3-2005

Job Embeddedness: A Construct of Organizational and Community Attachment Utilized to Asses Voluntary Turnover

Richard E. A. Fletcher III

JOB EMBEDDEDNESS: A CONSTRUCT OF ORGANIZATIONAL AND COMMUNITY ATTACHMENT UTILIZED TO ASSESS VOLUNTARY TURNOVER

THESIS

Richard E.A. Fletcher III, 1st Lieutenant, USAF

AFIT/GEM/ENV/05M-03

DEPARTMENT OF THE AIR FORCE
AIR UNIVERSITY

AIR FORCE INSTITUTE OF TECHNOLOGY

Wright-Patterson Air Force Base, Ohio

The views expressed in this thesis are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense, or the United States Government.

AFIT/GEM/ENV/05M-03

JOB EMBEDDEDNESS: A CONSTRUCT OF ORGANIZATIONAL AND COMMUNITY ATTACHMENT UTILIZED TO ASSESS VOLUNTARY TURNOVER

THESIS

Presented to the Faculty

Department of Systems and Engineering Management

Graduate School of Engineering and Management

Air Force Institute of Technology

Air University

Air Education and Training Command

In Partial Fulfillment of the Requirements for the

Degree of Master of Science in Engineering Management

Richard E.A. Fletcher III, BS

1st Lieutenant, USAF

March 2005

AFIT/GEM/ENV/05M-03

JOB EMBEDDEDNESS: A CONSTRUCT OF ORGANIZATIONAL AND COMMUNITY ATTACHMENT UTILIZED TO ASSESS VOLUNTARY TURNOVER

Richard E.A. Fletcher III, BS
1st Lieutenant, USAF

Approved:

/signed/	14 Feb 2005
Daniel T. Holt, Major, USAF (Chairman)	Date
/signed/	14 Feb 2005
Sharon G. Heilmann, Major, USAF (Member)	Date
/signed/	14 Feb 2005
Timothy S. Webb, Major, USAF (Member)	Date

Abstract

There are few, if any, organizations immune to the adverse and costly effects of voluntary turnover. Unfortunately, traditional attitudinal variables (e.g. job satisfaction, organizational commitment, perceived job alternatives, and job search behavior) fall short when explaining the causes of voluntary turnover. The job embeddedness construct was developed by Mitchell, Holtom, Lee, Sablynski and Erez (2001) to account for additional influences, beyond the effects of traditional attitudinal variables, on a person's decision to stay or leave by considering the organizational and community forces that may keep a person on the job. Acting on the basic premise that a person's decision to leave or stay could also be influenced by diverse psychological processes and activities, Mitchell et al. (2001) added a richness and diversity not previously seen in typical turnover theory.

The purpose of this research was to further refine and evaluate the extent to which job embeddedness influences voluntary turnover. Specifically, this thesis sought to determine the effectiveness of job embeddedness in explaining additional incremental variance in intent to leave, above what is usually accounted for with traditional attitudinal variables. Additionally, the individual effects of tenure, education level, organizational rank, and pay were evaluated to determine if they moderated the effects of job embeddedness on a person's level of intent to leave.

Multiple hierarchical regression analysis was used to assess the incremental variance job embeddedness explains with regards to intent to leave. The results indicated that job embeddedness accounted for a significant amount of variance, above and beyond

what was accounted for with the traditional attitudinal variables in predicting turnover. Upon further investigation, the data suggested that the community related components of job embeddedness accounted for all the added predictability associated with the job embeddedness construct in reference to the antecedents of leaving and/or staying. This not only supported previous findings that people who were more embedded in their jobs had less intent to leave, but also illustrated the significance of off-the-job and non-affective causes of turnover. These findings suggest that organizations like the United States Air Force need to consider organizational and community relationships when developing programs designed to affect retention decisions of members.

Acknowledgments

I would like to express my sincere appreciation to my faculty advisors, Major Danny Holt, Major Sharon Heilmann, and Major Timothy Webb for their guidance and support throughout the course of this thesis effort. Their insight and experience were invaluable in keeping my efforts in focus and on schedule. I would also like to thank Lieutenant Colonel James Weber for his support and allowing his squadron to participate in the data collection portion of this project. Above all, I would like to give special thanks to my wife and two children for their patience, understanding, and support throughout the course of my work.

Richard E.A. Fletcher III

Table of Contents

List of Figures

List of Tables

JOB EMBEDDEDNESS: A CONSTRUCT OF ORGANIZATIONAL AND COMMUNITY ATTACHMENT UTILIZED TO ASSESS VOLUNTARY TURNOVER

CHAPTER 1

INTRODUCTION

Increased personnel and organizational costs associated with losing employees underscores why turnover continues to be an important issue among many of today's organizations and firms (Mitchell, Holtom, Lee, Sablynski & Erez, 2001). When it could cost up to $2000 to replace even low-level employees, overall costs could easily extend into the millions annually for larger organizations (Cascio, 1991). Organizational leaders and managers need to know what the primary predictors of turnover are before solutions can be formulated and implemented; solutions in which many organizations would benefit.

Military organizations are no exception. For example, in fiscal year 2000 the active duty U.S. military turnover rates were 6.99% for officers and 10.2% for enlisted personnel (Active Military Turnover Rates, 2003). Such losses are substantial when you consider there were approximately 1.38 million active duty members in the U.S. military at the time (GAO 05-200, 2005). To offset such losses, the Department of Defense has incurred significant recruiting and retraining costs annually. The cost of retraining one active duty United States Air Force (USAF) member ranges from $8,100 to $187,000, averaging $31,000 across 222 different occupations (Air Force Instruction 65-503, 2003). The USAF spent $875 million on initial skill training for new accessions in fiscal year 2003 to maintain the desired force structure and counter the effects of turnover (Typical

Acquisition and Training Costs, 2003). This expense did not account for resources spent on recruiting efforts or lost productivity. Retraining costs alone underscore the need for continued turnover research in an effort to identify key factors involved in a person's decision to leave or stay. The dilemma is exacerbated when retraining costs are combined with recruiting costs and lost productivity associated with losing experienced employees.

Historically, research on turnover dates back to 1912 (Crabb, 1912). According to Hulin, Roznowski and Hachiya (1985), job satisfaction and job alternatives have served as the major conceptual underpinnings for much of the literature on voluntary turnover. Although researchers like Cotton and Tuttle (1986), Mobley (1982), and Hom and Griffeth (1995) have found empirical support for other variables, almost all have been seen as affecting turnover through job satisfaction and alternative job availability (Mitchell & Lee, 2001). Yet, subsequent researchers have found that these work attitudes play a small role in the overall prediction of employees' decisions to leave their organizations (Griffeth, Hom, & Gaertner, 2000; Steel and Ovalle, 1984). Realizing there could be job related, as well as other non-affective and non-job related influences on a person's decision to leave or stay, Mitchell et al. (2001) introduced the concept of job embeddedness.

The development of the job embeddedness construct was a research effort to account for additional influences, beyond the effects of traditional attitudinal variables (e.g. job satisfaction, organizational commitment, and available alternatives) on a person's decision to stay or leave by considering the organizational and community forces that may keep a person on the job. Job embeddedness encompasses both the

organizational and community dimensions of link, fit, and sacrifice as predictors of intent to leave and voluntary turnover. More specifically, individuals' links to other people, teams, and groups, their perceived fit with the organization and community, and what they would have to sacrifice or give up by leaving their current job determine an established level of job embeddedness (Mitchell, et al., 2001).

Job embeddedness has been used successfully to augment the prediction of voluntary turnover in two separate studies among two groups of employees and organizations. With little empirical research on job embeddedness, this study will replicate the findings of Mitchell et al. (2001) to further refine, and evaluate the extent to which job embeddedness influences intent to leave and voluntary turnover. Previous tests of the construct have been limited to hospital, grocery store, and regional service center employees. This study utilized members of the USAF to test the construct's ability to account for additional variability in turnover within diverse populations. To accomplish this data were collected regarding the traditional attitudinal variables of job satisfaction, organizational commitment, job search, perceived alternatives, and intent to leave, as well as job embeddedness. Multiple hierarchical regression analysis was performed to assess the incremental variance job embeddedness explained with regards to intent to leave. Furthermore, personal information regarding individual characteristics was also collected to perform additional hierarchical regression analyses and assess whether or not the individual effects of tenure, education level, pay, and organizational rank moderated the influence of job embeddedness on a person's level of intent to leave.

CHAPTER 2

LITERATURE REVIEW

Preface

The fundamental concepts involved in the development of the job embeddedness construct are detailed in the following review of literature. Previous research related to turnover will be introduced prior to elaborating on the job embeddedness construct. The empirical research regarding job embeddedness will be reviewed to substantiate the effectiveness of job embeddedness in explaining additional incremental variance in voluntary turnover, improving upon what is traditionally accounted for with personal characteristics, job satisfaction, organizational commitment, job search behavior, perceived job alternatives and intent to leave. The review will conclude with an evaluation of individual demographics (e.g. pay, education level, tenure, and organizational rank) and their predicted influences on an individual's work-related attitudes (e.g. job satisfaction, organizational commitment, and perceived alternatives).

Turnover

The two fundamental types of turnover studied are voluntary and involuntary. Price (1977) defined voluntary turnover as movement across the membership boundaries of a social system initiated by the individual. In contrast, the individual does not initiate involuntary turnover. Voluntary turnover entails quitting or resigning, whereas involuntary turnover is associated with dismissals, layoffs, deaths, and retirements. The efforts of most researchers have been focused primarily on ways to better understand and limit voluntary turnover versus involuntary for two main reasons. Voluntary turnover accounts for the majority of turnover that occurs. More importantly, if the causes of

voluntary turnover are known, managers can exert some influence over a person's decision to leave (Price, 1977). In an effort to determine such causes, turnover has been a key topic among many researchers over the years, especially since the first formal theory emerged over four decades ago.

March and Simon (1958) have been credited with the first formal theory regarding turnover or an employee's decision to participate. In the development of this theory, they introduced the concept of an inducements-contributions balance. The concept stemmed from previous research by Barnard (1938) and Simon (1947) regarding organizational equilibrium; a state that Barnard and Simon proposed is achieved when payments to employees are sufficient to motivate continued participation or work effort. March and Simon defined inducements as payments (e.g. wages, salary, services, etc.) organizations make to employees and contributions as work the employees accomplish for the organization. The employees compare and weigh the inducements against their values and other alternatives they may have and assign them an inducement utility value based on the perceived value of their alternatives. Similarly, the contributions employees make in the form of work are assigned a contribution utility value. March and Simon defined the utility of a contribution as the value of the alternatives an individual foregoes to make the contribution. They proposed that employees were inclined to stay with an organization when the balance between inducements and contributions was in favor of inducements. At a minimum, a balance between inducements and contributions is desired for the survival of the organization (Hom & Griffeth, 1995). March and Simon identified the inducements-contributions balance as a function of two interdependent, but distinct motivational components: perceived desirability of leaving the organization and

perceived ease of movement from the organization. Most traditional turnover models since 1958 (e.g. Hom & Griffeth, 1995; Mobley, 1977; Price & Mueller, 1981; Steers & Mowday, 1981) include these two major components as predictor variables for turnover, and commonly refer to them as job attitudes and ease of movement.

March and Simon (1958) linked an employee's motivation to leave an organization to his or her satisfaction with the job, suggesting that individuals who were more satisfied with their job had less perceived desirability of movement. Expounding on the concept, they proposed three major influences on job satisfaction. First, job satisfaction is enhanced when a person's job becomes more aligned with personal goals and preferences. On the other hand, a significant difference between the reality of job characteristics and the self-image of the individual performing the job increases dissatisfaction and the desire to move. Second, job satisfaction is increased by a higher predictability of instrumental relationships on the job. For example, being aware of equipment capabilities would enable an individual to predict an expected output and enhance job satisfaction. Third, job satisfaction is influenced by the compatibility of work requirements with the requirements of other roles or extra duties performed in conjunction with the primary job. March and Simon (1958) posited that job satisfaction increases as job requirements become more aligned with additional work roles of the employee. During this phase of turnover research, March and Simon (1958) concentrated primarily on additional roles as work related. Community and family related roles were not considered.

In addition to job satisfaction, March and Simon (1958) discussed a relationship between the size of an organization and the perceived desirability of movement. They

proposed larger organizations would foster a greater perceived possibility of intra-organizational transfer, thereby decreasing the perceived desire to leave. Simply transferring jobs within the same organization did not necessitate leaving and was not identified as turnover. For an illustration of the propositions regarding March and Simon's (1958) model of perceived desirability of movement, refer to Appendix A, Figure A1.

Insert Figure A1 about here

In addition to the perceived desirability of movement, March and Simon (1958) referred to the state of the economy as the most accurate predictor of turnover and related turnover directly to the perceived ease of movement from an organization. They related the number of perceived extra-organizational alternatives to the availability of acceptable jobs for which an individual is qualified. The greater the number of available alternate jobs an individual identifies, the greater the perceived ease of movement.

March and Simon (1958) also recognized business activities and the number of visible firms as instrumental components in determining an individual's perceived extra-organizational alternatives. Low business activity or a weak economy translates into fewer available jobs. As for visibility, a company's status, size, type of products produced, number of high profile employees and growth rate are crucial in determining its level of visibility, but an individual can expand the number of visible firms simply by increasing personal contacts through outside organizations. Organizational visibility is not the only factor affecting the individual's propensity to search for alternative jobs; an

individual's visibility within multiple organizations also plays a key role in perceived ease of movement.

With reference to individual visibility, March and Simon (1958) suggested the range of alternate organizational contacts, social status, and the uniqueness of an individual would increase his or her visibility. Furthermore, they concluded that an individual's tendency to search would enhance his or her visibility and emphasized that job satisfaction and habituation directly influenced the desire to search. Refer to Appendix A, Figure A2 for an illustration of March and Simon's (1958) model of factors affecting perceived ease of movement.

Insert Figure A2 about here

When tied to employee turnover, the perceived desirability of movement and perceived ease of movement models come together to form March and Simon's (1958) model of motivation. The work of March and Simon (1958) and the development of the model of motivation have influenced many successive theorists and shaped much of the existing turnover theory (i.e., Mobley, 1977; Porter & Steers, 1973; Price, 1977).

Although the work of March and Simon (1958) is credited for shaping conceptual thinking regarding turnover, it was 15 years before a new turnover theory emerged in academic literature. Porter and Steers (1973) offered the next major turnover theory. In accordance with previous research, Porter and Steers believed job satisfaction was a principal factor in turnover. They proposed four categorical factors regarding the global concept of job satisfaction: (a) organizational factors (e.g., pay and promotion policy); (b) immediate work environment factors (e.g., unit size, supervision, and co-worker

relations); (c) job-related factors (e.g., nature of job requirements); and (d) personal factors (e.g., age and tenure). Each category represented a separate level in the organization. Porter and Steers (1973) identified several variables relating to turnover in all four categorical factors. With several variables identified in each categorical factor, the major roots of turnover were identified throughout the structure of the entire organization—identifying numerous work-related determinants of turnover.

In an effort to summarize and explain the effects of the many work-related determinants identified, Porter and Steers (1973) introduced the concept of met expectations. They viewed the concept of met expectations as what a person expects to encounter on his or her job. Discrepancies occurred when there were differences between what people expected to encounter and what they actually encountered on the job, leading to unmet expectations. The level of unmet expectations determined an employee's degree of satisfaction or dissatisfaction, directly influencing the decision to remain or search for new alternatives. Under these circumstances, job satisfaction was viewed as the total sum of an individual's met expectations on the job.

Porter and Steers (1973) found individuals may have their own unique set of job expectations with varying levels of importance placed on each one. For an individual to remain on the job, his or her most important or highly valued expectations must be met. Porter and Steers (1973) pointed out that expectations may change or be modified as previous expectations are met over time and emphasized the importance of being aware of current expectations. They also point out that increasing the pay of an individual who is not interested in money would be fruitless. Under this premise, Porter and Steers (1973) found that individuals who had increased met expectations had higher levels of

job satisfaction and were less likely to turnover; whereas, unmet expectations contributed to a level of job dissatisfaction, which in turn translated into turnover.

Another key contributor to the study of turnover was Mobley (1977). He agreed there was a significant and consistent relationship between job satisfaction and turnover, but he called attention to the typically weak correlations reported between job satisfaction and turnover that had been produced in previous research. With such low correlations, Mobley (1977) proposed there were other influences or psychological processes involved between job dissatisfaction and turnover. To address the psychological processes involved, he introduced the concept of intermediate linkages between the evaluation of one's present job, which established a level of job satisfaction or dissatisfaction, and turnover. Mobley (1977) developed a model illustrating the psychological processes involved in turnover that is provided in Appendix A, Figure A3.

Insert Figure A3 about here

The model describes a process in which a negative evaluation of one's job creates job dissatisfaction and leads directly to thoughts of quitting. The next step, evaluation of job-seeking expected utility and cost of quitting, entails assessing the likelihood of obtaining a comparable job and weighing the benefits of the new job against the cost of searching (e.g. travel, lost work time, etc.) and what would be sacrificed (e.g. seniority, vested benefits, etc.) by quitting the old job. If the costs associated with quitting are high or the likelihood of finding a comparable job is low, the individual may reevaluate his or her current status, experiencing a possible change in level of job satisfaction as well as intentions (Mobley, 1977).

If finding an alternate job is probable and the associated costs are low, it is believed that this will induce intentions to seek and eventually lead to searching for alternatives. If no alternatives are found, the individual may either reevaluate and accept his or her current job and situation or continue the search effort. Conversely, finding alternatives would entail evaluating and comparing them to his or her present job. If the comparison reveals the alternate job is more suitable, it will stimulate the individual's intent to quit and eventually lead to quitting (Mobley, 1977). In contrast, should the comparison favor the current job, the individual may reevaluate his or her current situation and accept the current state of affairs or continue the search effort.

Motivated by what he termed a lack of inclusiveness or traditional researchers neglecting to take into account previously identified determinants of turnover; Price (1977) conducted a comprehensive literature synthesis in an attempt to provide a more inclusive explanation of the determinants of turnover. He identified five primary determinants of turnover: pay, integration, instrumental communication, formal communication, and centralization. Although he introduced what were identified as five determinants of turnover, he still identified job satisfaction as the intervening variable between the determinants and turnover. Simply stated, those determinants affected an individual's level of job satisfaction. Not detracting from previous literature, job satisfaction was still the primary influence on turnover.

