysis

The statistical analysis of the data obtained from the survey was done in six phases.

First, a comparison was done between known characteristics of the full population and the corresponding characteristics of the group which responded to the survey. This was accomplished to ensure that the sample data was not skewed toward any subpopulation within the overall population being studied.

Second, comparisons were made of the types of absences taken by military and civilian respondents and by personnel on the different shifts.

Third, the validity of the non-job commitment and non-job interest constructs was examined through correlation and factor analysis. Also, the reliability of the job commitment, job satisfaction, and absence inducing events constructs was examined with reliability analysis.

Fourth, t-tests were performed to see if there existed a difference between the means of the absence variables based on military versus civilian status and based on gender. An analysis of variance was also performed on the absence frequency variables on the basis of shift worked.

Fifth, pearson correlation analysis was conducted on all the independent variables with each dependent absence variable. Next, the model, proposed in chapters 1 and 2, was modified based on the results of the analysis described above. Finally, a multiple linear regression was performed on the modified model.

Summary

This research measured absence as a dependent variable using a number of independent variables which together form a model of absence within military organizations. A survey of personnel assigned to a security police squadron at a CONUS Air Force Base was used to collect data. The results were analyzed with statistical procedures, and conclusions

were made from the results. The results of the survey and the analysis are the topics of chapters 4 and 5.

IV. Results

This chapter is a summary of the results of the six phases of the statistical analysis outlined in chapter 3.

Comparison of Population and Sample Characteristics

In order to verify that the sample responses were representative of the overall population in the unit under study, known population characteristics were compared with the corresponding sample characteristics. Tables 1 through 5 show the proportion of selected characteristics observed in the overall population and in the sample population. Table 1 indicates a slightly higher proportion of military personnel responded then did civilians. The grade spread in the sample, shown in table 2, was closely aligned with the population. This was also the case for shift in table 4. On the other hand, table 3 shows a slightly higher response rate from females then males, but not markedly so. As shown in table 5, a slightly higher proportion of the staff personnel responded to the survey then did personnel in operations. However, in both cases there was a shift of no more then 4% from the population proportions. In summary, all the tables tend to confirm that the survey sample was representative of the overall population.

Table 1

Comparison of the Proportion of Military and Civilian Members

SERVICE CATEGORY	POPULATION		SAMPLE	
MILITARY	135	58%	77	64%
CIVILIAN	97	42%	44	36%
TOTAL	232	100%	121	100%

Table 2

Comparison of Grade Spread

GRADE	POPULATION		SAMPLE	
GS1-AB	4	2%	0	**
GS2-AMN	10	4%	6	5%
GS3-A1C	52	23%	30	24%
GS4-SRA/SGT	50	22%	24	20%
GS4-SSGT	81	35%	35	29%
GS6-TSGT	10	4%	7	6%
GS7-MSGT	9	4%	7	6%
GS8-SMSGT	1	**	1	1%
GS9-CMSGT	9	4%	6	5%
GS10+	5	2%	5	4%
TOTAL	231	100%	121	100%

Table 3

Comparison of the Proportion of Males and Females

GENDER	POPULATION		SAMPLE	
MALE	192	83%	97	80%
FEMALE	39	17%	24	20%
TOTAL	231	100%	121	100%

Table 4

Comparison of the Distribution of Personnel Between Shifts

SHIFT				
DAY SHIFT	149	65%	82	68%
SWING SHIFT	47	20%	22	18%
MID SHIFT	35	15%	17	14%
TOTAL	231	100%	121	100%

Table 5

Comparison of the Proportion of Operations and Staff Personnel

WORKCENTER				
OPERATIONS	189	82%	94	78%
STAFF	42	18%	27	22%
TOTAL	231	100%	121	100%

Comparison of Absence Patterns in Sample Subpopulations

Absence Patterns of Military and Civilian Respondents. A series of t-tests were performed to assess the relationship of absence behavior patterns between military and civilian respondents. T-tests were performed on the frequency and duration of absences for military and civilian respondents in each of five absence categories: sick leave, regular leave, emergency leave, nonchargable days off, and total absences. The results are presented in tables 6 through 10.

Table 6

Sick Leave T-Test

	N	MEAN	SD	SE	F	T	DOF	PROB
Sick Leave Frequency								
Military	77	0.20	0.43	0.05				
Civilian	44	1.70	1.96	0.30	20.74	-5.04	45,38	0.00
Sick Leave Duration								
Military	77	0.34	0.77	0.09				
Civilian	44	2.02	2.89	0.44	14.03	-3.79	46,53	0.00

Table 7

Regular Leave T-Test

	N	MEAN	SD	SE	F	T	DOF	PROB
Regular Leave Frequency								
Military	77	0.97	0.97	0.11				
Civilian	44	1.73	1.63	0.25	2.82	-2.79	60,79	0.01
Regular Leave Duration								
Military	77	4.69	5.72	0.65				
Civilian	44	2.52	2.47	0.37	5.34	2.89	112,6	0.01

Table 8

Emergency Leave T-Test

	N	MEAN	SD	SE	F	T	DOF	PROB
Emergency Leave Frequency								
Military	77	0.03	0.16	0.02				
Civilian	44	0.11	0.32	0.05	4.02	-1.69	55,46	0.10
Emergency Leave Duration								
Military	77	0.03	0.16	0.02				
Civilian	44	0.16	0.53	0.08	10.78	-1.64	47,60	0.11

Table 9

Nonchargable Time-off T-Test

	N	MEAN	SD	SE	F	T	DOF	PROB
Nonchargable Time-off Frequency								
Military	77	1.75	1.82	0.21				
Civilian	44	0.27	0.85	0.13	4.61	6.09	115,29	0.00
Nonchargable Time-off Duration								
Military	77	1.96	2.17	0.25				
Civilian	44	0.25	0.78	0.12	7.69	6.25	104,92	0.00

Table 10

Total Absence T-Test

	N	MEAN	SD	SE	F	T	DOF	PROB
Total Absence Frequency								
Military	77	2.95	2.21	0.25				
Civilian	44	3.82	3.25	0.49	2.17	-1.58	66,01	0.12
Total Absence Duration								
Military	77	7.01	6.52	0.74				
Civilian	44	4.95	4.28	0.65	2.32	2.09	116,64	0.04

The null hypothesis is that the means of all the measures of absence are the same for both military and civilian respondents. This was rejected in all cases except for frequency and duration of emergency leave and frequency of total absence. It is further noted that military respondents reported higher frequency and duration of nonchargable time off while civilian respondents reported more sick leaves both in frequency and duration.

For regular leaves, civilian respondents reported higher frequency, but military members reported a larger number of regular leave days (duration).

Further, the average duration of each category of absence differed between absence category and between military and civilian respondents (see table 11). The most notable difference in average absence duration is regular leave with the military respondents reporting nearly 5 days/leave while the civilian respondents reported only 1 1/2 days average.

Table 11

Average Absence Duration for
Military and Civilian Respondents

Absence Category	Average Duration
Sick Leave	
Military	1.73 days
Civilian	1.19 days
Regular Leave	
Military	4.81 days
Civilian	1.46 days
Emergency Leave	
Military	1.00 days
Civilian	1.40 days
Nonchargable Time off	
Military	1.12 days
Civilian	0.92 days

Comparison of Absence Patterns Between Work Shifts.

The absence taking pattern of the three shifts was also examined. The results are presented in table 12.

Table 12

Proportion of Absence Category by Shift

SHIFT	SICK	REGULAR	EMERG.	NONCHARG.	TOTAL
DAYS	0.879	1.439	0.049	0.927	3.293
n=82	(27%)	(44%)	(1%)	(28%)	(100%)
SWINGS	0.455	1.091	0.136	1.364	3.046
n=22	(15%)	(36%)	(4%)	(45%)	(100%)
MID SHIFT	0.471	0.529	0.00	2.412	3.412
n=17	(14%)	(15%)	(0%)	(71%)	(100%)

In addition, a difference of means test was conducted to determine if the means for each category of absence were equal across shifts. The results are shown in table 13.