Price (1977) defined the primary determinants of job satisfaction such that individuals are believed to act in their own best interest to maximize their satisfaction over dissatisfaction. Differentiating between pay and satisfaction with pay, he identified pay as simply a sum of money received for services, whereas satisfaction with pay

described a social psychological response to the amount of money received. Closely interpreted as group participation and cohesion, Price (1977) defined integration as the extent to which individuals participated in primary relationships. Instrumental communication was typically formal (i.e., conferences, training sessions, etc.) and job related, providing a realistic picture of the organizations work environment and expectations (Price, 1977). Centralization was the degree to which power was distributed throughout an organization. A dictatorship would be representative of a high degree of centralization. He deduced that increases in pay, integration, and instrumental and formal communication increased job satisfaction and reduced turnover, whereas centralization had the opposite effect.

Price (1977) introduced the concept of opportunity or the availability of alternate employment as a second intervening variable to better explain the relationship between the determinants, job satisfaction, and turnover. He integrated organizational variables (determinants), environmental variables (opportunity), and individual variables (satisfaction) into one model. A key attribute of the model was the distinction that dissatisfaction with one's job leads to turnover only if alternate job opportunities are high; otherwise, dissatisfied employees tend to stay (Price, 1977). Refer to Appendix A, Figure A4 for an illustration of Price's causal model of turnover.

Insert Figure A4 about here

The work of Price and Mueller (1981) expanded Price's (1977) original model and identified 11 determinants that produced variations in voluntary turnover. The determinants include opportunity, routinization, participation, instrumental

communication, integration, pay, distributive justice, promotional opportunity, professionalism, general training, and kinship responsibility. They further proposed two crucial variables, job satisfaction and intent to stay, intervened between the determinants and voluntary turnover. Seven of the determinants were identified to impact voluntary turnover indirectly through job satisfaction. Price and Mueller (1981) proposed repetitive work lowered job satisfaction, whereas participating in job-related decisions, having current information regarding work issues, forming friendships at work, receiving fair pay and compensation, and having ample opportunity for advancement all increased job satisfaction and fostered greater intent to stay (Price & Mueller, 1981).

The addition of intent to stay as an intervening variable between job satisfaction and turnover was the major change from Price's (1977) original model. As such, three additional determinants were identified to have an indirect impact on turnover through intent to stay. Professionalism and generalized training were determined to have an inverse relationship with intent to stay, whereas obligations to local kinship fostered a mutual relationship with intent to stay (Price & Mueller, 1981). In sum, Price and Mueller regarded intent to stay and availability of alternate jobs elsewhere as the primary determinants of turnover. Refer to Appendix A, Figure A5 for an illustration of Price and Mueller's (1981) revised causal model of turnover.

Insert Figure A5 about here

Working on the premise that most models of the turnover process were more complementary than contradictory, Bluedorn (1982) synthesized three fundamental turnover models to gain a more complete understanding of the turnover process. He

incorporated the causal model by Price (1977), a model that had developed around the organizational commitment concept, and Mobley's (1977) intermediate linkages model. The model was designed purposely to incorporate individual (attitudinal and demographic), organizational, and environmental variables (Bluedorn, 1982). Refer to Appendix A, Figure A6 for an illustration of Bluedorn's (1982) unified model of turnover.

Insert Figure A6 about here

The model studied included 5 criterion variables (job satisfaction, organizational commitment, job search, intent to leave, and turnover) and 15 determinant variables (promotional opportunities, centralization, formalization, instrumental communication, equity, pay, routinization, member integration, environmental opportunities, foregone environmental opportunities, role conflict, length of service, age, education, and marital status) leading directly to job satisfaction. Based on previous empirical tests of Price's (1977) model, Bluedorn (1982) believed the independent effects of the demographic variables (e.g. age, length of service, etc.) would be significant. Establishing a significance level of .05 for variable effects on the 5 criterion variables during data analysis reduced the number of significant variables from 15 to 9 and included instrumental information, equity, age, potential role conflict, promotion opportunities, routinization, education, foregone environmental opportunities and environmental opportunities. Of these, the four most significant determinants were identified in ascending order as environmental opportunity, intentions to stay or leave, routinization, and age. These four determinants were linked directly and indirectly to turnover,

whereas, the remaining five influenced turnover indirectly through one or more of the remaining four criterion variables (job satisfaction, organizational commitment, job search, and intent to leave). Of particular interest was the fact that the determinants not directly linked to turnover demonstrated insignificant influence.

The recurring theme in turnover literature and models has been that the turnover process is inspired by poor attitudes (Hom & Griffeth, 1995). Relative to literature of their time, earlier models (March & Simon, 1958; Mobley, 1977; Price, 1977) alluded to either a lack of job satisfaction or job dissatisfaction as the primary reason employees develop thoughts of quitting. Although Price (1977) incorporated job satisfaction into his model, he introduced the concept of opportunity as an intervening variable. He made the distinction that dissatisfaction with one's job leads to turnover only if alternate job opportunities are high; otherwise, dissatisfied employees tend to stay. Expounding on Price's (1977) model, Price and Mueller (1981) later added intent to stay as an intervening variable between job satisfaction and turnover. Price and Mueller (1981) regarded intent to stay and availability of alternate jobs elsewhere as the primary determinants of turnover. Later models, like Bluedorn (1982), also concentrated on organizational commitment as an intervening variable between job satisfaction and turnover. Similarly, Hom and Griffeth (1995) found individuals who were dissatisfied were more receptive to the idea of moving, whereas individuals who had been performing a particular job for many years were less likely to search for alternative jobs. Although there have been very few studies directly testing March and Simon's (1958) original model, many researchers have focused on behavioral intentions in general to better understand turnover. Other researchers have taken it upon themselves to compare and

study previous research regarding the relationship between behavior intentions and turnover by performing a meta-analysis of several studies.

Steel and Ovalle (1984) conducted a meta-analysis of 34 independent studies regarding behavioral intentions and identified a weighted average correlation of .5 between behavioral intentions and employee turnover. Unfortunately, they found even with all the attitudinal variables historically used in research considered, researchers are hard pressed to account for more than 50% of variability in turnover (Steel & Ovalle, 1984). Acting on the basic premise that a person's decision to leave or stay could also be influenced by diverse psychological processes and activities, Mitchell et al. (2001) introduced the concept of job embeddedness to account for additional variability in turnover, adding a richness and diversity not seen in typical turnover theory.

Job Embeddedness

With so much unexplained variability regarding turnover and in an effort to account for additional variance in voluntary turnover, Mitchell et al. (2001) introduced the job embeddedness construct as a multidimensional aggregate of both the organizational and community forces that keep a person on the job. Job embeddedness encompasses both the organizational and community dimensions of link, fit, and sacrifice as predictors of intent to leave and voluntary turnover. More specifically, individuals' links to other people, teams, and groups, their perceived fit with the organization and community, and what they would have to sacrifice or give up by leaving their current job determine an established level of job embeddedness (Mitchell, et al., 2001). On this basis, and as defined by Law, Wong, and Mobley (1998), job embeddedness is an aggregate formed from six dimensions. Mitchell et al. (2001) point out that being

embedded does not cause a person to buy a house or form links within the community or organization. Instead, those activities would cause a person to become more embedded. In accordance with Law et al.'s (1998) path diagram, causal arrows would flow from the causal indicators (items) to the six dimensions and from the six dimensions to the aggregate construct. Although the concept of job embeddedness is relatively new, it was derived from previous theories.

Witkin, Dyk, Faterson, Goodenough, and Karp's (1962) theory of embedded figures and Lewin's (1951) field theory guided the theoretical development of the construct. According to Witkin et al. (1962), images used in psychological tests are hidden or embedded inside larger figures and become immersed in their backgrounds. These embedded figures become integrated into and part of the surroundings by forming strong connections that make them hard to separate and indistinguishable. Similarly, people that are deeply embedded and immersed in their surroundings will have many strong connections. For instance, as people become immersed in the local community, such as participating in social and professional organizations, they form attachments and connections that influence their thoughts and decisions. The more enmeshed people become within this web, the more important it is to understand and consider their many connections in an effort to completely understand their attitudes, beliefs, values, and decisions.

Similarly, Lewin's (1951) field theory suggested people are entangled in an intricate network of connections or links. Similar to the concept of embedded figures, an individual's choices are better understood by analyzing the connections within this field collectively, rather than concentrating on isolated elements. Lewin (1951) referred to the

sum of these connections as life space, stating that the properties of an individual's life space depend partially on the state of the individual as a product of his or her history and partly on the non-psychological, or physical and social surroundings. The physical and social surroundings form a boundary around the individual's life space and provide stimuli that influence decisions. Lewin (1951) described an individual's behavior as a function of the person and his or her environment. Overall, Witkin et al. (1962) and Lewin (1951) suggested people and their environments have to be considered as one constellation of inter-dependent factors to predict behavior.

Job embeddedness utilizes the concepts of fields and embedded figures introduced by Witkin et al. (1962) and Lewin (1951) to describe the network or web of professional and social organizations that influence an individual's job choices. More precisely, job embeddedness is a multi-dimensional combination of organizational and community influences that affect a person's decision to stay (Mitchell et al., 2001).

Mitchell et al. (2001) posited that examining an individual's links, fit, and sacrifice could capture ties with his or her organization and community. Links represent the relationships one has with other people, teams, and groups on- or off-the-job. Fit reflects the individual's perceived value alignment with his or her organization and community. Sacrifice describes the cost that one associates with the decision to leave his or her current organization or community. Moreover, Mitchell et al., (2001) emphasized an individual may have a sense of link, fit, and sacrifice toward the organization that is unique from the sense of link, fit, and sacrifice he or she feels toward the local community, forming a three-by-two matrix with six dimensions to represent the total embeddedness experienced in the organization and community. Mitchell and Lee (2001)

conceded that while the level of job embeddedness may be the same, the content of the connections or specific elements could vary substantially, emphasizing the importance of considering the level of job embeddedness as a whole, as opposed to individual elements.

Mitchell et al. (2001) hypothesized job embeddedness would account for additional variance in turnover, above and beyond the traditional predictors (e.g. job attitudes and ease of movement). Job embeddedness promotes an image of both attachment and stuckedness, suggesting that people who are more embedded are less likely to leave their job (Mitchell & Lee, 2001). To explore this, Mitchell and colleagues tested the construct's ability to explain incremental variance in voluntary turnover beyond what is traditionally accounted for by personal characteristics, job satisfaction, organizational commitment, job search behavior, perceived job alternatives and intent to leave. Initially, two organizations were included in this study: a regional grocery store chain and a community-based hospital. The organizations were purposefully selected for several reasons. Both organizations employed a diverse group of people, were experiencing relatively high turnover rates and came from areas where unemployment rates were low (less than 5%), suggesting those who wanted to leave their jobs could have departed.

Data from the two samples provided evidence of both convergent and discriminate validity for job embeddedness. Convergent validity is the process of demonstrating measures that should be related are in reality related; whereas, discriminate validity is the process of demonstrating measures that should *not* be related are *not* related. In support of convergent validity, Mitchell et al. (2001) demonstrated that job embeddedness and the dimension fit to organization were both significantly and

positively correlated with job satisfaction and organizational commitment. Further support for convergent validity was evident when job embeddedness was found to be negatively correlated to job search and job alternatives, implying the more people are embedded the less likely they are to search for or believe alternatives exist.

In support of discriminate validity, Mitchell et al. (2001) documented little correlation between organizational links and job satisfaction, and organizational links and organizational commitment. The findings suggested the non-affective dimensions of job embeddedness (e.g. marital status, number dependants, home owner status, etc.) were weakly related to the traditional measures of employee attachment. Mitchell et al. further substantiated discriminate validity when they reported that the community-based sub-dimensions of job embeddedness (community link, fit, and sacrifice) exhibited lower correlations with overall job satisfaction and organizational commitment than their organizational-based counterparts.

Further analysis of both samples suggested a negative relationship between intent to leave and actual voluntarily leaving, and job embeddedness. Controlling for the effects of gender, job satisfaction, and organizational commitment among the grocery store employees, Mitchell et al. (2001) demonstrated how job embeddedness explains additional variance beyond what was accounted for by job satisfaction and organizational commitment. Similarly, with the effects of gender, perceived alternatives, and job search controlled among the hospital employees, job embeddedness accounted for significantly more variability in voluntary turnover than perceived alternatives and job search. After likening job satisfaction and organizational commitment to March and Simon's (1958) perceived desirability of movement, and perceived alternatives and job search to their

perceived ease of movement and controlling both, Mitchell et al. noted job embeddedness significantly improved prediction of turnover in the hospital sample. The findings provided initial support for job embeddedness as a construct that accounts for additional turnover related to measures of job satisfaction and organizational commitment (Mitchell et al. 2001).

In a second study that was conducted and later published by Lee, Mitchell, Sablynski, Burton, and Holtom (2004), data were collected at a large regional service center (i.e., telemarketing, data processing, customer service, human resources). In the study, they referred to embeddedness within the community and within the organization as off-the-job and on-the-job embeddedness, respectively, and differentiated between the effects of each on voluntary turnover. Their results supported previous findings that overall job embeddedness is significantly related to turnover. More specifically, when job satisfaction and organizational commitment were statistically controlled, off-the-job embeddedness was significantly and negatively related to turnover, whereas on-the-job embeddedness was not (Lee et al., 2004) related to turnover. Consequently, they found that on-the-job embeddedness moderated the negative effects of job performance on subsequent voluntary turnover. The relationship was stronger for higher levels of on-the-job embeddedness. Also, both on- and off-the-job embeddedness were found to moderate the negative effects of organizational citizenship on voluntary turnover. Overall, the study provided additional support for the job embeddedness construct's ability to account for additional voluntary turnover.

In a paper, preceding the publication of the original manuscript for Lee et al. (2004), Mitchell and Lee (2001) analyzed the results associated with these three studies

collectively and identified three major findings across the samples. In all three samples, job embeddedness was reliably measured as either an aggregate (collective) or dimensionalized (i.e. fit in the organization, fit in the community, links to the organization, links to the community, sacrifice in leaving the organization, sacrifice in leaving the community) score, was significantly correlated with intention to leave, and accounted for subsequent voluntary turnover, over and beyond what was explained by job satisfaction, organizational commitment, and job involvement (Mitchell & Lee, 2001). Independently, the studies provided empirical evidence supporting the job embeddedness construct's ability to account for additional voluntary turnover, and collectively, the findings contributed new insights into the study of turnover (Mitchell & Lee, 2001).

The findings presented by Mitchell and Lee (2001) suggest people leave their jobs for various reasons and in ways different from conventional turnover theory. For over two decades, many researchers have focused on dissatisfaction and perceived alternatives as the primary causes of turnover (Mitchell & Lee, 2001). By demonstrating how job embeddedness takes into account different psychological processes and activities, Mitchell and Lee (2001) added a richness and diversity not seen in typical turnover theory. The premise for their research was based on shocks or unexpected events that were both job related (e.g., mergers, corporate buyouts, missed promotions, etc.) and personal (e.g., marriage, pregnancy, child leaving home, divorce, etc.). Mitchell and Lee (2001) posited these shocks stimulated an action in an unconventional manor, leading to one of four decision paths.

The first decision path involved a shock that was similar to a previous experience; the current decision or action taken in reference to the shock was then based on or

scripted from actions taken in response to the previous experience. The decision is almost scripted, and action is practically automatic. This path was unique because it did not involve an evaluation of job alternatives and the action taken was not the result of job dissatisfaction. The shock could be work-related (e.g. finding out the company is involved in fixing prices or has taken a shady client, being asked to falsify documents); more importantly, Mitchell and Lee, (2001) point out that the shock could have resulted from personal factors (e.g. marriage, pregnancy, mortgage being paid off, last child leaving home), expanding beyond traditional turnover models.

The second decision path included a shock to the system, but with no prior experience match to base a decision and no available job alternatives. Because of the lack of alternatives, the individual may be forced to re-evaluate his or her values, organizational attachment and/or commitment as part of the decision process. Similar to the first decision path, Mitchell and Lee (2001) found the shock could be either work-related (e.g. victim of sexual harassment) or personal (e.g. unexpected pregnancy). According to Mitchell and Lee (2001), the pregnant mother would have to decide if working was compatible with motherhood (values), having a career (trajectory), or continuing in her current job progression (trajectory).

The third decision path also entailed a shock to the system with no prior experience to base a decision, but there were job alternatives available. In opposition to traditional turnover models, the individual may be completely satisfied and committed to his or her job, but the shock would force a decision. As with the second decision path, the shock is assessed for compatibility with an individual's value, trajectory and strategic

images. Depending on the type and severity of the shock, the individual would weigh his or her choices and choose the better alternative.

The fourth and final decision path did not include a shock. The individual simply reassessed his or her current commitment to the organization. It could be initiated by gradual changes in the job or organization that build up, causing the individual to simply become dissatisfied with his or her job after a period of time and quit. This decision path is aligned more with the traditional turnover theory of job dissatisfaction leading to the decision to quit.

Mitchell and Lee (2001) also found additional empirical evidence in support of their belief that the processes involved in staying differed from those involved in leaving. They found people stayed not only because of their links and fit, but also because of what they would have to sacrifice. A person's links and fit within the organization and local community fostered the desire to stay, while non-transferable sacrifices associated with leaving friends and communities further reinforced the desire to stay. Overall, their research substantiated there were non-affective and non-job related influences, different from traditional attitudinal measures, which kept a person on-the-job.

With the lack of extensive empirical research on job embeddedness, my study will replicate the findings of Mitchell et al. (2001) to further refine, and evaluate the extent to which job embeddedness influences intent to leave and voluntary turnover. Previous tests of the construct have been limited to hospital, grocery store, and regional service center employees. In accordance with Mitchell et al.'s (2001) suggestion to evaluate the construct in various populations, this study uses members of a military organization to test the construct's ability to account for additional variability in turnover within diverse

populations. In accordance with this research objective and previous findings, the first research hypothesis is:

> *H1: Job embeddedness will account for variance in turnover intentions beyond the variance accounted for by job satisfaction, organizational commitment, job search, and job alternatives.*

Individual Characteristics

Individual demographic characteristics are considered key variables in psychological research regarding perceptions and attitudes and have been associated with significant effects on job performance, satisfaction, and turnover (Tsui & O'Reilly, 1989). Of particular interest are the effects of tenure, education level, pay, and organizational rank on an individual's work related attitudes (e.g. organizational commitment, job satisfaction, and job search).

Tenure. Tenure is commonly referred to as the length of time an individual has worked for a company or organization. Through its consistent and negative relationship with turnover, it has been identified as one of the better predictors of turnover. Arnold and Feldman (1982) identified tenure as one of five variables with the strongest relationship to turnover. Intuitively, one would surmise high tenure was the result of high job satisfaction and commitment, and low intent to search for alternate employment; otherwise, individuals would terminate their employment. Vivien and Thompson (1998) found the amount of time an individual has worked for an organization is viewed more as an investment, having significant impacts on work-related attitudes (job satisfaction, organizational commitment, intention to quit and career plateau). Furthermore, long-term service in an organization increases fringe benefits, independence, and control; high

tenured employees perceive these as sacrifices associated with leaving (Vivien & Thompson, 1998).

Distinguishing between position and organizational tenure, Mathieu and Zajac (1990) performed a meta-analysis and demonstrated a positive relationship between tenure and job commitment. More precisely, position tenure formed a psychological attachment to the organization, whereas increased organizational tenure developed larger personal investments (e.g. pension plan contributions); together they contributed significantly to one's overall commitment. They identified a significant positive relationship between job satisfaction and organizational commitment, as well as a significant negative relationship with intent to search and organizational commitment.

Similar to the relationship described between tenure and work-related attitudes, Mitchell et al. (2001) identified job embeddedness as positively correlated with job satisfaction and organizational commitment, and negatively correlated with job search. In relation to tenure, the longer people stay in one location and work for an organization the more likely they are to become involved in their job and community. They could develop community and organizational links, increasing their level of job embeddedness and the sacrifices associated with leaving. Based on the similar effects tenure and job embeddedness have on work related attitudes, the second research hypothesis is:

> *H2: Tenure will influence the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for higher tenured respondents as compared to respondents with less tenure.*

Education. An individual's education level has also been found to influence his or her level of organizational commitment, job satisfaction and job search. Mowday, Porter and Steers (1982) identified a significant inverse relationship between

organizational commitment and an individual's education level. They suggested people with higher education levels might have higher expectations than the organizations can meet, leading to less commitment. DeCotiis and Summers (1987) suggested that the inability of organizations to meet higher expectations of educated individuals leads to inadequate rewards and a decline in organizational commitment. Additionally, Mathieu and Zajac (1990) proposed the negative correlation between education level and commitment was due to the numerous job options available to those who are better educated.

In addition to the negative relationship with job commitment, Glisson and Durick (1988) found education level to be predictive of intent to stay. They attributed low job movement to the jobs held by less-educated people; the jobs were noncompetitive, low skilled, and had no pay or career advancement associated with moving. In sum, education level is seen as having a predominately positive relationship with job search efforts, and a negative relationship with organizational commitment and job satisfaction.

Conversely, job embeddedness has demonstrated the opposite effect on job search, organizational commitment and job satisfaction. Based on the inverse relationship education level and job embeddedness have with respect to work-related attitudes (job satisfaction, job search, and organizational commitment), the third research hypothesis is:

> *H3: Education level will influence the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for less educated respondents as compared to the more educated respondents.*

Pay. Due to its strong influence on determining individual job attitudes, researchers have been able to demonstrate that pay satisfaction is a primary predictor of

job satisfaction**.** Satisfaction with one's pay increases the perceived costs associated with leaving the organization and fosters positive job attitudes (Mathieu & Zajac, 1990). Price and Mueller (1981) derived a direct relationship between an individual's pay and satisfaction. Imbalances between employees' pay and their contributions, similar to the inducement-contribution balance concept of March and Simon (1958), promotes pay dissatisfaction and creates job dissatisfaction (Ironson, Smith, Brannick, Gibson, and Paul, 1989). Ting (1997) demonstrated that pay satisfaction consistently had significant, positive effects on job satisfaction, while Cohen-Charash and Spector (2001) and Hom and Griffeth (1995) found that individuals with high levels of pay satisfaction are also highly committed to the organization.

Being paid more shifts the inducement-contribution balance more to the workers favor and appears to increase an individual's job satisfaction and organizational commitment. Job embeddedness has similar effects on the same work-related attitudes. In relation to job embeddedness, highly paid individuals are likely to view their pay as an organizational sacrifice associated with leaving their current job and increase their level of job embeddedness. Based on the similar effects pay and job embeddedness have on work related attitudes (job satisfaction, organizational commitment, and intent to leave), the fourth research hypothesis is:

> *H4: Pay will influence the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for higher paid respondents as compared to lower paid respondents.*

Organizational Rank. An individual's position or ranking within the organizational is also believed to influence his or her level of organizational commitment. However, it is difficult to distinguish between the individual influences of age, tenure,

and job level; older individuals tend to have more organizational tenure and hold higher positions than younger employees (Mathieu & Zajac, 1990). Meyer and Allen (1984) suggested older workers are more committed to an organization because they have advanced to better positions and are more satisfied with their job, indicating a positive correlation between organizational rank and organizational commitment. Mathieu and Zajac (1990) equated increased organizational commitment associated with higher job levels to prestige or status associated with higher positions. They further suggest organizational commitment could be influenced by potential financial gain associated with opportunities for job level advancement.

Advancing in rank or position within an organization coincides with an increased level of job satisfaction and organizational commitment. Successfully advancing in an organization would imply value alignment on behalf of the person and the organization. In relation to job embeddedness, a level of organizational fit would exist. Furthermore, as a person progresses in rank they develop a comfort level within the organization, as well as other fringe benefits related rank progression, all of which would be considered a sacrifice and influence his or her level of job embeddedness. Based on the similar effects organizational rank and job embeddedness have on work related attitudes (job satisfaction, organizational commitment, and intent to leave), the final research hypothesis is:

> *H5: Organizational rank will influence the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for respondents in higher positions or ranks as compared to respondents in lower positions or ranks.*

CHAPTER 3
METHOD

Procedures

Data were collected via a 124-item questionnaire mailed to military respondents at a large military installation in the upper Midwestern U.S. The questionnaires were distributed to the organizational members through a designated point of contact who assigned several key personnel as intermediate distribution and collection points. To encourage participation and ensure the anonymity of participants, each questionnaire included a cover letter directing respondents to seal the completed survey in the envelope provided and return it to their designated collection point. The organization's representative collected the questionnaires from the intermediate collection points and mailed them to the research institute. Those who missed the deadline to return the survey to the collection point were directed via the directions in the cover letter to put the survey in the pre-addressed envelope provided and return it through official mail channels at no cost to the participants.

The expectations of survey participants were explained in the cover letter and on the front page of each survey booklet. Furthermore, the cover letter summarized the fundamental purpose for the data collection and encouraged everyone's participation in the study. Finally, participants were instructed to direct any questions directly to the researchers using contact information that was provided.

Participants

The survey population included the members of a United States Air Force (USAF) maintenance organization located at a large, midwestern military installation (N = 250). Of those, 230 respondents returned questionnaires and 224 of those provided

usable data, resulting in an 89.6% response rate. Six of the returned questionnaires were missing most of the data entries or were simply not completed. Additionally, three questionnaires were returned separately through official mail channels. Data were coded and entered by the researcher. A second researcher verified the accuracy of data entry. The typical respondent was a married (n = 139), 29 year old (n = 222, SD = 7.79), white male who had served in the military approximately 10 years (n = 220, SD = 7.56).

Measures

The questionnaire was designed to measure six dimensions and individual characteristics. The six dimensions included job embeddedness, job satisfaction, job search behavior, organizational commitment, job alternatives, and intentions to leave. The individual characteristics of interest included tenure, education level, pay, and organizational rank. The questionnaire used is attached as Appendix B, and a consolidated list of reliabilities, means, standard deviations, and population sizes for all measures and their respective sub-dimensions can be found in Appendix C, Table C1.

Insert Appendix B and Table C1 about here

Job Embeddedness. Job embeddedness is a multidimensional aggregate of on-the-job and off-the-job forces that influence individual's decisions to stay on or leave a job. More specifically, it reflects the extent to which people feel they are linked to the people and activities within their community and organization; they fit with their community and organization; and they consider the sacrifices they would make for leaving their community and organization (Mitchell, Holtom, Lee, Sablynski & Erez, 2001). As such, the job embeddedness scale (adapted from Mitchell et al., 2001)

encompasses variables for all six dimensions. The number of items for each dimension ranges from 3 to 10, totaling 40 items overall. Unless otherwise indicated, participants indicated their sense of each embeddedness measure on a seven-point Likert-type scale anchored from *strongly disagrees* to *strongly agree*. The aggregate measure of embeddedness was computed by taking the mean of the six dimensions. To ensure equal weighting of the six dimensions, all items were standardized prior to calculating the means. Using standardized scores for all items, the Coefficient Alpha for the all-inclusive 40-item job embeddedness scale for this research was .91 (n = 183).

Fit to community. This sub-dimension was comprised of five items developed by Mitchell et al. (2001). Fit to community represents the extent to which a person's values and goals align with those in the community. The measure was comprised of survey items 1, 3, 5, 8, and 9; in which, participants were asked to reply to items such as "I really love the place where I live," and "The weather where I live is suitable to me." Mitchell et al. reported a Coefficient Alpha for the fit to community scale of .78, whereas the Coefficient Alpha from this research data was .89 (n = 222, M = 3.67, and SD = 1.59).

Fit to organization. This sub-dimension was measured with nine items developed by Mitchell et al. (2001). Fit to organization represents the extent to which a person's values and goals align with those of the organization. The measure was comprised of survey items 2, 4, 6, 7, 10, 11, 12, 13, and 14; in which, participants were asked to reply to items such as "I like the members of my squadron," and "I fit with the squadron's culture." Mitchell et al. reported a Coefficient Alpha for the fit to

organization scale of .75. The reported Coefficient Alpha from this research data was .90 (n = 220, M = 4.85, and SD = 1.27).

Links to community. This sub-dimension was measured with six items developed by Mitchell et al. (2001). Link to community represents the extent to which a person develops informal and formal connections (e.g. friends, family, teams and community groups) in his or her community. The measure was comprised of survey items 29, 31, 37, 38, 39, and 40; in which, participants were asked to reply (yes or no) to items 37, 38, 39, and 40 and included such questions as "Are you currently married?," and "Do you own the home you live in?" For data analysis purposes the (yes or no) responses were coded as 1 or 0 respectively. The remaining two items, "How many immediate family members live within 60 miles?," and "How many of your closest friends live nearby?" were fill-in-the blank items. Responses to the two fill-in-the blank items were continuous data and had to be scaled and recoded as (0 or 1) with any original response above 0 being recoded as a 1. Mitchell et al. reported a coefficient alpha for the links to community scale of .77. The Kuder-Richardson Formula 20 (KR-20), which is comparable to the Chronbach's Alpha for dichotomous data, was accomplished to determine the scale reliability for this sample. The KR-20 from this sample was .46 (n = 224, M = .34, and SD = .24).

Links to organization. This sub-dimension was measured with seven items developed by Mitchell et al. (2001). Link to organization represents the extent to which a person develops informal and formal connections (e.g. friends, teams and work groups) in his or her organization. The measure was comprised of survey items 28, 30, 32, 33, 34, 35, and 36; in which, participants were asked to reply with short answer

numeric write-in responses to such questions as "How long have you been in your present position?," "How long have you been in the Air Force?," and "How long have you been assigned to this squadron?." The original responses to all the items were entered in months and ranged from 0 to 345 between items. To ensure equal weighting between all survey items the responses were normalized prior to performing data analysis. Mitchell et al. reported a Coefficient Alpha for the links to organization scale of .65. The Coefficient Alpha from this sample was .45 (n = 206, M = 29.29, and SD = 21.36).

Community-related sacrifice. This sub-dimension was measured with three items developed by Mitchell et al. (2001). Community-related sacrifice represents the extent to which a person perceives material and psychological costs are associated with leaving his or her community (e.g. friendships, relationships, family schools, location, etc.). Respondents were asked to reply to the three items: (a) "Leaving this community would be very hard," (b) "People respect me a lot in my community," and (c) "My neighborhood is safe." Mitchell et al. reported a Coefficient Alpha for the community related sacrifice scale of .61. The reported Coefficient Alpha from this sample was .64 (n = 224, M = 4.46, and SD = 1.23).

Organization-related sacrifice. This sub-dimension was measured with ten items developed by Mitchell et al. (2001). Organization related sacrifice represents the extent to which a person perceives material and psychological costs are associated with leaving his or her organization (e.g. friendships, relationships, position, stability, future opportunities, etc.). The measure was comprised of survey items 16, 18, 20, 21, 22, 23, 24, 25, 26, and 27; in which, participants were asked to reply to items such as "The perks on this job are outstanding," and "I am well compensated for my level of

performance." Mitchell et al. reported a Coefficient Alpha for the organizational related sacrifice scale of .85. The reported Coefficient Alpha from this sample was .85 (n = 214, M = 4.46, and SD = 1.10).

Job Satisfaction. Job Satisfaction is a culmination of an employee's attitudes about the job and aspects of the job. The Job Satisfaction Scale (adapted from Spector, 1997) is a 36-item, 9-faceted scale developed to assess these attitudes. The nine sub-scales, with their respective survey items, include pay (items 41, 50, 59, and 68), promotion (items 42, 51, 60, and 73), supervision (items 43, 52, 61, and 70), fringe benefits (items 44, 53, 62, and 69), contingent rewards (items 45, 54, 63, and 72), operating procedures (items 46, 55, 64, and 71), coworkers (items 47, 56, 65, and 74), nature of work (items 48, 57, 67, and 75), and communication (items 49, 58, 66, and 76). For all 36 items, respondents used a six-point Likert-type scale anchored from *very much disagrees* to *very much agree* to indicate their responses. After reversing the scores of negatively worded items (42, 44, 46, 48, 50, 52, 54, 56, 58, 59, 61, 63, 64, 66, 69, 71, 72, 74, and 76), an averaged composite of all 36 items was used to determine a level of job satisfaction. Mitchell et al. (2001) reported a Coefficient Alpha for the composite job satisfaction scale of .92. The reported Coefficient Alpha for the composite job satisfaction scale from this sample was .90 (n = 197, M = 3.90, and SD = .63).

Job Search Behavior. The job search behavior scale (adapted from Kopelman, Rovenpor, & Millsap, 1992) was computed with survey items 77 through 86 and assesses the extent to which respondents display actual search activity. Participants were asked to reply using yes or no responses to items such as, "During the past year have you read a book about getting a job?," and "During the past year have you revised your resume?"

Yes responses were scored as "1" and no responses were scored as "0". The scores were totaled from all ten items to determine a level of job search behavior. Mitchell et al. (2001) reported a Coefficient Alpha for the job search behavior scale (adapted from Kopelman, Rovenpor, & Millsap, 1992) of .80. The Kuder-Richardson Formula 20 (KR-20), which is comparable to the Chronbach's Alpha for dichotomous data, was accomplished to determine the scale reliability for this sample. The KR-20 from this sample was .66 (n = 224, M = .27, and SD = .22).

Organizational Commitment. The organizational commitment scale (adopted from Allen & Meyer, 1990) was comprised of 23 items and assessed how committed, dedicated and emotionally attached an individual is to an organization. Allen and Meyer (1990) identified a three-component model consisting of affective, continuance, and normative commitment scales, assigning the number of items to each as 8, 9, and 6 respectively. For the basis of this research, affective commitment was measured with survey items 87 through 94, continuance commitment with items 95 through 103, and normative commitment with items 104 through 109. For all 23 items, respondents used a seven-point Likert-type scale anchored from *strongly disagrees* to *strongly agree* to indicate their responses. An average of all 23 items was used to determine an overall level of organizational commitment. Mitchell et al. (2001) reported Coefficient Alphas for the affective, continuance, and normative commitment scales of .86, .85, and .93 respectively. The reported Coefficient Alpha for the overall organizational commitment scale from this sample was .89 (n = 214, M = 3.77, and SD = 1.02).

Job Alternatives. The job alternative scale (adapted from Lee & Mowday, 1987) assesses the extent to which respondents feel they have available job alternatives. To

measure this, participants were asked to reply to two items: (a) "What is the probability that you can find an acceptable civilian alternative to your job in the military?," and (b) "If you search for an alternative civilian job within a year what are the chances you can find an acceptable job?" Respondents used a five-point Likert-type scale anchored from *very unlikely* to *very likely* to indicate their responses. The two items were averaged to assess the overall job alternatives scale. Mitchell et al. (2001) reported a Coefficient Alpha for the job alternatives scale of .93. The reported Coefficient Alpha from this sample was .79 (n = 224, M = 4.01, and SD = .94).

Intent to Leave. The intent to leave scale (adapted from Hom, Griffeth, & Sellaro, 1984) assesses the extent to which respondents intend to leave an organization. To measure this, participants were asked to reply to the three items: (a) "Do you intend to leave the military in the next 12 months?," (b) "How strongly do you feel about leaving the military within the next 12 months?," and (c) "How likely is it that you will leave the military within the next 12 months?" Respondents used a five-point Likert-type scale anchored from *very unlikely* to *very likely* to indicate their responses. An averaged composite of the three items was used to determine an overall level of intent to leave. Mitchell et al. (2001) reported a Coefficient Alpha for the intent to leave scale of .95. The reported Coefficient Alpha from this sample was .97 (n = 223, M = 2.13, and SD = 1.41).

Individual Characteristics. Data regarding an individual's tenure, education level, pay, and organizational rank were collected with survey items 118, 119, 120, and 121 respectively. The responses were grouped and recoded as necessary to ensure equal weighting among all items.

Tenure. With respect to tenure, respondents were asked to disclose what their total time-in-service (TIS) was in years and months. Their responses were regrouped into six groups: (a) group one was comprised of those respondents with four or less years TIS, (b) group two was comprised of respondents with more than four years, but less than eight years TIS, (c) group three was comprised of respondents with more than eight years, but less than twelve years TIS, (d) group four was comprised of respondents with more than twelve years, but less than sixteen years, (e) group five was comprised of respondents with more than sixteen years, but less than twenty years TIS, and (f) group six was comprised of those respondents with twenty or more years TIS. Therefore, based on the six groups, the range of responses was from 1 to 6.

Education Level. Regarding education, participants were asked to select their highest level of education completed from the following choices: high school, some college, associates degree, bachelor's degree, graduate degree, doctorate, post doctorate, and professional. In accordance with the order they were listed, education level was scaled from 1 (high school) to 8 (professional), respectively. Since the highest level of education achieved by all respondents was a doctoral degree, the range of responses was from 1 to 6.