Table 13

Difference of Means Test

Ho: Mean(days) = Mean(swings) = Mean(mids)
Ha: At least two of the means differ.

Rejection Region: F > 3.07 based on 2 and 118 degrees of freedom

	SICK	REGULAR	EMERG.	NONCHARG.	TOTAL
F Value	1.135	3.819	1.838	6.008	0.104
Reject?	No	Yes	No	Yes	No

In summary, the tables show that the average total number of absences are the same between the three shifts, however the form of the absences differs. Personnel on day and swing shifts report a higher proportion of regular leave than do personnel on mid shift. Conversely, mid shift personnel report that nearly 3/4ths of their absences are in the nonchargable category. This is significantly higher then the other two shifts.

Survey Instrument Validity.

The validity of the constructs measured by the survey instrument was evaluated in a four step process. First, pearson correlations were computed among all the independent variables to identify any abnormal patterns. Second, factor analysis was performed on the non-job commitment and non-job interest constructs. Third, the non-job commitment and non-job interest constructs were refined based on insights gained from the pearson correlation and factor analysis. Finally, validity of the refined constructs was verified with reliability analysis.

Pearson Correlations Analysis. Initially, the non-job attachment construct in the absence model was composed of an average sum of all the non-job commitment and non-job interest survey questions. The pearson correlations and, later, factor analysis cast doubt on the utility of this approach. The pearson correlations were accomplished in three stages. First, the nine non-job commitment variables

were compared to one another. Second, the six non-job interest variables were compared to one another and third, all 15 variables were compared.

Non-Job Commitment Variables. Eight of the nine non-job commitment variables fall naturally into three groups. The first group is two questions that address commitment to community and church (NJCOM5 and NJCOM8) and they have relatively high correlations with one another (r=.34, p=.000). The second group asks about commitment to family and friends (NJCOM6 and NJCOM7) and has an r of .53 and a p of .000. The third group of questions ask the respondent to compare commitment to the job and commitment outside the job directly (NJCOM1, NJCOM2, NJCOM3, and NJCOM9). The intent is to ascertain their central life interest. These variables are significantly correlated (r=.32 to .65, p values = .000 for all). Commitment to hobbies, sports and recreation (NJCOM4), did not fall naturally in any of the above categories.

Non-Job Interest Variables. Two of the six non-job interest questions (NJINT1 and NJINT4) asked about the respondents' interest in community and church activities. The responses to these two questions were significantly correlated (r = .872, p = .000). The other four non-job interest variables asked the respondents interest level with a second job (NJINT2), family and friends (NJINT3), recreation (NJINT5) and school (NJINT6).

Second Job (NJINT2) was significantly correlated only with school (NJINT6, r=.21, p=.01). Family and friends (NJINT3) was correlated with community/church (r=.24, p=.004), recreation (r=.41, p=.000), and school (r=.15, p=.04). Recreation (NJINT5) was correlated with family (r=.40, p=.000) and both community/church interest variables (r=.31 and .30, p=.000 for both). School was correlated with job (r=.21), family/friends (r=.15), and the community/church variables (r=.22, p=.17). There appears to be a connection between the two community/church variables, between the second job and school variables, and between the family/friends and recreation variables.

All Non-Job Variables. Comparisons of correlations between all the non-job commitment and non-job interest questions continued to show the three-group pattern observed earlier with the non-job commitment variables. The central life interest group (NJCOM1, NJCOM2, NJCOM3, and NJCOM9) continued to have the highest intercorrelations. The community and church variables (NJCOM8, NJINT1, and NJINT4) also grouped together. Attachment to family and friends (NJCOM6 and NJCOM7) also showed close association. To further investigate the association between these groups of variables, factor analysis on the full set of variables was performed.

Factor Analysis. As in the pearson correlation analysis, the factor analysis was accomplished first on the

non-job commitment questions, then on the non-job interest questions, and finally on the full set of 15 questions.

Non-Job Commitment Questions. Factor analysis using VARIMAX and three factors generally supports the three variable arrangement mentioned above. NJCOM1(CLI), NJCOM3(CLI) and NJCOM4(REC) all loaded most heavily on factor 1, representing central life interest. However, NJCOM9(CLI) loaded heavier on factor 2, representing attachment to family and friends, along with NJCOM6(HOME) and NJCOM7(HOME). All three community and church attachment variables (NJCOM2, NJCOM5, NJCOM8) loaded heaviest on factor 3.

Non-Job Interest Questions. Factor analysis of these variables using three factors also supported the groupings suggested above. NJINT1 and NJINT4 loaded on FACTOR 1. NJINT3 and NJINT5 loaded on FACTOR 2 and NJINT2 and NJINT6 loaded on FACTOR 3.

Non-Job Commitment and Non-Job Interest Questions Together. Factor analysis on all 15 non-job variables did not produce any clear patterns when calculated with two factors, but at three factors a pattern did emerge. Three sets of variables loaded together. Group 1 was made up of the central life interest variables (NJCOM1, NJCOM2, and NJCOM3). Group 2 was three of the community and church variables (NJCOM8 and NJINT1 and NJINT4). Group 3 was the family and friends variables (NJCOM6 and NJCOM7).

Summary of Correlation and Factor Analysis Results. Both the pearson correlation and factor analysis indicated that it would be more appropriate to refine the non-job attachment construct into four smaller variables rather then to use a summed average of all the non-job commitment and non-job interest variables together. After making this decision it became necessary to verify the reliability of the new measures with reliability analysis along with the other construct variables.

Reliability Analysis

Reliability analysis is used to test the accuracy of a summed or weighted summed score in estimating the the true score in a population of objects to be measured (Nie et al., 1975). It was used here to verify the reliability of the construct variables composed of a series of survey questions.

Reliability of the Non-Job Attachment Constructs. Cronbach's alpha was computed on the four constructs developed after the pearson correlation and factor analysis described above. These were central life interest (CLI), attachment to community and church (CC), attachment to family and friends (HOME), and atachment to recreation (REC). The analysis provided results in table 14.

Table 14

Cronbach's Alpha Reliability
on Non-Job Constructs

Construct	Variables Included	Alpha
CLI	NJCOM1, NJCOM2, NJCOM3	.79
CC	NJCOM8, NJINT1, NJINT4	.89
HOME	NJCOM6, NJCOM7	.69
REC	NJCOM4, NJINT5	.44

Table 15

Cronbach's Reliability Alpha for Job Attachment
and Absence Inducing Events Constructs

Construct	Variables Included	Alpha
Job Satisfaction (JSATC)	JSAT1 to JSAT6	.74
Organizational Commitment (ORGAC)	ORGA1 to ORGA15	.89
Absence Inducting Events (AIE)	ROFF1 to ROFF8	.71

The alpha level for CLI, CC, and HOME indicate a strong reliability within these constructs. However, the alpha of .44 for the recreation construct is less convincing and therefore the utility of using this construct is in doubt.

Reliability of Job Attachment and Absence Inducing Events Constructs. Reliability analysis was also performed on the other construct variables in the model to confirm their reliability as constructs. Table 15 shows the results.

The alpha levels of all three variables show a high degree of reliability.

Correlation Analysis of Independent and Absence Variables.

Correlation Procedure. The last step in the statistical analysis before refining and testing the absence model was pearson correlation analysis between each of the absence frequency variables and all the independent variables. The variables which were significant with each of the absence frequency variables at an alpha level of .05 are shown in tables 16 through 21.