Pay. In reference to pay, participants were asked to select their current gross annual salary (not considering their spouse's) from the following eight ranges: $10K-$20K, $20k-$30K, $30K-$40K, $40K-$50K, $50K-$60K, $60K-$70K, $70K-$80K, and $80K plus. In accordance with the order they were listed, pay was scaled from 1 ($10K-$20K) to 8 ($80K plus), respectively. None of the respondents had an income of over $80K; therefore, the range of responses was from 1 to 7.

Organizational Rank. With respect to organizational rank, participants were asked to select their current rank from a list of sixteen original choices developed from the basic Air Force rank structure. Based on the ranks of the participants, all responses were grouped and recoded into five groups: (a) group one was comprised of airmen (airmen basics, airmen, and senior airmen), (b) group two was comprised of non-commissioned officers (staff sergeants, and technical sergeants), (c) group three was comprised of senior non-commissioned officers (master sergeants, senior master sergeants, and chief master sergeants), (d) group four was comprised of company grade officers (second lieutenants, first lieutenants, and captains), and (e) group five was comprised of field grade officers (majors, lieutenant colonels, and colonels). Every participant fit within one of the groups; therefore, the range of responses was from 1 to 5.

CHAPTER 4

RESULTS

Preface

A summary of the results is provided in the following chapter. In reference to the first hypothesis, multiple hierarchical regression analysis was used to assess the incremental variance job embeddedness explains with regards to intent to leave. Hierarchical regression analyses were also used to evaluate the remaining four hypotheses and assess whether or not the individual effects of tenure, pay, education level, and organizational rank moderated the influence of job embeddedness on a person's level of intent to leave. In addition, supplemental exploratory analyses were also conducted to further investigate the job embeddedness construct and its key sub-dimensions. An initial evaluation of fundamental descriptive information regarding construct correlations precedes the discussion of the hypotheses and review of the supplemental exploratory analysis.

Descriptive Information

Correlations between some of the independent variables resulted in several inferences regarding convergent and discriminate validity. Convergent validity being the process of demonstrating measures that should be related are in reality related; whereas, discriminate validity is the process of demonstrating measures that should *not* be related are in reality *not* related. Similar to the findings of Mitchell et al. (2001) regarding convergent validity and as illustrated in Table C2 of Appendix C, the correlations revealed job embeddedness was associated with work-related constructs. As such, job

embeddedness was positively and significantly correlated with job satisfaction and organizational commitment (r = .64 and .61, p < .01, respectively). Furthermore, fit to organization, the dimension Mitchell et al. (2001) found to be most directly related to the same affective measures, was also positively and significantly correlated with job satisfaction and organizational commitment (r = .68 and .53, p < .01, respectively). Conversely, job embeddedness was negatively related to job search (r = -.13, p < .05); suggesting the more people are embedded the less likely they are to search for jobs.

Comparable support was found for discriminate validity. Similar to the findings addressed by Mitchell et al. (2001), the affective dimensions of job embeddedness appeared to be weakly related to traditional measures of employee attachment. Furthermore, based on Fisher's z' transformation and comparison between independent r's as outlined in Cohen and Cohen (1975), organizational links dimension was not as highly correlated with job satisfaction (r = .07, p > .05) or organizational commitment (r = .23, p < .01). Subsequently, when Fisher's z' transformation and comparison was performed on the disaggregated community and organizational components of job embeddedness , or off-the-job and on-the-job embeddedness, respectively, as addressed in Lee et al. (2004), community job embeddedness had significantly lower correlations with overall job satisfaction and organizational commitment (r = .30 and .35, p < .01, respectively) in support of discriminate validity; conversely, organizational job embeddedness had significantly higher correlations with job satisfaction and organizational commitment (r = .72 and .64, p < .01, respectively), an indication that a distinction could be drawn between the two primary sub-dimensions of job embeddedness. More importantly, the high correlations associated with organizational

job embeddedness could be indicative of potential problems with multicollinearity, which will be further investigated in the supplemental exploratory analysis. Comparable with the findings of Mitchell et al. (2001), the data from this sample indicated evidence of convergent and discriminate validity for job embeddedness with respect to other work-related constructs.

Insert Table C2 about here

Tests of Hypotheses

The relationship between the job embeddedness and intent to leave constructs lent itself well to linear regression analysis for hypothesis one. Not only did linear regression analysis allow for the control of additional independent variables (job satisfaction, organizational commitment, job alternatives, and job search) other than job embeddedness, but the assumptions of linear regression were also tested and met. For each value of the independent variable, job embeddedness, the distribution of the dependent variable was normal. The variance of the distribution of the dependent variable, intent to turnover, was constant for all values of the independent variable. The relationships between the dependent and independent variables were linear. Finally, all observations were independent.

Regarding hypotheses two through five, linear regression analyses were also used to evaluate whether or not the effects of four individual characteristics (tenure, education level, pay, and organizational rank) on a person's level of job embeddedness were

significant enough to influence his or her level of intent to leave and be characterized as moderators. Linear regression analysis allowed for control of the traditional attitudinal variables and job embeddedness, in order to assess the combined (cross-product) effects of job embeddedness and each individual characteristic on intent to leave. It was possible to determine whether or not each individual characteristic significantly augmented the effects of job embeddedness on intent to leave.

Hypothesis 1. The linear regression analysis for the first hypothesis was accomplished using SPSS (version 12.0) predictive analysis software. Prior to performing the regression analysis, data items were scaled, recoded and/or standardized (as described in the methods section) to ensure all measures were weighted equally. Gender was controlled and entered separately in the first block due to the sample population being predominantly male (males = 188; females = 33). The subsequent blocks were comprised of the remaining independent variables entered in the following order: job satisfaction, job alternatives, organizational commitment, job search, and job embeddedness. This method controlled for the effects of traditional attitudinal variables (job satisfaction, job alternatives, organizational commitment, and job search) and allowed for the individual assessment of the predictability of job embeddedness with respect to intent to leave.

Change in R^2 values were evaluated to determine the amount of incremental variance accounted for by the independent variables, and the significant change in *F*-values were compared to determine if the respective variables had a significant influence on the dependent variable intent to leave. As summarized in Table C3 of Appendix C, the total variance accounted for with all the independent variables combined (job

satisfaction, job alternatives, organizational commitment, job search, and job embeddedness) was $R^2 = .34$, $p < .05$. The variance accounted for by each of the attitudinal variables was significant (job satisfaction $\Delta R^2 = .04$, $p < .05$, job alternatives $\Delta R^2 = .05$, $p < .05$, organizational commitment $\Delta R^2 = .13$, $p < .05$, job search $\Delta R^2 = .10$, $p < .05$). More importantly, job embeddedness accounted for a significant amount of variance above and beyond all other attitudinal variables ($\Delta R^2 = .01$, $p < .1$). In sum, hypothesis 1 was largely supported.

Insert Table C3 about here

Hypothesis 2. SPSS (version 12.0) predictive analysis software was also used to perform the linear regression analysis for the second hypothesis. Prior to performing the regression analysis, data items were regrouped and recoded (as described in the methods section), and then standardized to ensure all measures were weighted equally. Additionally, a new independent variable comprised of the cross product between job embeddedness and tenure was created. To accomplish the linear regression, gender was again controlled due to the sample population being predominantly male. As such, gender was entered in the first block along with all the remaining independent variables, including the cross product term comprised of job embeddedness and tenure, in the following order: job satisfaction, organizational commitment, job alternatives, job search, job embeddedness, tenure, and the cross-product term. This method controlled for the effects of traditional attitudinal variables (job satisfaction, organizational commitment, job alternatives, and job search), and job embeddedness. It also allowed for the individual assessment of the cross product on an individual's level of intent to leave in

order to determine if tenure significantly moderated the effects of job embeddedness with respect to intent to leave.

The standardized regression coefficient (β) and the significant change in *F*-values for the cross-product term were evaluated to determine if there was a significant influence on the dependent variable intent to leave. The influence accounted for by the cross product was insignificant (β = .05, $p > .1$). Based on those results, tenure was not a moderator of the effects of job embeddedness on intent to leave. In sum, hypothesis 2 was not supported. The results are summarized in Table C4 of Appendix C.

Insert Table C4 about here

Hypothesis 3. The linear regression analysis for the third hypothesis was conducted with SPSS (version 12.0) predictive analysis software. Data items were regrouped and recoded (as described in the methods section), and then standardized to ensure all measures were weighted equally prior to performing the regression analysis. A new independent variable comprised of the cross product of job embeddedness and education level was also created. To accomplish the linear regression, gender was again controlled due to the sample population being predominantly male. Gender was entered in the first block along with all the remaining independent variables, including the cross product term of job embeddedness and education level, in the following order: job satisfaction, organizational commitment, job alternatives, job search, job embeddedness, education level, and the cross-product. The effects of traditional attitudinal variables (job satisfaction, organizational commitment, job alternatives, and job search), and job embeddedness were controlled. This allowed for the individual assessment of the cross

product term on an individual's level of intent to leave in order to determine if education level significantly moderated the effects of job embeddedness with respect to intent to leave.

To determine if there was a significant influence on the dependent variable intent to leave, the standardized regression coefficient (β) and the significant change in *F*-values for the cross-product were evaluated. The influence accounted for by the cross product was insignificant (β = -.06, $p > .1$). Based on those results, education level was not a moderator of the effects of job embeddedness on intent to leave. In sum, hypothesis 3 was not supported. The results are summarized in Table C4 of Appendix C.

Hypothesis 4. The linear regression analysis for the fourth hypothesis was also accomplished using SPSS (version 12.0) predictive analysis software. Prior to performing the regression analysis, data items were regrouped and recoded (as described in the methods section), and then standardized to ensure all measures were weighted equally. Additionally, a new independent variable comprised of the cross product between job embeddedness and pay was created. To accomplish the linear regression, gender was again controlled due to the sample population being predominantly male. Gender was entered in the first block along with all the remaining independent variables, including the cross product of job embeddedness and pay, in the following order: job satisfaction, organizational commitment, job alternatives, job search, job embeddedness, pay, and the cross-product term. This method controlled for the effects of traditional attitudinal variables (job satisfaction, organizational commitment, job alternatives, and job search), and job embeddedness. It also allowed for the individual assessment of the

cross product term on an individual's level of intent to leave in order to determine if pay significantly moderated the effects of job embeddedness with respect to intent to leave.

The standardized regression coefficient (β) and the significant change in *F*-values for the cross-product were evaluated to determine if there was a significant influence on the dependent variable intent to leave. The influence accounted for by the cross product was insignificant ($\beta = -.02$, $p > .1$). Based on those results, pay was not a moderator of the effects of job embeddedness on intent to leave. In sum, hypothesis 4 was not supported. The results are summarized in Table C4 of Appendix C.

Hypothesis 5. SPSS (version 12.0) predictive analysis software was also used to perform the linear regression analysis for the fifth hypothesis. Data items were again regrouped and recoded (as described in the methods section), and then standardized to ensure all measures were weighted equally prior to performing the regression analysis. The cross product between job embeddedness and organizational rank was taken to create a new independent variable. To accomplish the linear regression, gender was again controlled due to the sample population being predominantly male. The first block of the regression analysis was comprised of gender along with all the remaining independent variables, including the cross product of job embeddedness and organizational rank, in the following order: job satisfaction, organizational commitment, job alternatives, job search, job embeddedness, organizational rank, and the cross-product. The effects of traditional attitudinal variables (job satisfaction, organizational commitment, job alternatives, and job search), and job embeddedness were controlled, allowing for the individual assessment of the cross product on an individual's level of intent to leave to

determine if organizational rank significantly moderated the effects of job embeddedness with respect to intent to leave.

The standardized regression coefficient (β) and the significant change in *F*-values for the cross-product were evaluated in an effort to determine if there was a significant influence on the dependent variable intent to leave. The influence accounted for by the cross product was insignificant ($\beta = .00$, $p > .1$). Based on those results, organizational rank was not a moderator of the effects of job embeddedness on intent to leave. In sum, hypothesis 5 was not supported. The results are summarized in Table C4 of Appendix C.

Supplemental Exploratory Analysis

In an effort to assess the affects that the order the independent variables were entered into the linear regression had on the predictability of job embeddedness, subsequent analyses involving manipulation of the regression sequence used in hypothesis 1 for the attitudinal variables and job embeddedness was conducted. Controlling for gender and changing the order in which the independent variables were entered to job satisfaction, organizational commitment, job embeddedness, job search, and job alternatives increased the predictability of job embeddedness ($\Delta R^2 = .02$, $p < .05$). As illustrated in Appendix C, Table C5, the variability in intent to leave accounted for by job embeddedness marginally increased.

Insert Table C5 about here

Inspired by the work and preliminary findings of Lee et al. (2004) regarding the two primary sub-dimensions of job embeddedness, further regression analysis was conducted using the same control and attitudinal variables previously introduced, but job

embeddedness was disaggregated into its two major sub-dimensions—community and organizational job embeddedness. Similar to hypothesis 1, gender was controlled and the independent variables were entered in the following order: job satisfaction, job alternatives, organizational commitment, job search, community job embeddedness and organizational job embeddedness. This method controlled for the effects of traditional attitudinal variables (job satisfaction, job alternatives, organizational commitment, and job search) while allowing for the individual assessment of the predictability of the two major sub-dimensions (organizational and community job embeddedness) with respect to intent to leave.

Change in R^2 values were evaluated to determine the amount of incremental variance accounted for by the independent variables and the change in F-values were compared to determine if the respective variables had a significant influence on the dependent variable intent to leave. As summarized in Table C6 of Appendix C, the total variance accounted for with all the independent variables combined (job satisfaction, job alternatives, organizational commitment, job search, and organizational and community job embeddedness) was 34%. The variance accounted for by each of the attitudinal variables was significant (job satisfaction $\Delta R^2 = .04$, $p < .01$, job alternatives $\Delta R^2 = .01$, p $< .01$, organizational commitment $\Delta R^2 = .13$, $p < .01$, job search $\Delta R^2 = .10$, $p < .05$). More importantly, organizational job embeddedness was found to be insignificant ($\Delta R^2 = .00$, $p = .811$); whereas, community job embeddedness was significant and accounted for the variability originally explained by the job embeddedness construct ($\Delta R^2 = .02$, $p < .05$).

Insert Table C6 about here

Additionally, controlling for gender and changing the order in which the independent variables were entered in the linear regression to job satisfaction, organizational commitment, community job embeddedness, job search, and job alternatives increased both the predictability of intent to leave and the significance level ($\Delta R^2 = .03$, $p < .01$), as illustrated in Appendix C, Table C7.

Insert Table C7 about here

As a follow up to the earlier indicators of possible multicollinearity issues, additional analysis of the tolerance and variance inflation factors (VIF's) in relation to the regression analysis was conducted, revealing the possibility that multicollinearity existed between the independent variables job satisfaction and organizational commitment, and job embeddedness. To further investigate, job embeddedness was disaggregated into its primary sub-dimensions and revealed an extremely low tolerance and high VIF of .33 and 3.04, respectively, for organizational job embeddedness, likewise, job satisfaction and organizational commitment had similar values as illustrated in Table C8 of Appendix C. More importantly, community job embeddedness had a high tolerance and low VIF of .75 and 1.33 respectively, demonstrating that 75% of its predicted variance with regards to intent to leave could not be explained by other independent variables. Based on these preliminary findings, it appears that the community sub-dimension of job embeddedness was the source of the multicollinearity issues with the job embeddedness construct.

Summary

This chapter provided a summary of the results from the job embeddedness survey and the test of the job embeddedness construct's ability to account for added variability in intent to leave as presented by Mitchell et al. (2001). Although the results revealed that job embeddedness did account for additional variability in intent to leave, above and beyond what is accounted for by traditional attitudinal variables, further evaluation revealed that community job embeddedness accounted for all the added variability previously associated with the job embeddedness construct. Additionally, throughout the analysis there were indicators of possible multicollinearity issues between job satisfaction and organizational commitment, and organizational job embeddedness, which were further supported in the supplemental exploratory analysis section. When job embeddedness was disaggregated into its community and organizational components, community job embeddedness appeared to be the only significant factor in accounting for additional variability in intent to leave. Additionally, the individual influences of individual characteristics (tenure, education level, pay, and organizational rank) on a person's level of job embeddedness were also assessed. The results demonstrated that the personal characteristics tested did not moderate the effects of job embeddedness on an individual's level of intent to leave. The same results were reached with the community and organizational components of job embeddedness as well.

CHAPTER 5

DISCUSSION

Job Embeddedness

This study extends the empirical support for job embeddedness and expands the understanding of this relatively new construct. In accordance with the initial research by Mitchell et al. (2001), job embeddedness accounted for a significant amount of variability in intent to leave, above and beyond what was accounted for with traditional attitudinal variables (Hypothesis 1). Of particular interest were the disaggregated components of job embeddedness or community and organizational job embeddedness, referred to as off and on-the-job embeddedness respectively in Lee et al.'s (2004) study. Data suggested that community job embeddedness accounted for all the added predictability associated with job embeddedness in reference to the antecedents of leaving and/or staying. This not only supported previous findings that people who were more embedded in their jobs had less intent to leave, but also illustrated the significance of off-the-job and non-affective causes of turnover.

Furthermore, based on the high correlations between organizational job embeddedness and the traditional attitudinal variables job satisfaction and organizational commitment, it could be inferred that organizational job embeddedness is similar to the traditional attitudinal variables and accounts for the same variability. This was further supported by multicollinearity tests that identified low tolerance values and high VIF's for organizational job embeddedness, job satisfaction, and organizational commitment;

whereas, community job embeddedness maintained high tolerance values and low VIF's throughout all data analyses.

Individual Characteristics

The study found that the effects of job embeddedness on intent to leave were not significantly moderated by a person's tenure, education level, pay, or organizational rank. In an effort to further investigate the relationships between the individual characteristics and job embeddedness, job embeddedness was disaggregated into its community and organization components and the linear regression analyses were re-accomplished. The results were consistent with the previous linear regression tests regarding job embeddedness; the effects of organizational and community job embeddedness on intent to leave were not significantly moderated by tenure, education level, pay or organizational rank. An underlying problem may have been with the military sample. Within the military, tenure, education level, pay, and organizational rank tend to all be related to and measure rank. However, throughout analysis of the individual characteristics with regards to the organizational job embeddedness dimension, high VIF's were common among job satisfaction, organizational commitment, and organizational job embeddedness. Again, suggesting there are multicollinearity issues with the organizational components of job embeddedness.

Limitations

Support for the reliability and validity of the questionnaire used to collect the data was provided by the coefficient alphas reported for each of the six dimensions. Although all six primary dimensions had overall coefficient alphas close to or greater than the expected values reported by previous researchers, some of the reliability statistics for the

sub-dimensions were considerably lower than expected and may have introduced some error into conclusions based on statistical calculations using those sub-dimensions individually, as opposed to collectively. Two such sub-dimensions were links to the organization and links to the community.

Links to the organization, a sub-dimension of job embeddedness, had a low coefficient alpha of .45. The fact that the participants were all from an Air Force (military) organization may have influenced the results, especially since there was a disproportionate amount of airmen respondents with less time in the Air Force and in their current position. Further complicating matters was the rewording of the items selected to fit within the military work environment; for example, rewording "How long have you worked for this company?" and "How long have you worked within the current industry?" to "How long have you been assigned to this squadron?" and "How long have you been in the Air Force?"respectively. Fifty percent of those surveyed reported being with the squadron for less than two years; on the contrary, 50% surveyed also reported being in the Air Force for 9 years. In reference to the original questions, their responses would translate into 50% of the participants working for the company less than 2 years, but in the industry for over 9 years, potentially skewing the data and affecting the reliability of the scale. The questions should have asked, "How long have you been in the Air Force?" and "How long have you worked in the current industry?" to better compare the individual's time in the Air Force (company) to their time in the industry or field of work. Restricting the time a person works for the company to a squadron level assignment, which is normally 3 to 4 years, severely restricts the ability to acquire an

accurate measure of an individual's links to the organization, especially when tenure is a key component.

The links to the community measure was also a sub-dimension of the job embeddedness construct and included such questions as "Are you currently married?", "If you are married, does your spouse work outside the home", and "Do you own the home you live in?" Considering 85 of 224 respondents (38%) were not married and were instructed to skip the item regarding their spouse's employment, the measures reliability could have been influenced. Overall, the reliability of the job embeddedness construct was good and the only concern is that error could have been introduced when the sub-dimensions in question were used individually to draw conclusions.

Two fundamental limitations of the survey included a lack of generalizability and common method variance. The limited population diversity, associated with all respondents being located at a northern tier Air Force base, could influence or limit the extent to which inferences can be made regarding the Air Force or DOD as a whole. In effect, generalizability may be limited solely to northern tier Air Force bases. Similarly, measuring all the variables with a single questionnaire, in a single setting, and on a self-report instrument potentially introduced error associated with common method variance.

Self-reporting becomes an issue when the measures being reported are not verifiable by other means. For example, there are no means of cross-validating or verifying people's descriptions of their feeling or intentions; individuals are required to engage a higher-order cognitive process that not only involves recall, but weighting, inference, prediction, interpretation, and evaluation as well (Podsakoff & Organ, 1986). According to Podsakoff and Organ (1986), the problem is compounded when two or

more of these measures are taken from the same respondent in order to conduct correlation analysis among them. The problem is commonly known as common method variance. More precisely, the respondent could be providing the common link for the shared variance between the measures and not the measures themselves. Since validation deals with each measure individually, it cannot account for the interaction caused by the common link (respondent) or the artificial covariance it introduces. In short, there is no way to prove or disprove the covariance is due to a true interaction between the measures or simply imposed by the respondent as artificial covariance (Podsakoff & Organ, 1986).

To minimize the adverse effects common method variance might introduce into the study, the survey's administration procedures were standardized and contact information was provided to answer any of the respondent's questions. Having self- and supervisor-reported information for each respondent would have been a better solution, but participants would have been required to identify themselves on the survey and that may have limited the number of respondents.

Additionally, without personal information, it was not possible to acquire performance measures that would not have been self reported by respondents; therefore, it is unknown whether the level of intent to leave was or was not the result of poor performance or the other variables tested. Furthermore, the level of intent to leave was affected by service commitment issues. The three items used to determine the level of intent to leave were not reworded to conform to the Air Force respondents. For example, the question "How likely is it that you will leave the military in the next twelve months?" should have read "If you didn't have a service commitment, how likely is it that you would leave the military in the next twelve months?" It is not known whether or not

respondents took into consideration their service commitment when answering all three items, potentially affecting the overall level of intent to leave. Overall, there was sufficient variability within the responses for the service commitment and common method variance issues not to be a major concern.

Future Research

Since job embeddedness has been proven to predict and/or account for additional variability in intent to leave and voluntary turnover across multiple diverse samples, future research should start to address individual factors that influence a person's level of embeddedness or factors that would moderate the effects of job embeddedness on turnover. Some of the moderators of interest may include, but aren't limited to population demographics, location (urban vs. rural), type and availability of community activities or religious organizations, and quality of local schools. Since being embedded promotes staying, this type of research would introduce much needed insight into how organizations can influence employees to stay. These propositions are commensurate with the suggestions of Lee et al. (2004), in which they proposed moving beyond simple predictive validity designs to allow for stronger causal inferences.

The preliminary findings presented in this research also suggest the organizational and community dimensions of job embeddedness warrant further study with regards to turnover. Lee et al (2004) had similar insights when they conducted a study regarding the effects of on- and off-the-job embeddedness with respect to organizational citizenship, job performance, volitional absences, and voluntary turnover. Lee et al. (2004) agree that these measures fall short as standard research instruments and warrant further study.

In one aspect, further research should focus on community and/or non-effective factors related to turnover; while a separate effort should concentrate on further investigating the causes of the multicollinearity issues related to the organizational components of job embeddedness. Based solely on the findings from this research effort, community job embeddedness may be the only relevant construct of interest. Future research should concentrate on developing questions better suited to distinguish between the organizational and community dimensions of job embeddedness, as well as job satisfaction and organizational commitment, before such conclusions can be drawn. Many of the questions currently used regarding the organizational dimensions of job embeddedness appear to be very similar to those used in reference to job satisfaction and organizational commitment. Spill over, the inability to draw a clear distinction between attachments with one's organization and community, only adds to the problem. Survey items need to be developed that can effectively discriminate between and measure these dimensions individually.

Regarding the implications for the Air Force, future research should test the construct across a more representative sample; possibly through a web based survey administered Air Force wide. The results would not only help with the generalizability of the findings, but also lead to a more in depth understanding of the influences job embeddedness has on turnover within the Air Force.

Conclusion

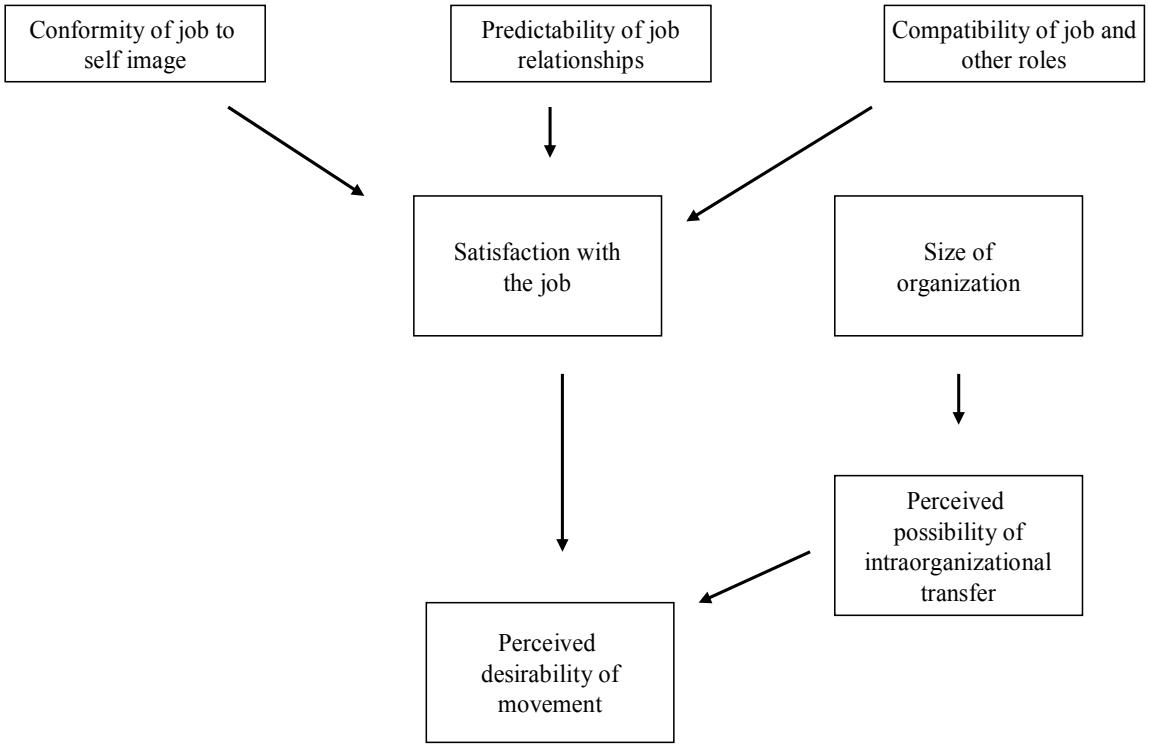
The results presented in this research paper contribute to the previous work and findings of Mitchell et al. (2000) and, in general, to research regarding voluntary turnover by demonstrating job embeddedness accounts for a significant amount of variability in

intent to leave. Initial findings suggest there are both on- and off-the-job factors that influence a person's intent to leave or stay. More importantly, with community job embeddedness accounting for all the added predictability originally attributed to the job embeddedness construct, it can be implied that non-affective, community based factors (e.g., family, friends, relationships, etc.) play an important role in a person's turnover intentions. It can be implied from these findings that organizations should encourage and support involvement in the community to help reduce personnel losses.

Based on these findings, there are several steps that the Air Force could currently take to foster community embeddedness and possibly support retention efforts. Some suggestions include, but aren't limited to implementing longer assignments or allowing individuals to extend their current assignments when possible, putting more emphasis on follow-on assignments or allowing more individual interaction in the assignment process, and investing in the local communities (i.e. local parks, community centers, activity centers, schools, libraries, etc.) around the bases by donating money and/or people (time) to help improve such community programs. Hopefully, future research will continue to isolate the individual causes of turnover in an effort to identify additional means of influencing turnover decisions.

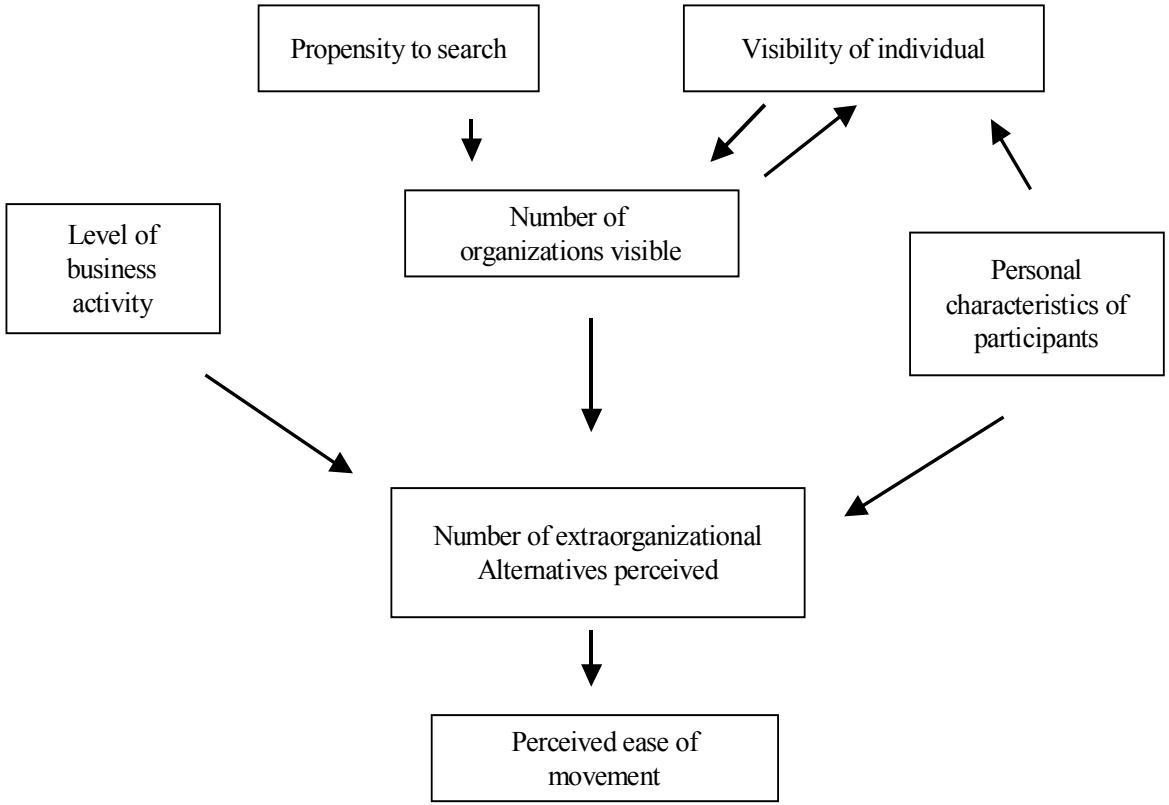
Appendix A: Previous Turnover Models

Figure A1: March and Simon's (1958, p. 99) – Major Factors affecting Perceived Desirability of Movement



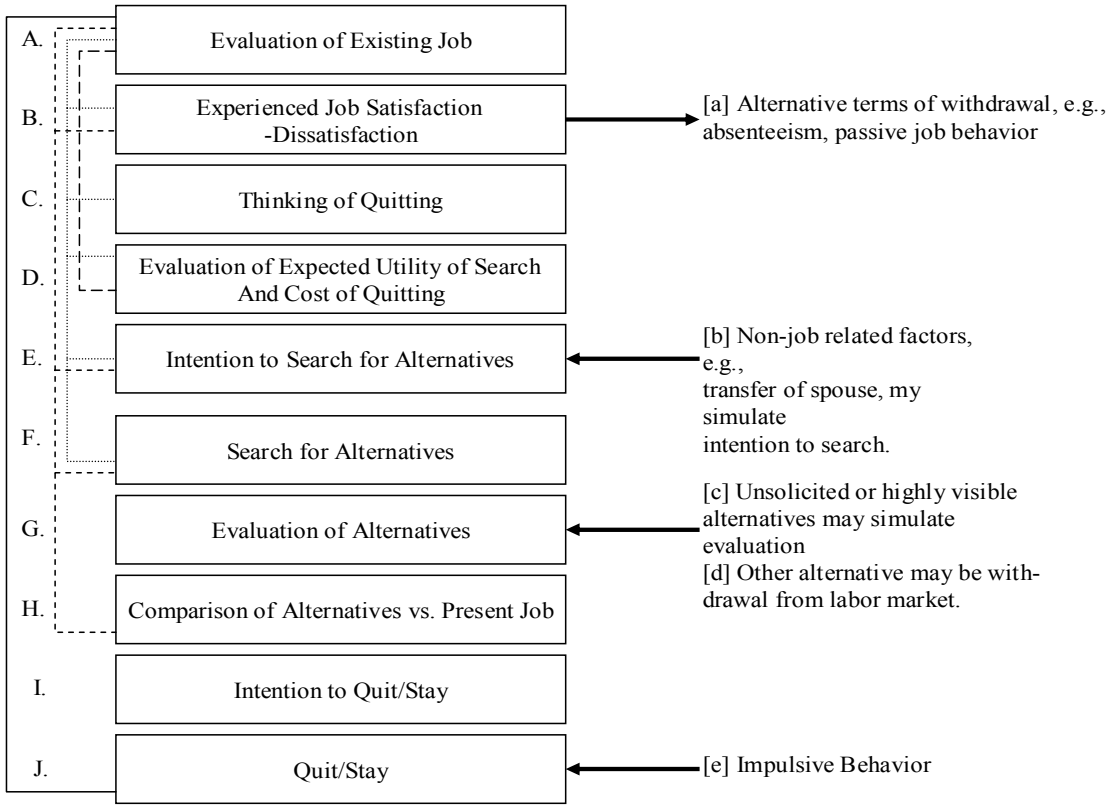
March, J., & Simon, H. (1958). *Organizations*. New York, NY: Wiley.

Figure A2: March and Simon (1958, p. 106) – Major Factors influencing Perceived Ease of Movement



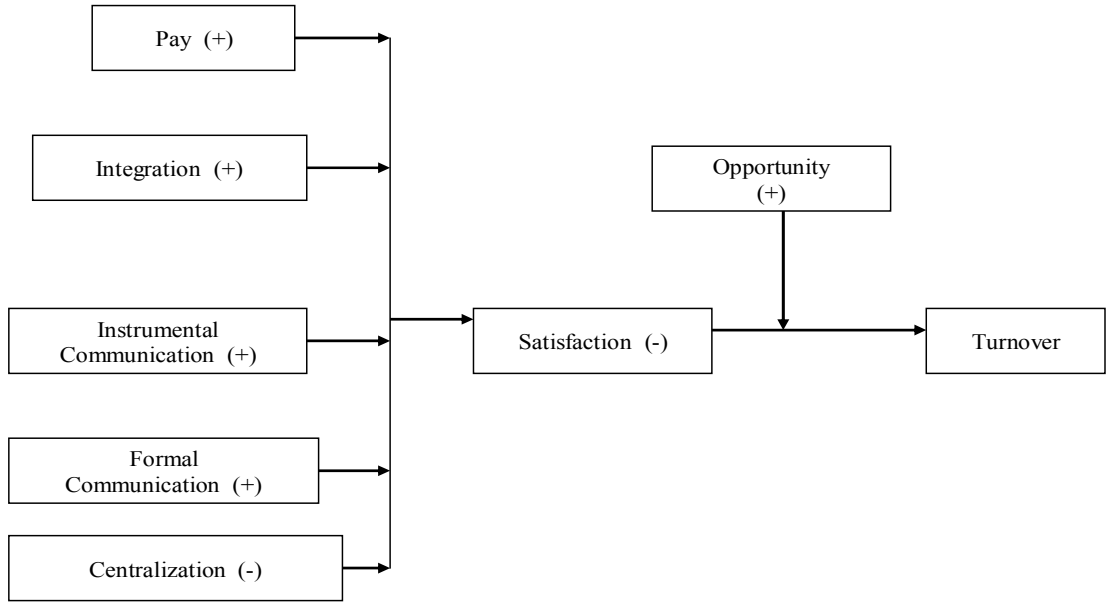
March, J. G., & Simon, H.A. (1958). *Organizations*. New York, NY: Wiley.