Table 16

Correlations with Frequency of Sick Leave (SICKT)

SEX	r= .48	p=.000
MILCIV	r= .51	p=.000
NJINTS	r=-.20	p=.015
REGT	r= .43	p=.000
NONCHT	r=-.17	p=.033
ORGA1S	r= .17	p=.030
ROOF1	r= .52	P=.000
ROFF2	r= .20	p=.015
ROFF4	r= .20	p=.014
ROFF7	r= .18	p=.022

Table 17

Correlations with Nonchargable Time Off Frequency (NONCHT)

MILCIV	r=-.42	p=.000
SEX	r=-.15	p=.050
AGE	r=-.40	p=.000
MSTAT	r= .22	p=.007
GRADE	r=-.29	p=.001
TIS	r=-.33	p=.000
SHIFT	r= .29	p=.000
ORGA1	r=-.17	p=.031
ORGA2	r=-.19	p=.021
ORGA5	r=-.33	p=.000
ORGA11	r=-.19	p=.020
NJCOM1	r= .28	p=.001
NJCOM2	r= .21	p=.011
NJCOM3	r= .21	p=.010
NJCOM6	r=-.15	p=.050
NJINT5	r= .15	p=.040
ROFF4	r= .33	p=.000
ROOF7	r= .25	p=.003
ROOF8	r= .20	p=.014
SICKT	r=-.17	p=.030
ORGAC	r=-.17	p=.030
NJINT	r= .16	p=.040
AIE	r= .19	p=.020

Table 18

Correlations with Regular Leave Frequency (REGT)

MILCIV	r= .28	p=.001
SEX	r= .29	p=.000
SHIFT	r=-.24	p=.003
ORGA15	r= .15	p=.050
NJCOM1	r= .21	p=.010
NJCOM2	r= .20	p=.010
NJCOM3	r= .21	p=.010
NJCOM9	r= .20	p=.013
NJINT2	r= .16	p=.030
ROFF1	r= .25	p=.003
ROFF2	r= .25	p=.002
ROFF3	r= .15	p=.050
ROFF6	r= .27	p=.001
NJAC	r= .18	p=.024
AIE/ROFFC	r= .23	p=.005
LIFEC	r= .24	p=.003

Table 19

Correlations with Emergency leave and leaves of absence (EMERT)

MILCIV	r= .18	p=.024
ORGA10	r= .18	p=.020
NJCOM2	r= .16	p=.040
NJCOM3	r= .23	p=.005
NJINT1	r= .15	p=.044
NJINT6	r= .17	p=.030
NJAC	r= .16	p=.030
NJINTC	r=-.21	p=.009

Table 20

Correlations with Absent without leave/ unauthorized absence (AWOLT)

No occurrences of AWOLs or unauthorized absence were reported.

Table 21

Correlations with Total Absence Frequency (TOFFT)

MILCIV	r= .15	p=.041
SEX	r= .30	p=.000
MSTAT	r= .17	p=.028
TIS	r=-.16	p=.040
ORGA5	r=-.20	p=.010
ORGA13	r=-.16	p=.040
ORGA14	r=-.16	p=.040
ORGA15	r=-.23	p=.005
NJCOM1	r= .35	p=.000
NJCOM2	r= .16	p=.043
NJCOM3	r= .26	p=.002
NJCOM9	r=-.16	p=.040
ROFF1	r= .31	p=.000
ROFF2	r= .21	p=.011
ROFF6	r= .16	p=.040
ORGAC	r=-.15	p=.047
NJAC	r= .17	p=.030
AIE/ROFFC	r= .26	p=.002

Observations Concerning Pearson Correlations. Several significant patterns are evident in examining the correlations above. First, the job satisfaction construct was not significant, at an alpha level of .05, with any of the absence variables. Second, the dummy variable identifying military and civilian personnel (MILCIV) is significant with all types of time off. The direction of correlation of the dummy variable with nonchargable time off was negative, but the correlation of the dummy variable with all other forms of absence was positive. Third, sick leave and nonchargable leave frequencies were significantly correlated with a negative value. Fourth, the central life interest variables (NJCOM1, NJCOM2, and NJCOM3) showed as significant with nearly all the absence variables. Few of the the other non-job commitment variables showed as significant with any absence variables.

Model Refinement.

The original model proposed in chapter 2 called for independent variables consisting of job attachment, non-job commitment, absence inducing events, and a dummy variable identifying military and civilian respondents. The statistical analysis described earlier in this chapter suggested several refinements to the model.

Job Attachment Construct. The job attachment construct was originally composed of an averaged sum of all the job satisfaction and job commitment question variables.

The pearson correlations on the dependent absence variables showed that job satisfaction was not significant with any of the absence frequency variables. Therefore job satisfaction and job commitment were entered into the refined model as separate constructs in order to better evaluate the contribution of each. Each had a high level of reliability with Cronbach's alpha levels of .74 and .89 respectively.

Non-Job Attachment Construct. The non-job attachment construct variable was originally composed of an averaged sum of all the non-job commitment and non-job interest questions. Pearson correlation analysis, factor analysis, and reliability analysis showed this was not the most appropriate approach. The variables more naturally fell into three major categories. These are central life interest (CLI), attachment to family and friends (HOME), and attachment to community and church (CC) as described earlier in this chapter. Each of these sets of variables had high intercorrelations, loaded heavily on the same factors, and had reliability alpha levels in excess of .68. The recreation variable, suggested by factor analysis, did not hold up in reliability analysis, however, with an alpha of only .44. Also, the other non-job commitment variables did not fit clearly into any pattern so their interpretation in an absence model would be difficult. Therefore, the non-job commitment construct was broken down

into the central life interest (CLI), community and church attachment (CC), and attachment to family and friends (HOME) constructs discussed above.

Absence Inducing Events Construct. The absence inducting events construct is unchanged. The individual variables, which composed the construct, showed up consistently with significant correlations with most of the absence frequency variables. A Cronbach's Alpha of .70 also showed it to be a reliable construct.

Final Model. The final model resulting from the refinements described above is:

$$ABS = B1 + B2(JSATC) + B3(ORGAC) + B4(CLI) + B5(CC) + B6(HOME) + B6(CIV)$$

ABS ---- Total Absence Frequency
JSATC -- Job Satisfaction Construct
ORGAC -- Organizational Commitment Construct
CLI ---- Central Life Interest Construct
CC ----- Community and Church Attachment Construct
HOME --- Family and Friends Attachment Construct
CIV ---- Military/Civilian Dummy Variable (Civilian=1)

Multiple Regression on Refined Model.

Results. A multiple regression on the model described above provided these summary results (for complete results see appendix B):

Adjusted R Square = .186
F(7,133) = 4.910
Significant F = .0001

Running the model with all the independent construct variables entered at once resulted in the following standardized beta weights:

$$ABS = .226(AIE) - .210(HOME) - .006(CC) + .229(CIV) - .132(ORGAC) + .318(CLI) + .129(JSATC)$$

The T statistics showed, however, that AIE, HOME, CIV, CLI are the only variables with significant correlation at an alpha level of .05. The variables CC, ORGAC and JSATC were at non-significant levels in the model.

Residual Analysis. Examination of the normal probability plot of standardized residuals revealed that the residuals were normally distributed. Also, examination of a scatterplot of residuals with predicted absence showed no abnormal patterns that would suggest non-linearity in the model.

This concluded the statistical analysis performed on the data in this study. The findings are discussed and areas for future research are proposed in chapter 5.

V. Discussion

In this chapter, each of the research questions and hypotheses proposed in chapter 2 are examined and the results of the statistical analysis presented in chapter 4 are discussed. Additionally, areas for future research are highlighted.

Examination of Research Questions/Hypotheses

Research Question #1.

What is the frequency, duration, and form of absences taken by military and civilian Air Force personnel?