Figure A3: Mobley's 1977 Model of Intermediate Linkages



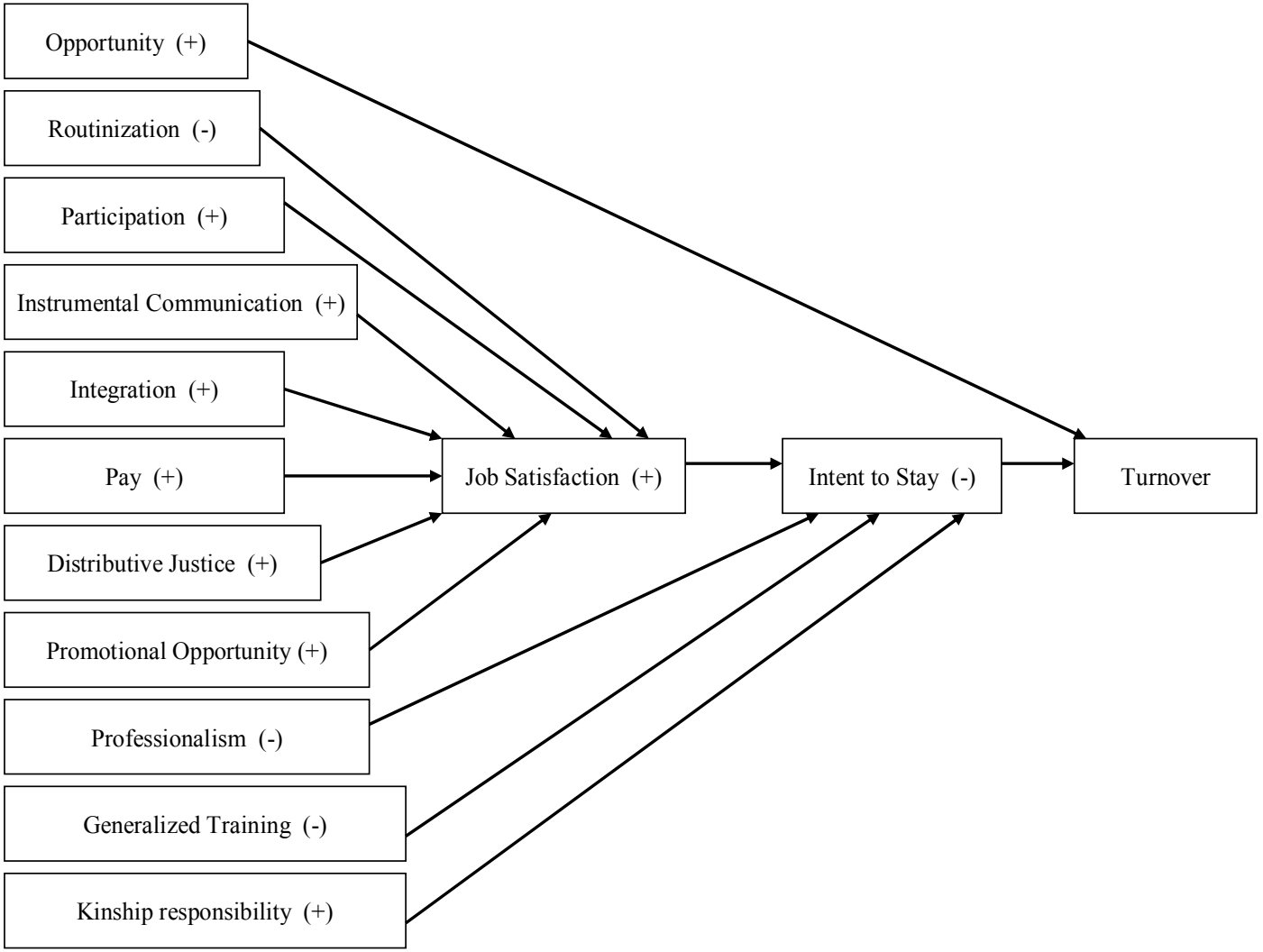
Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology* 62, 238.

Figure A4: Price (1977, p. 84) – Relationships between the Determinants, Intervening Variables, and Turnover



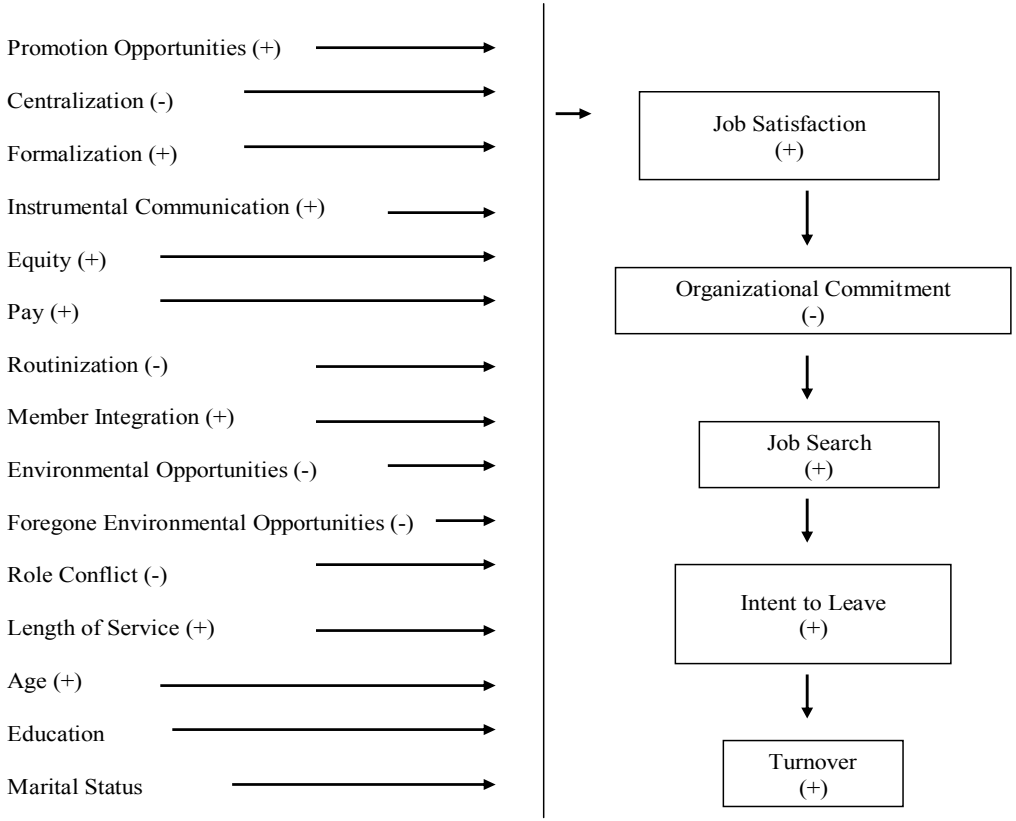
Price, J. L. (1977). *The study of turnover*. Ames; Iowa State University Press.

Figure A5: Price and Mueller's (1981, p. 547) Revised Causal Model of Turnover



Price, J. P., & Mueller, C. W. (1981). A causal model of turnover for nurses. *Academy of Management Journal, 24*(3), 543-565.

Figure A6: Bluedorn's 1982 Unified Model of Turnover



Bluedorn, A. C. (1982). A unified model of turnover from organizations. *Human Relations, 35*(2), 135-153.

Appendix B: Job Embeddedness Survey

Job Embeddedness Survey

Purpose: To conduct research on a new concept called job embeddedness and determine if it is a key factor in understanding why individuals choose to stay in the military. Job embeddedness considers an individual's links to other people, teams and groups, his or her perceived fit with the job, organization and community, and what he or she believes would be sacrificed by leaving the military

Participation: We would greatly appreciate your participation in our data collection effort. Your participation is COMPLETELY VOLUNTARY. Your decision to not participate or to withdrawal from participation will not jeopardize your relationship with the Air Force Institute of Technology, the U.S. Air Force, or the Department of Defense.

Confidentiality: We ask for some demographic information in order to interpret results more accurately. ALL ANSWERS ARE ANONYMOUS. No one other than the research team will see your completed questionnaire. Findings will be reported at the group level only. Reports summarizing trends in large groups may be published.

Contact information: If you have any questions or comments about the survey contact 1st Lt Hassell or 1st Lt Fletcher at the telephone numbers, fax, mailing addresses, or e-mail addresses listed below. You may take the cover sheet with the contact information for future reference.

1st Lt Charles Hassell & 1st Lt Richard Fletcher
AFIT/ENV BLDG 641 / Room 202C
2950 Hobson Way
Wright-Patterson AFB OH 45433-7765
Email: charles.hassell@afit.edu
richard.fletcher@afit.edu
Advisors: daniel.holt@afit.edu
sharon.heilmann@afit.edu
Phone: DSN 785-3636x4800, commercial (937) 255-3636x4800
Fax: DSN 986-4699; commercial (937) 656-4699

INSTRUCTIONS

- Base your answers on your own thoughts and experiences
- Please print your answers clearly when asked to write in a response or when providing comments
- Make dark marks when asked to use specific response options (feel free to use an ink pen)
- Avoid stray marks. If you make corrections, erase marks completely or clearly indicate the incurred response if you use an ink pen

MARKING EXAMPLES

Right ● Wrong ⊗ ⃠ ⊙

We would like to ask you questions relating to how you generally feel about your work and the local community where you live. For each statement, please fill in the circle for the number that indicates the extent to which you agree with each statement. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree Nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

1. I really love the place where I live.	①	②	③	④	⑤	⑥	⑦
2. I like the members of my squadron.	①	②	③	④	⑤	⑥	⑦
3. The weather where I live is suitable to me.	①	②	③	④	⑤	⑥	⑦
4. My coworkers are similar to me.	①	②	③	④	⑤	⑥	⑦
5. This community is a good match for me.	①	②	③	④	⑤	⑥	⑦
6. My job utilizes my skills and talents well.	①	②	③	④	⑤	⑥	⑦
7. I feel like I am a good match for this squadron.	①	②	③	④	⑤	⑥	⑦
8. I think of the community where I live as home.	①	②	③	④	⑤	⑥	⑦
9. The area where I live offers the leisure activities that I like.	①	②	③	④	⑤	⑥	⑦
10. I fit with the squadron's culture.	①	②	③	④	⑤	⑥	⑦
11. I like the authority and responsibility I have at this squadron.	①	②	③	④	⑤	⑥	⑦
12. My values are compatible with the squadron's values.	①	②	③	④	⑤	⑥	⑦
13. I can reach my professional goals working for this squadron.	①	②	③	④	⑤	⑥	⑦
14. I feel good about my professional growth and development.	①	②	③	④	⑤	⑥	⑦
15. Leaving this community would be very hard.	①	②	③	④	⑤	⑥	⑦
16. I have a lot of freedom on this job to decide how to pursue my goals.	①	②	③	④	⑤	⑥	⑦
17. People respect me a lot in my community.	①	②	③	④	⑤	⑥	⑦
18. The perks on this job are outstanding.	①	②	③	④	⑤	⑥	⑦
19. My neighborhood is safe.	①	②	③	④	⑤	⑥	⑦
20. I feel that people at work respect me a great deal.	①	②	③	④	⑤	⑥	⑦
21. I would sacrifice a lot if I left the military.	①	②	③	④	⑤	⑥	⑦
22. My promotional opportunities are excellent here.	①	②	③	④	⑤	⑥	⑦

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree Nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

23. I am well compensated for my level of performance.	①	②	③	④	⑤	⑥	⑦
24. The benefits are good on this job.	①	②	③	④	⑤	⑥	⑦
25. The health-care benefits provided by the military are excellent.	①	②	③	④	⑤	⑥	⑦
26. The retirement benefits provided by the military are excellent.	①	②	③	④	⑤	⑥	⑦
27. The prospects for continuing employment with the military are excellent.	①	②	③	④	⑤	⑥	⑦

Please fill in the appropriate information as requested for questions 28 through 36. Please respond with a specific number and not a range.

28. How long have you been in your present position?	Years _____	Months _____
29. How many immediate family members live within 60 miles?	Number _____	
30. How long have you been assigned to this squadron?	Years _____	Months _____
31. How many of your closest friends live nearby?	Number _____	
32. How long have you been in the Air Force?	Years _____	Months _____
33. How many coworkers do you interact with regularly?	Number _____	
34. How many coworkers are highly dependent on you?	Number _____	
35. How many work teams (e.g. work crews, production teams, etc.) are you on?	Number _____	
36. How many work committees (e.g. tiger teams, etc.) are you on?	Number _____	

37. Are you currently married? *If not, skip to number 39.*	Yes ○	No ○
38. If you are married, does your spouse work outside the home?	Yes ○	No ○
39. Do you own the home you live in?	Yes ○	No ○
40. My family roots are in this community.	Yes ○	No ○

We would like to understand how you generally feel about work. For each statement, please fill in the circle for the number that indicates the extent to which you agree with each statement. Use the scale below for your responses.

① Very Much Disagree	② Moderately Disagree	③ Slightly Disagree	④ Slightly Agree	⑤ Moderately Agree	⑥ Very Much Agree

41. I feel I am being paid a fair amount for the work I do.	①	②	③	④	⑤	⑥
42. There is really too little chance for promotion on my job.	①	②	③	④	⑤	⑥
43. My supervisor is quite competent in doing his/her job.	①	②	③	④	⑤	⑥
44. I am not satisfied with the benefits I receive.	①	②	③	④	⑤	⑥
45. When I do a good job, I receive the recognition for it that I should receive.	①	②	③	④	⑤	⑥
46. Many of our rules and procedures make doing a good job difficult.	①	②	③	④	⑤	⑥
47. I like the people I work with.	①	②	③	④	⑤	⑥
48. I sometimes feel my job is meaningless.	①	②	③	④	⑤	⑥
49. Communications seem good within this squadron.	①	②	③	④	⑤	⑥
50. Raises are too few and far between.	①	②	③	④	⑤	⑥
51. Those who do well on the job stand a fair chance of being promoted.	①	②	③	④	⑤	⑥
52. My supervisor is unfair to me.	①	②	③	④	⑤	⑥
53. The benefits we receive are as good as what civilian organizations offer.	①	②	③	④	⑤	⑥
54. I do not feel that the work I do is appreciated.	①	②	③	④	⑤	⑥
55. My efforts to do a good job are seldom blocked by red tape.	①	②	③	④	⑤	⑥
56. I find I have to work harder at my job because of the incompetence of people I work with.	①	②	③	④	⑤	⑥
57. I like doing the things I do at work.	①	②	③	④	⑤	⑥
58. The goals of this squadron are not clear to me.	①	②	③	④	⑤	⑥
59. I feel unappreciated by the military when I think about what they pay me.	①	②	③	④	⑤	⑥
60. People get ahead as fast here as they do in other places.	①	②	③	④	⑤	⑥
61. My supervisor shows too little interest in the feelings of subordinates.	①	②	③	④	⑤	⑥
62. The benefit package (e.g. BAS, BAH, medical, dental, etc.) the Air Force offers is equitable.	①	②	③	④	⑤	⑥

① Very Much Disagree	② Moderately Disagree	③ Slightly Disagree	④ Slightly Agree	⑤ Moderately Agree	⑥ Very Much Agree

63.	There are few rewards for those who work here.	①	②	③	④	⑤	⑥
64.	I have too much to do at work.	①	②	③	④	⑤	⑥
65.	I enjoy my coworkers.	①	②	③	④	⑤	⑥
66.	I often feel that I do not know what is going on with the squadron.	①	②	③	④	⑤	⑥
67.	I feel a sense of pride in doing my job.	①	②	③	④	⑤	⑥
68.	I feel satisfied with my chances for salary increases.	①	②	③	④	⑤	⑥
69.	There are benefits we do not have which we should have.	①	②	③	④	⑤	⑥
70.	I like my supervisor.	①	②	③	④	⑤	⑥
71.	I have too much paperwork.	①	②	③	④	⑤	⑥
72.	I don't feel my efforts are rewarded the way they should be.	①	②	③	④	⑤	⑥
73.	I am satisfied with my chances for promotion.	①	②	③	④	⑤	⑥
74.	There is too much bickering and fighting at work.	①	②	③	④	⑤	⑥
75.	My job is enjoyable.	①	②	③	④	⑤	⑥
76.	Work assignments are not fully explained.	①	②	③	④	⑤	⑥

The next questions involve the different activities people engage in when they start to look for a new job. For Questions 77 through 86, please mark any items that apply when completing the phrase:

During the *past year* have you …

- ○ 77. Read a book about getting a job?
- ○ 78. Revised your resume?
- ○ 79. Sent copies of your resume to a prospective employer?
- ○ 80. Contacted an employment agency or executive search firm to obtain a job outside of the military?
- ○ 81. Read the classified/help-wanted advertisements in the newspaper?
- ○ 82. Gone on a job interview?
- ○ 83. Talked to friends or relatives about getting a new job?
- ○ 84. Sought to transfer to a new job within your wing?
- ○ 85. Talked to co-workers about getting a job in another squadron or at another base for reasons other than required PCS (e.g. special duty, short tour, etc.)?
- ○ 86. Made any telephone inquiries to prospective employers?