Hypothesis #1.1:

The means of absence frequency are the same for military and civilian personnel.

Results. The null hypotheses that the mean of total absence frequency was equal between the two groups could not be rejected (see results of t-test in table 10). The military population averaged 2.95 absences during the four month period of the study while the civilian population averaged 3.82.

Hypothesis #1.2:

The means of absence duration are the same for military and civilian personnel.

Results. This hypothesis was rejected at a probability of .039 (see table 10). Military respondents

reported an average of 7.013 days of absence during the period of the study, while civilians reported 4.95 days.

Hypothesis #1.3:

The type of absences taken are the same for military and civilian populations.

Results. Based on the t-test on the means of each category of absence this hypothesis was rejected. Except for emergency leave, the frequency and duration of all forms of absence were different between military and civilian respondents. Military respondents reported higher frequency of nonchargable leave and civilians reported a higher frequency of sick and regular leaves. For duration, military reported more regular leave and nonchargeable days off, while civilians reported more sick leave days. An explanation of possible reasons for the results found for these three hypotheses is discussed below under hypotheses 5.1 and 5.2.

Research Question #2.

How do past patterns of absence relate to future absence?

Hypothesis #2.1:

Stated intended absences in the future will positively correlate with past absence frequency.

Results. The results of the multiple correlation analysis support this hypothesis. Absence inducing events (AIE) was positively correlated with

absence frequency at a statistically significant level. The AIE construct was composed of the respondents' predictions of the likelihood of taking an absence in the next month for any of a variety of reasons.

Research Question #3.

How does attachment to the job relate to absence frequency?

Hypothesis #3.1:

Attachment to the job is negatively correlated with absence frequency.

Results. There was only weak evidence that this hypothesis was true. Organizational commitment was shown to be negatively correlated with absence frequency ($r=-.15$, $p=.047$). Job satisfaction on the other hand had a positive correlation ($r=.016$), but at a non-significant level ($p=.43$). In the case of job satisfaction, the non-significant p values make it difficult to make meaningful inference about the correlations with absence frequency.

Research Question #4.

How does attachment to non-job activities relate to absence frequency?

Hypothesis #4.1.

Non-job attachment is positively correlated with absence frequency.

Results. Mixed results were found regarding this hypothesis. Both the pearson correlation and multiple correlation analysis showed positive correlation of central life interest with absence frequency. However, attachment to family and friends had a negative correlation with absence frequency, so it appears attachment to family and friends does not contribute to absence as expected. The relationship of absence with attachment to family and friends is discussed further under areas for future research below. Attachment to community and church was non-significant with a p value of .95. This finding is also discussed further in this section as an area for future research.

Research Question #5.

How does organizational absence policy relate to absence patterns?

Hypothesis #5.1:

Organizational absence policy has little or no relationship to the amount of leave taken (frequency).

Results. See Hypothesis 5.2 below.

Hypothesis #5.2:

Organizational absence policy is related to the form in which absences are taken.

Results. The results of hypotheses 1.1, 1.2 and 1.3 lend support to both hypotheses 5.1 and 5.2. It has been noted that the frequency of total absences between

military and civilian respondents was the same. However, the types of absences taken were different. This is most probably due to the differing organizational absence policies imposed on the two groups. Organizational policy makes it very difficult for a military member to take sick leave. In order to be placed on sick leave, a military member must first go to the base hospital and have a medical officer certify that he or she is in fact ill. On the other hand, civil service civilian employees save sick leave in the same manner as annual (regular) leave. Within limits, they can use the sick leave when they desire without any certification requirements. This would tend to explain the relative low frequency of military sick leave compared to civilian sick leave.

Conversely, federal labor regulations mandate that if a civil service worker is not at work he or she must be placed on some form of administrative leave (annual, sick, or leave of absence). The supervisor is not generally authorized to grant nonchargeable time off. Air Force policy and regulations, however, do make allowance for nonchargable time off for military members in the form of passes and liberties. It is therefore much easier for a military member to get nonchargable time off. This shows up in the higher frequency of nonchargable time off reported by military respondents.

Differing absence policy also can explain the relatively longer regular leaves taken by military members. Civilian employees can save part or all of their leave from year to year until retirement. Military members, however, may only save 60 days at the end of each fiscal year. Any amount of leave saved over 60 days is lost as of September 1, thus putting the military member in a "use or lose" situation. This may be an incentive to take longer leaves in order to use excess accumulated leave.

Additionally, the absence patterns observed between the three shifts also support the argument that organizational policy only affects the form of absence, not the amount. The average number of absences for the three shifts was equal. How the absences were divided between the absence categories was different. Personnel on mid shift reported a much larger proportion of nonchargeable absence then did personnel on day or swing shifts. This may be due to a more lenient policy towards giving nonchargeable time off on mid shift. If personnel on mid shift can get the time off they desire without being charged leave, the incentive to take sick or regular leave is reduced. On the otherhand, personnel on days and swing shift might be taking more sick and regular leave because it is comparatively harder to get the time off they desire in the nonchargable category.

A study by Nicholson (1976) of a sudden clamp-down of management sanctions on the absence behavior of the workforce in a food processing factory was consistant with the findings of this study. Nicholson (1976) found that the clamp-down did not significantly alter the level of absence, but did affect the form absences took. It showed a conversion of short to longer spells of absence and a change from uncertified to certified absence (Nicholson, 1976: 139). A comparison can be made between Nicholson's results and the findings of this study concerning the absence patterns of the military and civilian respondents and between the respondents of the three work shifts. In both studies, a difference in the form of absences -- but not the level of absence -- appears to be as a result of a difference or change of management policy on absence behavior.

Areas for Future Research

This research effort suggests some areas which deserve special discussion and recommendation for future research. The first of these areas concerns the concept of an individual absence profile and the effect of organizational absence policy on this profile.

The results of this research suggest that individuals might have a certain range of absence frequency within which they are comfortable. This is supported by the high correlation between past absences and the respondents'

prediction of future absences, as well as the consistency of absence frequency between military and civilian respondents and between the three work shifts.

The findings of this thesis further suggest that organizational absence policy does not affect the amount of absence taken, only the way the absences are taken. This is evidenced by the differing patterns of absence between the military and civilian populations and again between shifts. An area for future research would be a study into the direct effects of organization's absence policy in the military organization. To properly address the effects of organizational absence policy, the organizational policy variable requires further definition and a method of accurate measurement needs to be developed.

The effects of job satisfaction on absence patterns is another area where future research in military organizations is needed. Conventional wisdom within the military holds that job satisfaction, as an element of morale, is an important element driving absence patterns. However, this research did not show a strong relationship between job satisfaction and absence frequency. The finding that there is only a weak relationship between job satisfaction and absence is consistent with what Steers and Rhodes (1978) found in their review of 104 absence studies. The belief that job satisfaction is of primary importance in explaining absence in the military may therefore be

erroneous. However, a more detailed examination of the effects of job satisfaction on absence in the military is needed to clarify any relationship.

Non-job attachment's effect on absence frequency is another area deserving of comment. Attachment to community and church was not shown to be significantly related to absence frequency. This may have been because most church and community activities are on weekends and after hours and thus do not readily conflict with work. Further investigation to establish if any relationship exists between this involvement and absence is warranted.

The negative correlation of family attachment with absence frequency is also of interest. This raises a question about the role of intervening variables acting between family attachment and absence frequency. One such variable might be the need for financial security when one is strongly attached to the family. This research did not address monetary incentives in relation to absence frequency and this is an area for future investigation.

Central life interest is also a promising area for future research. This research showed that an individual's relative interest within and outside the job was clearly related to absence frequency. Dubin and Porter (1975) suggest a measurement of central life interest based on a survey instrument they developed. This instrument has not been applied in absence research and it might prove to be

of great utility in further investigation on the effect of central life interest on absence behavior.

Implications of Findings for Managers

Several findings in this research can have practical utility for Air Force leaders. The concept of an individual absence profile with each individual "needing" a certain level of absence from the job could prove useful. The Air Force has long advocated giving personnel enough opportunity to take regularly scheduled leaves. This finding lends credibility to this policy as a method of maintaining a stable workforce. If personnel are given opportunities for scheduled time-off, spontaneous and unscheduled absences may be reduced.

The effect of the Air Force's differing policy on absences for it's military and civilian members should be of interest to managers who supervise both groups. Managers must realize that close control of one form of absence for one group (i.e., sick leave for military and nonchargeable time off for civilians) will most probably show up as higher absence in another form for that group. Understanding this relationship will make it easier for the manager to develop leave and absence policies which are fair to both groups. It also tends to show the futility of a "crack down" on any one form of absence, since the reduced frequency of that category of absence may just be balanced with an increase in another category.

Summary and Conclusion.

A review of the absenteeism literature helped to identify several critical variables which contribute to absence behavior. These were job attachment, non-job attachment and absence inducing events. A survey instrument was constructed and administered in an Air Force unit. The objective of the survey was to measure the three critical variables and absence frequency for a population of both military and civilian personnel for analysis. Statistical analysis suggested refinement of the job attachment and non-job attachment constructs into five, more specific variables -- job satisfaction, job commitment, central life interest, attachment to family and friends, and attachment to community and church. Further analysis indicated that organizational policy is an important variable in determining the type of absences individuals take. The manner in which these variables related in the analysis gave rise to several areas for future research and also provided practical management insights for Air Force leaders.

In conclusion, substantial progress was made toward the goal of identifying the variables which are critical in explaining absence behavior in military organizations. However, further research is needed to more completely understand all the forces at work in this area.

Appendix A: Survey Questions and Variable Labels

This appendix is a copy of the questions from the survey instrument used in this research. The variable name assigned to each question is in parentheses following the question number.

BACKGROUND INFORMATION

1. (AGE) My age is:

   1. Less than 20
   2. 20 to 25
   3. 26 to 30
   4. 31 to 40
   5. 41 to 50
   6. 51 to 60
   7. More then 60

2. (GENDER) My gender is:

   1. Male
   2. Female

3. (MSTAT) My marital status is:

   1. Married
   2. Single, divorced, separated, or widowed

4. (DEPEND) Not counting myself or my spouse, I have _____ dependents living in my household?

   1. None
   2. 1
   3. 2
   4. 3
   5. 4
   6. 5
   7. 6
   8. More then 6

5. (EDLEV) My highest educational level obtained was:

1. Non high school graduate
2. High school graduate or GED
3. Some college work
4. Associate degree
5. Bachelor's degree
6. Graduate degree

6. (CAT) I am an:

1. Enlisted Member
2. Officer
3. Civilian (GS) Employee

7. (GRADE) My grade is:

1. E-1, O-1, or GS-1
2. E-2, O-2, or GS-2
3. E-3, O-3, or GS-3
4. E-4, O-4, or GS-4
5. E-5, O-5, or GS-5
6. E-6, O-6, or GS-6
7. E-7, --- or GS-7
8. E-8, --- or GS-8
9. E-9, --- or GS-9
10. --- --- GS-10, or Higher

8. (TIS) My total time of service in the Air Force is:

1. Less then 6 months
2. More then 6 months, less then 1 year
3. More then 1 year, less then 2 years
4. More then 2 year, less then 5 years
5. More then 5 years, less then 10 years
6. More then 10 years, less then 15 years
7. More then 15 years, less then 20 years
8. More then 20 years, less then 25 years
9. More then 25 years

9. (TIO) I have been working in my present organization:

1. Less then 6 months
2. More then 6 months, but less then 1 year
3. More then one year

10. (SHIFT) The current shift I work is:

1. Day shift
2. Swing shift
3. Mid or graveyard shift

11. (PCS) I've made a PCS move in the last 6 months.

1. Yes
2. No

12. (HEALTH) My general health is best described as:

1. Excellent
2. Good
3. Fair
4. Poor
5. Very Poor

JOB SATISFACTION

6 = EXTREMELY SATISFIED
5 = VERY SATISFIED
4 = SOMEWHAT SATISFIED
3 = SOMEWHAT DISSATISFIED
2 = VERY DISSATISFIED
1 = EXTREMELY DISSATISFIED

13. (JSAT1) How do you feel about your job?

14. (JSAT2) How do you feel about the people you work for--your supervisors?

15. (JSAT3) How do you feel about the people you work with--your co-workers?

16. (JSAT4) How do you feel about the work you do on your job--the work itself?

17. (JSAT5) How do you feel about where you work--the physical surroundings, the hours, the amount of work you are asked to do?

18. (JSAT6) How do you feel about what you have available for doing your job--equipment, information, facilities, and so on?

JOB COMMITMENT

6 = STRONGLY AGREE
5 = MODERATELY AGREE
4 = SLIGHTLY AGREE
3 = SLIGHTLY DISAGREE
2 = MODERATELY DISAGREE
1 = STRONGLY DISAGREE

19. (ORGA1) I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.

20. (ORGA2) I talk up this organization to my friends as a great organization to work for.

21. (ORGA3) I feel very little loyalty to this organization.

22. (ORGA4) I would accept almost any type job assignment in order to keep working for this organization.

23. (ORGA5) I find that my values and the organization's values are very similar.

24. (ORGA6) I am proud to tell others that I am part of this organization.

25. (ORGA7) I could just as well be working for a different organization as long as the type of work was similar.

26. (ORGA8) This organization really inspires the very best in me in the way of job performance.

27. (ORGA9) I am extremely glad that I was assigned to or hired by this organization over others I could be working for.

28. (ORGA10) Often, I find it difficult to agree with this organization's policies on important matters relating to its employees.

29. (ORGA11) I really care about the fate of this organization.

30. (ORGA12) For me this is the best of all possible organizations for which to work.

31. (ORGA13) I live, eat, and breathe my job in this organization.

32. (ORGA14) My organization's goals are completely compatible with my own personal goals.

33. (ORGA15) If I was given the option within the next year, I definitely would leave this organization.

NON-JOB COMMITMENT

6 = STRONGLY AGREE
5 = MODERATELY AGREE
4 = SLIGHTLY AGREE
3 = SLIGHTLY DISAGREE
2 = MODERATELY DISAGREE
1 = STRONGLY DISAGREE

34. (NJCOM1) The most important things that happen to me come from OUTSIDE my work.

35. (NJCOM2) The most important things I do involve my community or church--NOT my job.

36. (NJCOM3) The major satisfaction in my life comes from OUTSIDE my job.

37. (NJCOM4) The activities which give me the greatest pleasure and personal satisfaction involve sports, recreation or my hobby.

38. (NJCOM5) I would rather be a more important member of my club, church, community, or lodge then get a job promotion.

39. (NJCOM6) My responsibilities around the house are more important to me then my responsibilities at work.

40. (NJCOM7) I feel I should spend a lot of time with my family or friends even if my job suffers as a result.

41. (NJCOM8) I am very personally involved in my community or church.

42. (NJCOM9) I avoid taking on extra duties and responsibilities at work that might interfere with my off duty activities.