We would like to understand how committed you are to your current job. For each statement, please fill in the circle for the number that indicates the extent to which you agree with each statement. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree Nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

87. I would be very happy to spend the rest of my career in this squadron.	①	②	③	④	⑤	⑥	⑦
88. I enjoy discussing my squadron with people outside it.	①	②	③	④	⑤	⑥	⑦
89. I really feel as if this squadron's problems are my own.	①	②	③	④	⑤	⑥	⑦
90. I think I could easily become as attached to another squadron as I am to this one.	①	②	③	④	⑤	⑥	⑦
91. I do not feel like "part of the family" at my squadron.	①	②	③	④	⑤	⑥	⑦
92. I do not feel "emotionally attached" to this squadron.	①	②	③	④	⑤	⑥	⑦
93. This squadron has a great deal of personal meaning for me.	①	②	③	④	⑤	⑥	⑦
94. I do not feel a strong sense of belonging to my squadron.	①	②	③	④	⑤	⑥	⑦
95. I am not afraid of what might happen if I left the military without having another job lined up.	①	②	③	④	⑤	⑥	⑦
96. It would be very hard for me to leave the military right now, even if I wanted to.	①	②	③	④	⑤	⑥	⑦
97. Too much of my life would be disrupted if I decided I wanted to leave the military right now.	①	②	③	④	⑤	⑥	⑦
98. It wouldn't be too costly for me to leave the military in the near future.	①	②	③	④	⑤	⑥	⑦
99. Right now, staying with the military is a matter of necessity as much as desire.	①	②	③	④	⑤	⑥	⑦
100. I believe that I have too few options to consider leaving the military.	①	②	③	④	⑤	⑥	⑦
101. One of the few negative consequences of leaving the military would be the scarcity of available alternatives.	①	②	③	④	⑤	⑥	⑦
102. One of the major reasons I continue to work for the military is that leaving would require considerable personal sacrifice; a civilian job may not match the overall benefits I have here.	①	②	③	④	⑤	⑥	⑦
103. If I had not already put so much of myself into the military, I might consider working elsewhere.	①	②	③	④	⑤	⑥	⑦
104. I do not feel any obligation to remain with the military.	①	②	③	④	⑤	⑥	⑦
105. Even if it were to my advantage, I do not feel it would be right to leave the military now.	①	②	③	④	⑤	⑥	⑦
106. I would feel guilty if I left the military now.	①	②	③	④	⑤	⑥	⑦
107. This squadron deserves my loyalty.	①	②	③	④	⑤	⑥	⑦
108. I would not leave the military right now because I have a sense of obligation to the people in it.	①	②	③	④	⑤	⑥	⑦

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree Nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

109. I owe a great deal to the military.	①	②	③	④	⑤	⑥	⑦

We would like to understand how you feel about the alternatives you have to serving in the military. For each statement, please fill in the circle for the number that indicates the extent to which you agree with each statement. Use the scale below for your responses.

① Very Unlikely	② Unlikely	③ Neither Unlikely Nor likely	④ Likely	⑤ Very Likely

110. What is the probability that you can find an acceptable civilian alternative to your job in the military?	①	②	③	④	⑤
111. If you search for an alternative civilian job within a year what are the chances you can find an acceptable job?	①	②	③	④	⑤

We would like to understand your feelings about your intention to leave to leave the military. For each statement, please fill in the circle for the number that indicates the extent to which you agree with each statement. Use the scale below for your responses:

① Very Unlikely	② Unlikely	③ Neither Unlikely Nor likely	④ Likely	⑤ Very Likely

112. Do you intend to leave the military in the next 12 months?	①	②	③	④	⑤
113. How strongly do you feel about leaving the military within the next 12 months?	①	②	③	④	⑤
114. How likely is it that you will leave the military within the next 12 months?	①	②	③	④	⑤

This final section contains 9 items regarding your personal characteristics. These items are very important for statistical purposes. Respond to each item by WRITING in the information requested or FILLING in the corresponding circles that best describe you.

115. What is your age? _____

116. What is your gender?

- ○ **Male**
- ○ **Female**

117. What is your race?

- ○ **White**
- ○ **Black**
- ○ **Hispanic**
- ○ **Asian**
- ○ **Native American**
- ○ **Other**

118. What is your highest education level?

- ○ **High School**
- ○ **Some College**
- ○ **Associates Degree**
- ○ **Bachelor Degree**
- ○ **Graduate Degree**
- ○ **Doctorate**
- ○ **Post Doctorate**
- ○ **Professional**

119. What is your current rank?

- ○ **E-1**
- ○ **E-2**
- ○ **E-3**
- ○ **E-4**
- ○ **E-5**
- ○ **E-6**
- ○ **E-7**
- ○ **E-8**
- ○ **E-9**
- ○ **O-1**
- ○ **O-2**
- ○ **O-3**
- ○ **O-4**
- ○ **O-5**
- ○ **O-6**
- ○ **O-7**

120. What is your current gross annual salary range (do not consider spouse's income)?

- ○ **$10K - $20K**
- ○ **$20K - $30K**
- ○ **$30K - $40K**
- ○ **$40K - $50K**
- ○ **$50 - $60K**
- ○ **$60K - $70K**
- ○ **$70K - $80K**
- ○ **$80+**

121. What is your total time-in-service (Total Federal Active Service)? Years _____ Months _____

122. What is your total time-in-grade? Years _____ Months _____

123. How many subordinates do you currently supervise? _____

124. What squadron are you in (e.g. maintenance, transportation, supply, etc.)? _____

Reassurance of Anonymity

ALL ANSWERS ARE ANONYMOUS. No one other than the research team will see your completed questionnaire. Findings will be reported at the group level only. We asked for some demographic information in order to interpret results more accurately. Reports summarizing trends in large groups may be published.

Questions/Concerns

If you have any questions or concerns please feel free to contact the research team members listed on the front page of the questionnaire. We appreciate your participation and would be happy to address any questions you may have regarding the questionnaire or our research in general.

Feedback

If you are interested in getting feedback on our research results, please provide us with the following personal information so we can reach you at a later date:

Name: _____

Address: _____

_____

Phone: _____

Appendix C: Tables C1 through C8

Table C1

Variable Descriptive Statistics and Reliabilities

Variable	*n*	M	*sd*	Coefficient Alpha
Job Embeddedness	224	8.17	3.93	0.91
Fit to Community	224	3.67	1.59	0.89
Fit to Organization	224	4.85	1.27	0.90
Link to Community	224	0.34	0.24	0.46
Link to Organization	224	29.29	21.36	0.45
Community Sacrifice	224	4.46	1.23	0.64
Organizational Sacrifice	224	4.46	1.10	0.85
Job Satisfaction	224	3.90	0.63	0.90
Pay	224	3.41	1.16	0.81
Promote	224	3.67	0.94	0.70
Supervision	224	4.90	1.02	0.83
Fringe Benefits	224	3.49	1.02	0.67
Contingent Rewards	224	3.63	1.12	0.78
Operating Procedures	223	3.58	0.88	0.39
Co-workers	224	4.02	0.64	0.79
Nature of Work	224	4.34	1.06	0.80
Communication	224	3.89	0.99	0.67
Organizational Commitment	224	3.77	1.02	0.89
Affective Commitment	224	3.85	1.23	0.83
Continuance Commitment	223	3.89	1.33	0.86
Normative Commitment	224	3.66	1.45	0.86
Job Alternatives	224	4.01	0.94	0.79
Job Search	223	0.27	0.22	0.66
Intent to Leave	224	2.13	1.41	0.97

Table C2

Inter-correlations between Dependent and Independent Variables

Variables	Mean	s.d.	Scale Range	1	2	3	4	5	6
1	2.13	1.41	1 - 5	1					
2	3.90	0.63	2.1 - 5.4	-.21**	1				
3	4.01	0.94	1 - 6	.24**	-.01	1			
4	3.77	1.02	1.2 - 6.5	-.46**	.50**	-.34**	1		
5	0.27	0.22	0 - 1	.46**	-.17**	.20**	-.29**	1	
6	8.17	3.93	2.2 - 36.4	-.18**	.64**	.00	.61**	-.13*	1
7	2.48	0.84	.85 - 4.3	.00	.30**	.03	.35**	-.01	.78**
8	11.19	5.82	2.8 - 53.7	-.25**	.72**	-.02	.64**	-.19**	.92**
9	3.67	1.59	1 - 7	-.03	.24**	-.07	.34**	-.04	.67**
10	4.85	1.27	1.1 - 13.7	-.16*	.68**	.05	.53**	-.17**	.81**
11	0.34	0.24	0 - 1	.05	.18**	.12	.17**	.07	.52**
12	29.29	21.36	2.3 - 183	.04	.07	.11	.23**	.16**	.48**
13	4.46	1.23	1 - 7	-.04	.37**	.08	.38**	-.06	.76**
14	4.46	1.10	1.5 - 6.9	-.36**	.72**	-.14*	.64**	-.27**	.80**
15	19.00	14.18	2.2 - 109	-.09*	.08	.02	.06	-.03	.09
16	28.79	27.65	2.2 - 145	.04	.15*	-.06	.08	-.04	.16*
17	16.96	13.71	2.2 - 72.7	-.02	.14*	-.04	.07	-.06	.12
18	22.30	20.63	2.6 - 145	-.04	.18**	-.03	.12	-.06	.19**
19	1.15	0.36	1 - 2	.03	.05	.06	-.08	-.05	-.17**

[a]n ranged from 216 to 224 for all columns

[b]Pearson Two-tailed Coefficients

*p < .05

**p < .01

1. Intent to Leave
2. Job Satisfaction
3. Job Alternatives
4. Organizational Commitment
5. Job Search
6. Job Embeddedness
7. Community Job Embeddedness
8. Organizational Job Embeddedness
9. Fit to Community
10. Fit to Organization
11. Link to Community
12. Link to Organization
13. Community Related Sacrifice
14. Organizational Related Sacrifice
15. Job Embeddedness X Education Level
16. Job Embeddedness X Tenure
17. Job Embeddedness X Organizational Rank
18. Job Embeddedness X Pay
19. Gender

Table C2 (Continued)

7	8	9	10	11	12	13	14	15	16	17	18	19
1												
.47**	1											
.90**	.41**	1										
.38**	.90**	.33**	1									
.77**	.25**	.47**	.20**	1								
.42**	.41**	.38**	.17**	.33**	1							
.83**	.54**	.68**	.45**	.50**	.37**	1						
.37**	.90**	.31**	.73**	.16*	.15*	.48**	1					
-.02	.14*	.02	.14*	-.09	.14*	.02	.07	1				
.13	.15*	.14*	.11	.09	.20**	.09	.07	.36**	1			
.07	.14*	.09	.14*	.03	.10	.07	.07	.57**	.74**	1		
.16*	.17**	.16*	.15*	.13	.14*	.12	.11	.46**	.72**	.79**	1	
-.19**	-.11	-.17**	-.05	-.20**	-.17**	-.10	-.11	.02	.06	.06	.03	1

Table C3

Summary of Hierarchal Regression Analysis for Job Embeddedness (N = 220)

Variable	*B*	*SE B*	β	ΔR^2
Step 1				
Gender	0.03	0.07	0.03	0.00
Step 2				
Gender	0.04	0.06	0.04	
Job Satisfaction	-0.43	0.14	-0.21**	0.04**
Step 3				
Gender	0.03	0.06	0.03	
Job Satisfaction	-0.43	0.14	-0.20**	
Job Alternatives	0.25	0.07	0.23**	0.05**
Step 4				
Gender	-0.01	0.06	-0.00	
Job Satisfaction	0.05	0.15	0.02	
Job Alternatives	0.09	0.07	0.09	
Organizational Commitment	-0.80	0.14	-0.44**	0.13**
Step 5				
Gender	0.02	0.06	0.02	
Job Satisfaction	0.07	0.14	0.03	
Job Alternatives	0.05	0.06	0.05	
Organizational Commitment	-0.65	0.13	-0.36**	
Job Search	0.62	0.11	0.34**	0.10**
Step 6				
Gender	0.04	0.06	0.04	
Job Satisfaction	-0.08	0.16	-0.04	
Job Alternatives	0.02	0.07	0.02	
Organizational Commitment	-0.78	0.15	-0.43**	
Job Search	0.61	0.11	0.34**	
Job Embeddedness	0.35	0.18	0.16*	0.01*

[a]Independent Variable: Intent to Leave

*p < .1

**p < .05

Two-tailed Tests.

B = Unstandardized

β = Standardized

Enter Method

Table C4

Moderator Regression Analysis

	Intent to Turnover											
Variables	**H2**			**H3**			**H4**			**H5**		
	B	**SE B**	**β**	**B**	**SE B**	**β**	**B**	**SE B**	**β**	**B**	**SE B**	**β**
Control												
Gender	.06	.06	.06	.04	.06	.05	.07	.06	0.07	.05	.06	.05
Job Satisfaction	-.02	.15	-0.01	-.05	.15	-.03	-.06	.15	-0.03	-.06	.15	-.03
Organizational Commitment	-.76	.14	-0.42***	-.78	.14	-.43***	-.77	.14	-0.43***	-.77	.14	-.43***
Job Alternatives	.03	.07	.03	.02	.07	.02	.01	.07	0.01	.02	.07	.02
Job Search	.58	.11	.32***	.61	.11	.34***	.62	.11	0.34***	.60	.11	.33***
Job Embeddedness (JE)	.16	.18	.08*	.35	.16	.17*	.24	.17	0.12	.30	.17	.15+
Tenure	.00	.00	.13+									
Education Level (EL)				-.02	.06	-.02						
Pay							.08	.07	0.08			
Organizational Rank (OR)										.03	.07	.03
Cross Product												
JE * Tenure	11	.13	.05									
JE * EL				-.11	.12	-.05						
JE * Pay							-.04	.11	-0.02			
JE * OR										.00	.12	.00
R^2	.36			.34			.36			.34		
Adj. Model R^2	.33			.32			.33			.32		
F	14.48***			13.76***			14.24***			13.56***		

+p < .10
*p < .05
**p < .01
***p < .001
Two-tailed tests.
B = Unstandardized
β = Standardized
Simultaneous Entry

Table C5

Summary of Subsequent Hierarchal Regression Analysis for Job Embeddedness (N =220)

Variable	*B*	*SE B*	β	ΔR^2
Step 1				
Gender	0.03	0.07	0.03	0.00
Step 2				
Gender	0.04	0.06	0.04	
Job Satisfaction	-0.43	0.14	-0.20**	0.04**
Step 3				
Gender	-0.01	0.06	-0.01	
Job Satisfaction	0.09	0.15	0.04	
Organizational Commitment	-0.87	0.13	-0.48**	0.17**
Step 4				
Gender	0.03	0.06	0.03	
Job Satisfaction	-0.12	0.17	-0.06	
Organizational Commitment	-1.00	0.14	-0.55**	
Job Embeddedness	0.42	0.19	0.20*	0.02*
Step 5				
Gender	0.04	0.06	0.05	
Job Satisfaction	-0.08	0.16	-0.04	
Organizational Commitment	-0.80	0.13	-0.45**	
Job Embeddedness	0.36	0.18	0.17*	
Job Search	0.62	0.11	0.34**	0.10**
Step 6				
Gender	0.04	0.06	0.04	
Job Satisfaction	-0.08	0.16	-0.04	
Organizational Commitment	-0.78	0.15	-0.43**	
Job Embeddedness	0.35	0.18	0.16*	
Job Search	0.61	0.11	0.34**	
Job Alternatives	0.02	0.07	0.02	0.00

[a]Independent Variable: Intent to Leave

*p < .05

**p < .01

Two-tailed Tests.

B = Unstandardized

β = Standardized

Enter Method

Table C6

Summary of Hierarchal Regression Analysis for Community and Organizational Job Embeddedness (N = 220)

Variable	*B*	*SE B*	β	ΔR^2
Step 1				
Gender	0.03	0.07	0.03	0.00
Step 2				
Gender	0.04	0.06	0.04	
Job Satisfaction	-0.43	0.14	-0.20**	0.04**
Step 3				
Gender	0.03	0.06	0.03	
Job Satisfaction	-0.43	0.14	-0.20**	
Job Alternatives	0.25	0.07	0.23**	0.05**
Step 4				
Gender	-0.01	0.06	-0.01	
Job Satisfaction	0.05	0.15	0.02	
Job Alternatives	0.09	0.07	0.09	
Organizational Commitment	-0.80	0.14	-0.44**	0.13**
Step 5				
Gender	0.02	0.06	0.02	
Job Satisfaction	0.07	0.14	0.03	
Job Alternatives	0.05	0.06	0.05	
Organizational Commitment	-0.65	0.13	-0.36**	
Job Search	0.62	0.11	0.34**	0.10**
Step 6				
Gender	0.04	0.06	0.04	
Job Satisfaction	0.02	0.14	0.01	
Job Alternatives	0.03	0.06	0.03	
Organizational Commitment	-0.74	0.13	-0.41**	
Job Search	0.60	0.11	0.33**	
Community Job Embeddedness	0.25	0.10	0.15*	0.02*
Step 7				
Gender	0.04	0.06	0.05	
Job Satisfaction	0.00	0.17	-0.00	
Job Alternatives	0.03	0.07	0.03	
Organizational Commitment	-0.75	0.15	-0.42**	
Job Search	0.60	0.11	0.33**	
Community Job Embeddedness	0.24	0.11	0.14*	
Organizational Job Embeddedness	0.04	0.19	0.02	0.00

[a]Independent Variable: Intent to Leave

*p < .05

**p < .01

Two-tailed Tests.

B = Unstandardized

β = Standardized

Enter Method

Table C7

Summary of Subsequent Hierarchal Regression Analysis for Community Job Embeddedness (N = 220)

Variable	*B*	*SE B*	β	ΔR^2
Step 1				
Gender	0.03	0.07	0.03	0.00
Step 2				
Gender	0.04	0.06	0.04	
Job Satisfaction	-0.43	0.14	-0.20**	0.04**
Step 3				
Gender	-0.01	0.06	-0.01	
Job Satisfaction	0.09	0.15	0.04	
Organizational Commitment	-0.87	0.13	-0.48**	0.17**
Step 4				
Gender	0.02	0.06	0.03	
Job Satisfaction	0.01	0.15	0.01	
Organizational Commitment	-0.95	0.13	-0.53**	
Community Job Embeddedness	0.30	0.11	0.18**	0.03**
Step 5				
Gender	0.04	0.06	0.04	
Job Satisfaction	0.03	0.14	0.02	
Organizational Commitment	-0.76	0.12	-0.42**	
Community Job Embeddedness	0.25	0.10	0.15**	
Job search	0.61	0.11	0.33**	0.10**
Step 6				
Gender	0.04	0.06	0.04	
Job Satisfaction	0.02	0.14	0.01	
Organizational Commitment	-0.74	0.13	-0.41**	
Community Job Embeddedness	0.25	0.10	0.15*	
Job Search	0.60	0.11	0.33**	
Job Alternatives	0.03	0.06	0.03	0.00

[a]Independent Variable: Intent to Leave

*p < .05

**p < .01

Two-tailed Tests.