NON-JOB INTERESTS

6 = EXTREMELY IMPORTANT
5 = VERY IMPORTANT
4 = SOMEWHAT IMPORTANT
3 = SOMEWHAT UNIMPORTANT
2 = VERY UNIMPORTANT
1 = NOT AT ALL IMPORTANT

43. (NJINT1) Being an involved member of my community or church

44. (NJINT2) Having a second job or business outside the Air Force

45. (NJINT3) Doing things with my family or friends

46. (NJINT4) Taking part in community or church affairs

47. (NJINT5) Participating in hobbies, sports, or recreation

48. (NJINT6) Taking classes to further my education

REASONS FOR TAKING TIME OFF (ABSENCE INDUCING EVENTS)

(Note: The respondents were asked to estimate the likelihood of them being absent in the next month for each of the reason in questions 49 through 46.)

6 = EXTREMELY LIKELY
5 = VERY LIKELY
4 = SOMEWHAT LIKELY
3 = SOMEWHAT UNLIKELY
2 = VERY UNLIKELY
1 = EXTREMELY UNLIKELY

49. (ROFF1) I get too sick to come to work.

50. (ROFF2) I must stay home to care for a member of my family.

51. (ROFF3) I want to take part in an activity with my family or friends.

52. (ROFF4) I need to attend classes or work on school work.

53. (ROFF5) I want to participate in a community or church activity.

54. (ROFF6) I need to take care of some personnel business.

55. (ROFF7) I want to take part in sports, recreation or a hobby.

56. (ROFF8) I want to get away from my job for a while.

RECENT TIME OFF

57. (LOFFR) The last time you took a day or more off from work, which of the following statements best describes the reason for you taking the time off?

1. I was sick.
2. I was caring for a family member or dealing with a family problem.
3. I was involved with an activity with family or friends.
4. I was attending classes or working on school work.
5. I was participating in a community or church activity.
6. I had to take care of some personal business.
7. I was involved with sports, recreation, or a hobby.
8. I wanted to get away from my job for a while.

58. (LOFFA) The last time you took a day or more off from work, the absence was accounted for as:

1. Regular or annual leave
2. Emergency leave
3. Medical or sick leave
4. Leave of absence
5. Pass or "Free" time off given by supervisor
6. AWOL or unexcused absence

ABSENCE DATA

Sick or Medical Leave

59. (SICKT) I've taken sick or medical leave _____ TIMES since 1 January 1985. (For example, a single absence for 5 work days in a row would count 1 time.)

60. (SICKD) I've been on sick or medical leave for _____ WORK DAYS since 1 January 1985. (For example, a 2 absences for 5 work days each would count for 10 days)

Annual or Regular Leave

61. (REGT) I've taken annual or re ular leave _____ TIMES since 1 January 1985. (For e ample, a 5 day vacation would count as 1 time)

62. (REGD) I've been on annual or egular leave for _____ WORK DAYS since 1 January 1 35.

Leaves of Absence or Emergency eave

63. (EMERT) I've taken a leave of osence or emergency leave _____ TIMES since 1 January 1985.

64. (EMERD) I've been on leaves of absence or emergency leave for _____ WORK DAYS since 1 January 1985.

Nonchargable Days Off

65. (NONCHT) At times supervisors ive their people days off without making them take leave. I've been given days off without being charged leave ___ ___ TIMES since 1 January 1985.

66. (NONCHD) I've been given _____ _ WORK DAYS off without being charged leave since 1 January 1985.

Unexcused Absence or AWOL

67. (AWOLT) I've been absent from ork without approval _____ TIMES since 1 January 1985.

68. (AWOLD) I've been absent from ork without approval for _____ WORK DAYS since 1 Janua y 1985.

Appendix B: Multiple Regression

This appendix is a detailed reproduction of the data from the regression on the final model referenced in chapter 4.

DEPENDENT VARIABLE.. TOFFT TOTAL NUMBER OF TIMES OFF

VARIABLE(S) ENTERED ON STEP NUMBER	1..	AIE	ABSENCE INDUCING EVENTS CONSTRUCT
	2..	HOME	FAMILY AND FRIENDS ATTACHMENT CONSTRUCT
	3..	CC	COMMUNITY/CHURCH ATTACHMENT CONSTRUCT
	4..	CIV	MILITARY/CIVILIAN DUMMY VARIABLE
	5..	ORGAC	ORGANIZATIONAL COMMITTMENT CONSTRUCT
	6..	CLI	CENTRAL LIFE INTEREST CONSTRUCT
	7..	JSATC	JOB SATISFACTION CONSTRUCT

MULTIPLE R	0.48294	ANALYSIS OF VARIANCE			
R SQUARE	0.23323		DF	SUM OF SQUARES	MEAN SQUARE
ADJUSTED R SQUARE	0.18573	REGRESSION	7	197.20670	28.17239
STANDARD ERROR	2.39529	RESIDUAL	113	648.33049	5.73744

F = 4.91027 SIGNIF F = 0.0001

---------- VARIABLES IN THE EQUATION ----------

VARIABLE	B	SE B	BETA	T	SIG T
AIE	0.70224	0.27673	0.22638	2.538	0.0125
HOME	-0.42653	0.18669	-0.21025	-2.285	0.0242
CC	-0.01220	0.17903	-0.00598	-0.068	0.9458
CIV	1.25811	0.47368	0.22894	2.656	0.0091
ORGAC	-0.33065	0.29016	-0.13237	-1.140	0.2569
CLI	0.60993	0.19005	0.31839	3.209	0.0017
JSATC	0.40858	0.35648	0.12857	1.146	0.2542
(CONSTANT)	-1.09291	1.85197		-0.590	0.5563

RESIDUALS STATISTICS:

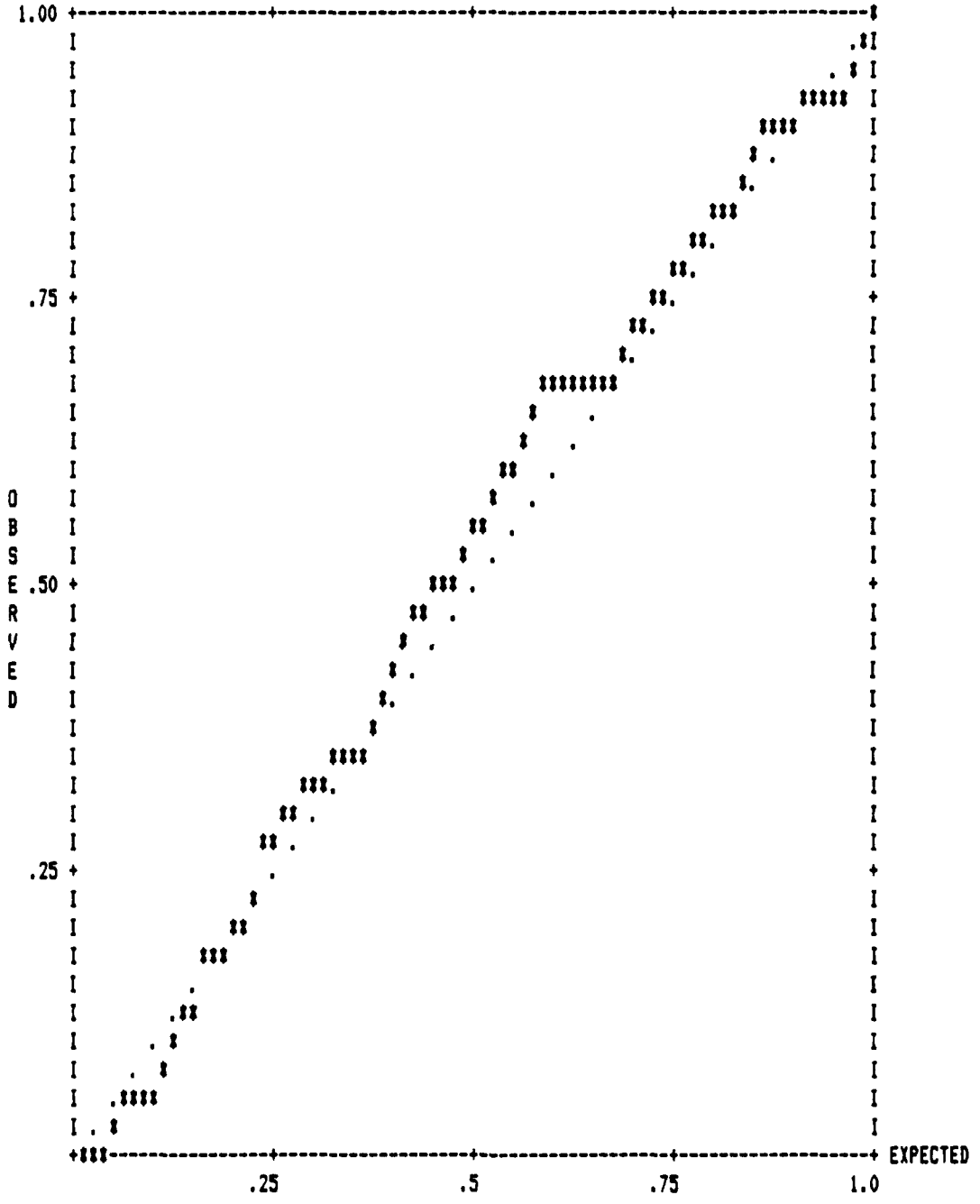
	MIN	MAX	MEAN	STD DEV	N
*PRED	0.3178	6.3722	3.2645	1.2819	121
*ZPRED	-2.2986	2.4243	0.0000	1.0000	121
*SEPRED	0.3319	0.9223	0.6008	0.1363	121
*ADJPRED	0.3381	6.7189	3.2738	1.3060	121
*MAHAL	1.3117	16.8005	6.9421	3.5718	121
*COOK D	0.0000	0.0608	0.0088	0.0132	121
*RESID	-4.2064	7.0833	0.0000	2.3244	121
*ZRESID	-1.7561	2.9572	0.0000	0.9704	121
*SRESID	-1.8676	3.0343	-0.0019	1.0035	121
*DRESID	-4.7574	7.4577	-0.0093	2.4868	121
*SDRESID	-1.8887	3.1520	0.0009	1.0142	121