B = Unstandardized

β = Standardized

Enter Method

Table C8

Summary of Hierarchal Regression Analysis with Collinearity Statistics for Community and Organizational Job Embeddedness (N = 220)

					Collinearity Statistics	
Variable	***B***	***SE B***	**β**	**ΔR^2**	**Tolerance**	**VIF**
Step 1						
Gender	0.03	0.07	0.03	0.00	1.00	1.00
Step 2						
Gender	0.04	0.06	0.04		1.00	1.00
Job Satisfaction	-0.43	0.14	-0.20**	0.04**	1.00	1.00
Step 3						
Gender	0.03	0.06	0.03		0.99	1.00
Job Satisfaction	-0.43	0.14	-0.20**		1.00	1.00
Job Alternatives	0.25	0.07	0.23**	0.05**	1.00	1.00
Step 4						
Gender	-0.01	0.06	-0.01		1.00	1.02
Job Satisfaction	0.05	0.15	0.02		0.71	1.41
Job Alternatives	0.09	0.07	0.09		0.86	1.17
Organizational Commitment	-0.80	0.14	-0.44**	0.13**	0.63	1.58
Step 5						
Gender	0.02	0.06	0.02		0.98	1.02
Job Satisfaction	0.07	0.14	0.03		0.71	1.41
Job Alternatives	0.05	0.06	0.05		0.85	1.18
Organizational Commitment	-0.65	0.13	-0.36**		0.61	1.65
Job Search	0.62	0.11	0.34**	0.10**	0.90	1.11
Step 6						
Gender	0.04	0.06	0.04		0.94	1.07
Job Satisfaction	0.02	0.14	0.01		0.70	1.44
Job Alternatives	0.03	0.06	0.03		0.83	1.20
Organizational Commitment	-0.74	0.13	-0.41**		0.56	1.77
Job Search	0.60	0.11	0.33**		0.90	1.12
Community Job Embeddedness	0.25	0.10	0.15*	0.02*	0.80	1.25
Step 7						
Gender	0.04	0.06	0.05		0.92	1.09
Job Satisfaction	0.00	0.17	-0.00		0.46	2.18
Job Alternatives	0.03	0.07	0.03		0.80	1.24
Organizational Commitment	-0.75	0.15	-0.42**		0.46	2.16
Job Search	0.60	0.11	0.33**		0.89	1.12
Community Job Embeddedness	0.24	0.11	0.14*		0.75	1.33
Organizational Job Embeddedness	0.04	0.19	0.02	0.00	0.33	3.04

[a]Independent Variable: Intent to Leave

*p < .05

**p < .01

Two-tailed Tests.

B = Unstandardized

β = Standardized

Enter Method

Appendix D: Human Subject Research Review Forms

08 Mar 04

MEMORANDUM FOR AFIT/ENV
AFIT/ENR
AFRL/HEH
IN TURN

FROM: AFIT/ENV/GEM

SUBJECT: Request for Exemption from Human Experimentation Requirements (AFI 40-402): Thesis Research, AFIT/ENV/GEM, Job Embeddedness Survey.

1. Request exemption from Human Experimentation Requirements of AFI 40-402 for the proposed Job Embeddedness Survey (attached) to be conducted in conjunction with thesis research at the Air Force Institute of Technology. Purpose of this study is to further investigate the extent to which job embeddedness may influence voluntary turnover. The results of this study will investigate the relationship strengths of link, fit, and sacrifice with job turnover. The survey results will display which of the three is the strongest indicator of job turnover.

2. This request is based on the Code of Federal Regulations, title 32, part 219, section 101, paragraph (b) (2); Research activities that involve human subjects will be exempt when the research involves the use of survey procedures provided (i) information obtained cannot be directly or through identifiers linked to the subjects, and (ii) disclosure of subjects' responses does not place the subjects at risk of criminal or civil liability, financial strain, employability or reputation ruin. Methodology used to collect information for job embeddedness research is based on an anonymous questionnaire of 119 questions that will be collected by the research administrators. The following information is provided to show cause for such an exemption:

2.1. Equipment and facilities: No special equipment or facilities will be used.

2.2. Subjects: Subjects will be members of the logistics group located at Grand Forks AFB, North Dakota.

2.3. Timeframe: Data will be collected in May 2004.

2.4. Description of the survey: The Job Embeddedness Survey will be administered in person by 1Lt Charles Hassell and 1Lt Richard Fletcher at Grand Forks AFB, North Dakota. The questionnaire will be filled out by members of the logistics group in a classroom setting. After completion, the questionnaires will be picked up by 1Lt Charles Hassell or 1Lt Richard Fletcher.

2.5. Data collected: No identifying information is obtained through the survey. Data collected on individual subjects will consist of short answers, simple yes or no responses, and utilize the Likert measuring scale. The areas of interest will

include: job embeddedness, job satisfaction, organizational commitment, job alternatives, job search behavior, employee intent to leave, age, gender, race, salary, education level and position.

2.6. Informed consent: All subjects are self-selected to volunteer to participate in the survey. No adverse action is taken against those who choose not to participate. Subjects are made aware of the nature and purpose of the research, sponsors of the research, and disposition of the survey results. A copy of the Privacy Act Statement of 1974 is presented for their review.

2.7. Risks to Subjects: Individual responses of the subjects will not be disclosed. This eliminates any risks to the subjects as noted in paragraph 2. There are no anticipated medical risks associated with this study.

3. If you have any questions about this request, please contact 1Lt Charles Hassell or 1Lt Richard Fletcher at- Phone (937) 255-3636x4553, DSN 785-3636x4553; E-mail – charles.hassell@afit.edu, richard.flecther@afit.edu, or Major Daniel T. Holt who will serve as the Faculty Advisor (primary investigator) – Phone 255-3636, ext. 4553; E-mail – daniel.holt@afit.edu.

DANIEL T. HOLT, Major, USAF
USAF
Assistant Professor of Management
Faculty Advisor, AFIT/ENV/GEM

CHARLES E. HASSELL, 1st Lt,

Graduate Student, AFIT/ENV/GEM

SHARON G. HEILMANN, Major, USAF
Lt, USAF
Instructor of Management
Faculty Advisor, AFIT/ENV/GEM

RICHARD E. A. FLETCHER, 1st

Graduate Student, AFIT/ENV/GEM

Attachment:
Job Embeddedness Survey

Protocol Outline
For
Job Embeddedness

1. Title: Job Embeddedness Survey.

2. Principal Investigator: Major Daniel T. Holt; AFIT/ENV; 255-3636, ext. 4553; daniel.holt@afit.edu.

3. Associate Investigator(s): 1Lt Charles Hassell, AFIT/ENV/GEM, (707) 479-9076, charles.hassell@afit.edu and 1Lt Richard Fletcher, AFIT/ENV/GEM, (937) 879-1367, richard.fletcher@afit.edu.

4. Medical Monitor: Not applicable.

5. Contractor and/or Facility: Not applicable.

6. Objective: The purpose of this study is to further investigate the extent to which job embeddedness may influence voluntary turnover. The results of this study will investigate the relationship strengths of link, fit, and sacrifice with job turnover. The survey results will display which of the three is the strongest indicator of job turnover.

7. Background:

a. To what extend does a person's link, fit, and sacrifice influence job turnover.
b. Mitchell, Holtom, Lee, Sablynski and Erze (2001) demonstrated that feelings of embeddedness are related to voluntary turnover. Our study will further test, refine, and evaluate the extent to which job embeddedness influences intent to leave and voluntary turnover.
c. This study can help the Air Force by demonstrating that job embeddedness is fundamental to retention, enabling future leaders to integrate appropriate changes that promote retention in the Air Force.

8. Impact: The completion of this project will add further insight into predicting turnover. Air Force turnover is a problem, especially within specialized career fields and middle management. Positive evidence of this study will lead to information that can be used to create an environment that promotes retention within the Air Force.

9. Experimental Plan:

a. Equipment and facilities: The survey shall be conducted in a classroom or office.
b. Subjects: The subjects will be volunteers from the logistics group stationed at Grand Forks AFB, North Dakota. There will be approximately 400 personnel of various race and gender that ranging in age from 18 to 50 participating in the study. The survey will take approximately 30 minutes to complete.

c. Duration of the study: The study will start April 2004 and end in March 2005.
d. A survey questionnaire will be administered to all participants—see attachment 1. The survey will be anonymous. 1Lt Charles Hassell and 1Lt Richard Fletcher will administer and collect the surveys. At no time shall the survey leave their control. Lt Hassell and Lt Fletcher shall evaluate the data and provide the results to any interested party involved in the survey. No survey data shall be matched up with an individual.
Data collection questionnaire—see attachment 1.
e. On-site monitoring shall be conducted by Lt Hassell and Lt Fletcher. They can be reached by phone at (707) 479-9076 or (937) 879-1367 in case of an emergency or by email at charles.hassell@afit.edu or richard.fletcher@afit.edu.

10. Medical Risk Analysis: There are no possible hazards associated with the survey

11. References:

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erze, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44(6), 1.

References

Air Force Instruction 65-503 Cost and Planning Factors. (2003). *Personnel factors: Attachments A18-1a and A18-1b*. Retrieved September 20, 2004, from https://aftoc.hill.af.mil/AFI65503/AFI65503.html.

Air Force Pamphlet 36-2241VI. (2003). *Promotion fitness examination (PFE) study guide.* Retrieved January 5, 2005, from http://www.e-publishing.af.mil/pubfiles/af/36/afpam36-2241v1/afpam36-2241v1.pdf.

Active Military Turnover Rates. (2003). *Air Force Instruction 65-503: Attachment A19-3*. Retrieved September 20, 2004, from https://aftoc.hill.af.mil/AFI65503/Personnel_Factors/19-3.html.

Allen, N.J., & Meyer, J.P. (1990). The measurement and antecedent of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology, 63,* 1-18.

Arnold, H.F., & Feldman, D.C. (1982). A multivariate analysis of the determinants of turnover. *Journal of Applied Psychology, 67*(3), 350-360.

Barnard, C.I. (1938). *The functions of the executive.* Cambridge, Mass.: Harvard University Press.

Bluedorn, A.C. (1982). A unified model of turnover from organizations. *Human Relations, 35*(2), 135-153.

Cascio, W.F. (1991). *Costing human resources: The financial impact of behavior in organizations (*3rd ed.). Boston: PWS-Kent Pub. Co.

Cohen, J., & Cohen, P. (1975). *Applied multiple regression/correlation analysis for the behavioral sciences.* Hillsdale, New Jersey: Lawrence Erlbaum Associates, Inc.

Cohen-Charash, Y., & Spector, P.E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes, 86*(2), 278-321.

Cotton, J. L., & Tuttle, J. M. (1986). Employee turnover: A meta-analysis and review with implications for research. *Academy of Management Review, 11*(1)*,* 55-77.

Crabb, J. T. (1912). Scientific hiring. *Efficiency Society Transactions*, *2*, 313-318.

DeCotiis, T., & Summers, T. (1987). A path analysis of a model of the antecedents and consequences of organizational commitment. *Human Relations*, *40*(7), 445-470.

GAO-05-200. (2005). *Military personnel: DOD needs to conduct a data-driven analysis of active military personnel levels required to implement the defense strategy.* Government Accountability Office. Retrieved February 3, 2005, from http://www.gao.gov/new.items/d05200.pdf

Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment. *Administrative Science Quarterly, 33*(1), 61-81.

Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update moderator tests, and research implications for the millennium. *Journal of Management, 26*(3), 463-488.

Hackman, J., & Oldham, G. (1976). Motivation through the decision of work: Test of a theory. *Organizational Behavior and Human Performance, 16*, 250-279.

Hom, P. W., & Griffeth, R. W. (1995). *Employee turnover*. Cincinnati: South/Western.

Hom, P. W., Griffeth, R. W., & Sellaro, C.L. (1984). The validity of Mobley's (1977) model of employee turnover. *Organizational Behavior and Human Performance, 34,* 141-174.

Hulin, C.L., Roznowski, M., & Hachiya, D. (1985). Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration. *Psychological Bulletin, 97,* 233-250.

Ironson, G.H., Smith, P.C., Brannick, M.T., Gibson, W.M., & Paul, K.B. (1989). Construct of a job-in-general scale: A comparison of global, composite and specific measures. *Journal of Applied Psychology, 74,* 193-200.

Kopelman, R.E., Ravenpor, J.L., & Millsap, R.E. (1992). Rationale and construct validity evidence for the Job Search Behavior Index: Because intentions (and New Year's resolutions) often come to naught. *Journal of Vocational Behavior, 40,* 269-287.

Law , K.S., Wong, C., & Mobley, W.H. (1998). Toward a taxonomy of multidimensional constructs. *Academy of Management Review, 23*(4), 741-755.

Lee, T. W., Mitchell, T. R., Sablynski, C. J., Burton, J. P., & Holtom, B. C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences and voluntary turnover. *Academy of Management Journal*, 47(5), 711-722.

Lee, T.W., & Mowday, R.T. (1987). Voluntarily leaving an organization: An empirical investigation of Steers and Mowday's model of turnover. *Academy of Management Journal, 30*(4), 721-743.

Lewin, K. (1951). In Cartwright D. (Ed.), *Field theory in social science*. New York: Harper & Row, Publishers, Inc.

Maertz, C.P., & Campion, M.A. (1998). 25 years of voluntary turnover research: A review and critique. *International Review of Industrial and Organizational Psychology, 13*, 49-81.

March, J.G., & Simon, H.A. (1958). *Organizations.* New York: John Wiley.

Mathieu, J.E., & Zajac, D.M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin, 108*(2), 171-194.

Meyer, J.P., & Allen, N.J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology, 69*, 372-378.

Mitchell, T. R., Holtom, B. C., & Lee, T. W. (2001). How to keep your best employees: The development of an effective attachment policy. A*cademy of Management Executive, 15*(4), 96-108.

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal, 44*(6), 1102-1121.

Mitchell, T. R., & Lee, T. W. (2001). The unfolding model of voluntary turnover and job embeddedness: Foundations for a comprehensive theory of attachment. *Research in Organizational Behavior, 23*, 189-246.

Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62*, 237-240.

Mobley, W. H. (1982). *Employee turnover: Causes, consequences, and control.* Menlo Park, CA: Addison-Wesley.

Mowday, R.T., Porter, L.W., & Steers, R.M. (1982). *Employee-organizational linkages.* New York: Academic Press.

Podsakoff, P.M., & Organ, D.W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531-544.

Porter, L.W., & Steers, R.M. (1973). Organizational work and personal factors in employee turnover and absenteeism. *Psychological Bulletin, 80*(2), 151-176.

Price, J.L. (1977). *The study of turnover.* Ames, Iowa: Iowa State University Press.

Price, J.L., & Mueller, C.W. (1981). A causal model of turnover for nurses. *Academy of Management Journal*, *24*(3), 543-565.

Simon, H.A. (1947). *Administrative behavior.* New York: Free Press.

Spector, P.E. (1997). *Job satisfaction.* Thousand Oaks, CA: Sage.

Steel, R.P., & Ovalle, N.K., II. (1984). A review and meta-analysis of research on the relationship between behavioral intentions and employee turnover. *Journal of Applied Psychology, 69*(4), 673-686.

Steers, R.M., & Mowday, R.T. (1981). Employee turnover and post-decision accommodation process. In L.L. Cummings & B.M. Staw (Eds.), *Research in organizational behavior* (Vol. 3). Greenwich, Conn.: JAI Press.

Ting, W. (1997). Determinants of job satisfaction of federal government employees. *Public Personnel Management, 26*(3), 313-335.

Tsui, A.S., & O'Reilly, C.A. III. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal, 32*(2), 402-423.

Typical Acquisition and Training Costs. (2003). *Air Force Instruction 65-503: Attachment A17-1*. Retrieved September 20, 2004, from https://aftoc.hill.af.mil/AFI65503/Personnel_Factors/17-1.html

Vivien, K.G., & Thompson, S.H. (1998). Effects of individual characteristics on police officer's work-related attitudes. *Journal of Managerial Psychology, 13*(5/6), 334-340.

Witkin, H. A., Dyk, R. B., Faterson, H. F., Goodenough, D. R., & Karp, S. A. (1962). *Psychological differentiation*. New York: John Wiley and Sons.

Vita

1st Lieutenant Richard Fletcher was enlisted for 11 years prior to being selected for the Airman Education and Commissioning Program in 1997 to complete his undergraduate degree. He entered North Carolina State University in January 1998 and graduated in December 2000. He graduated Magna Cum Laude with a Bachelor of Science degree in Electrical Engineering. He entered the Air Force's Officer Training School at Maxwell, AFB Alabama in January 2001 and was commissioned April 5, 2001.

His following assignment was to Travis AFB, California in the 60th Civil Engineering Squadron. He was assigned to the Maintenance Engineering flight for the first year, prior to being selected to fill in as Readiness Flight Chief. He then became the Housing, Medical, and Non-Appropriated Funds (NAF) Programmer for the Engineering Flight in October 2002. In August 2003, he entered the Graduate School of Engineering and Management, Air Force Institute of Technology. Upon graduation, he will be assigned to the 4th Civil Engineering Squadron at Seymour Johnson AFB, North Carolina.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 074-0188

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From – To)*
21-03-2005	**Master's Thesis**	Aug 2003 – Mar 2005

4. TITLE AND SUBTITLE

Job Embeddedness: A Construct of Organizational and Community Attachment Utilized to Assess Voluntary Turnover

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

Fletcher, Richard E.A. III, 1st Lieutenant, USAF

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAMES(S) AND ADDRESS(S)
Air Force Institute of Technology
Graduate School of Engineering and Management (AFIT/ENV)
2950 Hobson Way
WPAFB OH 45433-7765

8. PERFORMING ORGANIZATION REPORT NUMBER

AFIT/GEM/ENV/05M-03

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

N/A

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

13. SUPPLEMENTARY NOTES

14. ABSTRACT

The purpose of this research was to further refine and evaluate the extent to which job embeddedness influences voluntary turnover. Specifically, this thesis sought to determine the effectiveness of job embeddedness in explaining additional incremental variance in intent to leave, above what is usually accounted for with traditional attitudinal variables. Additionally, the individual effects of tenure, education level, organizational rank, and pay were evaluated to determine if they moderated the effects of job embeddedness on a person's level of intent to leave.

15. SUBJECT TERMS
Job Turnover, Job Embeddedness, Intent To Leave, Organizational Commitment, Job Satisfaction, Voluntary Turnover, Job Search, Job Alternatives, Organizational Link, Organizational Fit, Organizational Sacrifice, Community Link, Community Fit, Community Sacrifice

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
REPORT	ABSTRACT	c. THIS PAGE			Sharon G. Heilmann, Major, USAF (ENV)
U	U	U	UU	111	19b. TELEPHONE NUMBER *(Include area code)* (937) 255-3636, ext 4553; e-mail: Sharon.heilmann@afit.edu

Standard Form 298 (Rev: 8-98)
Prescribed by ANSI Std. Z39-18