TOTAL CASES = 121

DURBIN-WATSON TEST = 1.56694

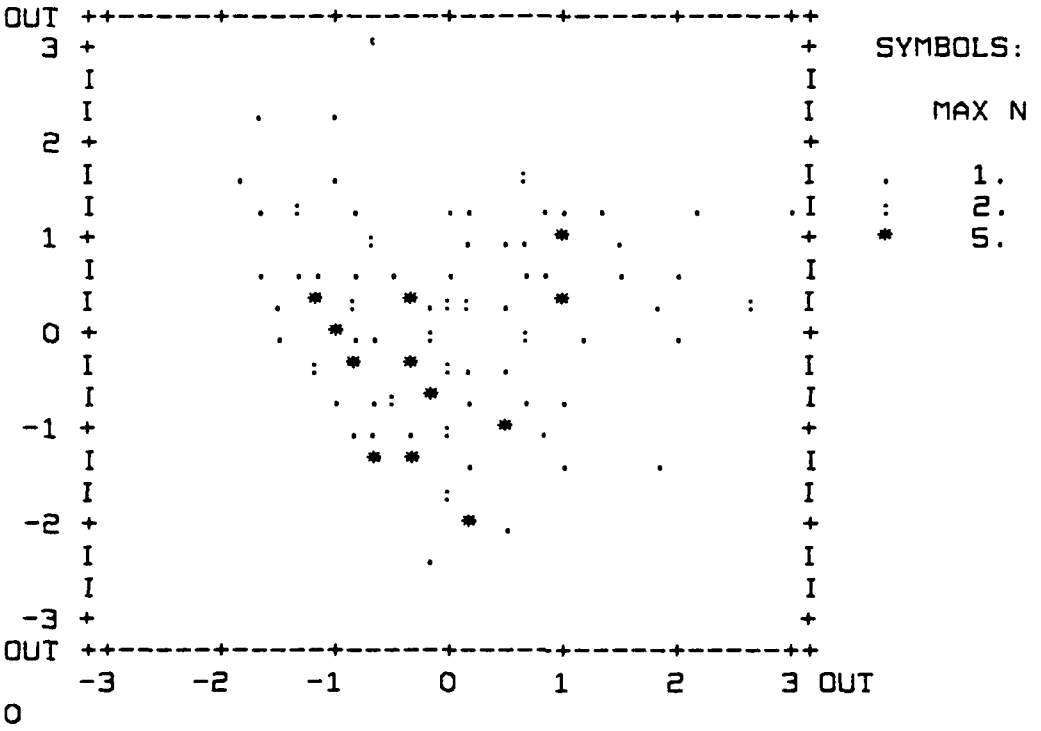
```
 0   0.13    OUT
 1   0.07   3.00 *                HISTOGRAM
 0   0.10   2.87                  STANDARDIZED RESIDUAL
 0   0.14   2.75
 2   0.19   2.62 **               ( * = 1 CASES)
 0   0.27   2.50
 0   0.36   2.37                  ( . : = NORMAL CURVE)
 0   0.48   2.25
 1   0.63   2.12
 2   0.82   2.00  *
 2   1.04   1.87  *
 0   1.31   1.75
 0   1.61   1.62
 1   1.96   1.50 *
 1   2.35   1.37 *
 2   2.76   1.25 **
 1   3.21   1.12 *
 6   3.66   1.00 *** **
 3   4.11   0.87 ***
 5   4.55   0.75 ****
 6   4.96   0.62 **** *
 7   5.32   0.50 **** **
 0   5.62   0.37
 4   5.84   0.25 ****
 6   5.98   0.12 *****
10   6.03   0.80 ***** ****
 5   5.98  -0.12 *****
10   5.84  -0.25 ***** ****
 5   5.62  -0.37 *****
 2   5.32  -0.50 **
 6   4.96  -0.62 **** *
 9   4.55  -0.75 **** ****
 3   4.11  -0.87 ***
 6   3.66  -1.00 *** **
 5   3.21  -1.12 ** **
 3   2.76  -1.25 **
 1   2.35  -1.37 *
 1   1.96  -1.50 *
 2   1.61  -1.62 *
 3   1.31  -1.75  **
 0   1.04  -1.87
 0   0.82  -2.00
 0   0.63  -2.12
 0   0.48  -2.25
 0   0.36  -2.37
 0   0.27  -2.50
 0   0.19  -2.62
 0   0.14  -2.75
 0   0.10  -2.87
 0   0.07  -3.00
 0   0.13    OUT
```

NORMAL PROBABILITY (P-P) PLOT - STANDARDIZED RESIDUAL



STANDARDIZED SCATTERPLOT

ACROSS - *RESID DOWN - *PRED



Bibliography

Angle, Donna C. The Correlates of AWOL: 30 Years of Research into the Problem of AWOL in the U. S. Army. Army Research Institute for the Behavioral and Social Sciences, Alexandria VA, August 1978 (AD-A076 712).

Breaugh, James A. "Predicting Absenteeism From Prior Absenteeism and Work Attitudes," Journal of Applied Psychology, 66: 555-560 (1981)

Cochran, James E. Absentees/Deserters: Can We More Effectively Manage the Problem. Research Report, ACSC-0435-79. Air Command and Staff College, Maxwell AFB AL, May 1979 (AD-B0038 806L).

Department of the Air Force. Desertion and Unauthorized Absence, AFR 35-73. Washington DC: Hq USAF, 3 December 1979.

Department of the Air Force. Leave and Administrative Absence Policy, AFR 35-9. Washington DC: Hq USAF, 7Aug 1981.

Dubin, Robert and Lyman W. Porter. "Central Life Interest and Organizational Commitment of Blue-Collar and Clerical Workers," Administrative Science Quarterly, 20: 411-421 (1975).

Fitzgibbons, Dale and Michael Moch. "Employee Absenteeism: A Multivariate Analysis with Replication," Organizational Behavior and Human Performance, 26: 349-372 (1980)

General Accounting Office. Millions Being Spent to Apprehend Military Deserters Most of Whom are Discharged As Unqualified for Retention. Report to Secretary of Defense FPCD-77-16; B-146890. Washington DC: Government Printing Office, 31 January 1977

Gibson, R. Oliver. "Toward a Conceptualization of Absence Behavior of Personnel in Organizations," Administrative Science Quarterly, 10: 107-133 (1966)

Hartnagel Timothy F. "Absent Without Leave: A Study of the Military Offender," Journal of Political and Military Sociology, 2: 205-220 (Fall 1974)

Hedges, Janice N. "Absence from Work - A Look at Some National Data," Monthly Labor Review, 96: 24-31 (1973)

Littlepage, Glenn E. and Leon Rappoport. "Factors Affecting Military AWOL Decisions," Journal of Political and Military Sociology, 5: 107-125 (Spring 1977)

Manual for Courts-Martial, United States. Executive Order 12473. Washington DC: Government Printing Office, 1984

McCubbin, Hamilton I. et al.. Leadership and Situational Factors Related to AWOL. Army Correctional Training Facility, Fort Riley KS, July 1971 (AD-A951 770).

Nicholson, Nigel. "Absence Behaviour and Attendance Motivation: A Conceptual Synthesis," Journal of Management Studies, 14: 231-252 (1977)

Nicholson, Nigel. "Management Sanctions and Absence Control," Human Relations, 2: 139-151 (1976)

Nie, Norman H. SPSS: Statistical Package for the Social Sciences. New York: McGraw-Hill, Inc., 1975.

Smulders, Peter G. W. "Comments on Employee Absence/Attendance as a Dependent Variable in Organizational Research," Journal of Applied Psychology, 65: 368-371 (1980)

Steers, Richard M. and Susan R. Rhodes. "Major Influences on Employee Attendance: A Process Model," Journal of Applied Psychology, 63: 391-407 (1978)

Sublett, Collier M. and Gary R. Greenfield. Study on the Apprehension of Military Deserters during Peacetime in an All-Volunteer Force. Army Administration Center, Fort Benjamin Harrison, December 1977 (AD-A056 248).

Vita

Captain William M. Getter was born on 29 May 1956 in Fullerton, California. He graduated from John F. Kennedy High School in 1975 and attended Cypress Community College from which he received an Associates of Arts degree in Political Science in 1977. He then transfered to the University of Califorina, Los Angeles (UCLA) and graduated in 1979 with the degree of Bachelor of Arts in International Relations. Also upon graduation, he received his commission as a distinguished graduate of the ROTC program. He entered active duty service in September 1979 and served as a section squadron commander in 388th Tactical Wing at Hill AFB, Utah until December 1981. Following his tour at Hill AFB, he cross-trained into the aircraft maintenance career field and attended the aircraft maintenance officer's course at Chanute AFB, Illinois until June 1982. After graduation, he served as the Officer in Charge of the 428th Aircraft Maintenance Unit at Nellis AFB, Nevada. He attended Squadron Officers School at Maxwell AFB, Alabama immediately prior to entering the School of Systems and Logistics, Air Force Institute of Technology, in October 1984.

Permanent Address: 212 City Blvd West #118
Orange, Califorina 92668

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

AD-A161 073

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION: UNCLASSIFIED	1b. RESTRICTIVE MARKINGS
2a. SECURITY CLASSIFICATION AUTHORITY	3. DISTRIBUTION/AVAILABILITY OF REPORT: Approved for public release; distribution unlimited.
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE	
4. PERFORMING ORGANIZATION REPORT NUMBER(S): AFIT/GLM/LSB/85S-27	5. MONITORING ORGANIZATION REPORT NUMBER(S)
6a. NAME OF PERFORMING ORGANIZATION: School of Systems and Logistices; 6b. OFFICE SYMBOL (If applicable): AFIT/LSY	7a. NAME OF MONITORING ORGANIZATION
6c. ADDRESS (City, State and ZIP Code): Air Force Institute of Technology, Wright-Patterson AFB, Ohio 45433	7b. ADDRESS (City, State and ZIP Code)
8a. NAME OF FUNDING/SPONSORING ORGANIZATION; 8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
8c. ADDRESS (City, State and ZIP Code)	10. SOURCE OF FUNDING NOS. — PROGRAM ELEMENT NO. / PROJECT NO. / TASK NO. / WORK UNIT NO.
11. TITLE (Include Security Classification): See Box 19	
12. PERSONAL AUTHOR(S): William M. Getter, B.A., Capt, USAF	
13a. TYPE OF REPORT: MS Thesis; 13b. TIME COVERED: FROM _____ TO _____; 14. DATE OF REPORT (Yr., Mo., Day): 1985 September; 15. PAGE COUNT: 95	
16. SUPPLEMENTARY NOTATION	

17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)
FIELD	GROUP	SUB. GR.	Absenteeism, Absence, AWOL, Desertion, Job Satisfaction, Job Commitment
05	10	00	

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

Title: ABSENTEEISM AMONG AIR FORCE ACTIVE DUTY AND CIVILIAN PERSONNEL

Thesis Chairman: James T. Lindsey, Lt Col, USAF
Deputy Head, Department of Organizational Sciences

Approved for public release IAW AFR 190-17
LYNN E. WOLAVER
Dean for Research and Professional Development
Air Force Institute of Technology (ATC)
Wright-Patterson AFB OH 45433

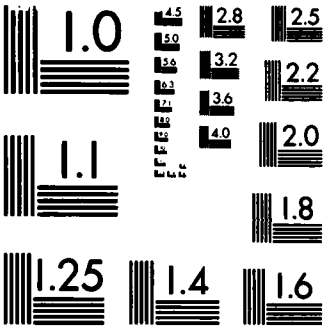
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT	21 ABSTRACT SECURITY CLASSIFICATION
UNCLASSIFIED/UNLIMITED ☒ SAME AS RPT. ☐ DTIC USERS ☐	UNCLASSIFIED
22a. NAME OF RESPONSIBLE INDIVIDUAL: James T. Lindsey, Lt Col, USAF	22b. TELEPHONE NUMBER (Include Area Code): (513) 255-4549

DD FORM 1473, 83 APR EDITION OF 1 JAN 73 IS OBSOLETE.

SECURITY CLASSIFICATION OF THIS PAGE

AD-A161 073 ABSENTEEISM AMONG AIR FORCE ACTIVE DUTY AND CIVILIAN PERSONNEL(U) AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL OF SYSTEMS AND LOGISTICS W M GETTER 2/2

UNCLASSIFIED SEP 85 AFIT/GLM/LSB/85S-27 F/G 5/10 NL



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

This ~~research effort~~ thesis was focused on identifying the critical variables which contribute to absence behavior among active duty and civilian Air Force personnel. A review of the absenteeism literature helped to identify several of these variables. They are job attachment, non-job attachment, and absence inducing events.

A survey instrument was constructed and administered in an Air Force unit. The objective of the survey was to measure the three critical variables and absence frequency for a population of both military and civilian personnel for analysis. Statistical analysis suggested refinement of the job attachment and non-job attachment constructs into five, more specific variables -- job satisfaction, job commitment, central life interest, attachment to family and friends, and attachment to community and church.

Further analysis indicated that organizational policy is an important variable in determining the type of absences individuals take. The manner in which all the variables related with on another in the analysis gave rise to several areas for future research and also provided practical management insights for Air Force leaders.

END

FILMED

12-85

DTIC