THE IMPACT OF COMMUNITY EMBEDDEDNESS ON TURNOVER:

AN INVESTIGATION OF THE MODERATING EFFECTS OF CAREER PLATEAUING, OCCUPATIONAL PORTABILITY, AND OCCUPATIONAL COMMUTABILITY

Sharon Gibson Heilmann

Submitted to the Faculty of the University Graduate School

In Partial Fulfillment of the Requirements

for the Degree

Doctor of Philosophy

in the Kelley School of Business

Indiana University

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
01 JUN 2005	**N/A**	**-**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
The Impact Of Community Embeddedness On Turnover: An Investigation Of The Moderating Effects Of Career Plateauing, Occupational Portability, And Occupational Commutability	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Kelley School of Business Indiana University**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) **Department of the Air Force, AFIT/CIA WPAFB, OH**	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
The original document contains color images.

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			
unclassified	**unclassified**	**unclassified**	**UU**	**173**	

ACCEPTANCE

Accepted by the Graduate Faculty, Indiana University, in partial fulfillment of the requirements of the Degree of Doctor of Philosophy in Business.

Date _____

_____
Professor George F. Dreher, Chair

_____
Professor Timothy T. Baldwin, Member

_____
Professor Janet P. Near, Member

_____
Clinical Assistant Professor Carolyn M. Wiethoff, Member

The views expressed in this article 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 U.S. Government.

ACKNOWLEDGEMENTS

As a doctoral student sponsored by the U.S. Air Force, my doctoral experience was somewhat different from that of my peers. I did not have to sacrifice employment to complete my doctoral education, as I remained employed by the Air Force, and was even promoted, during my doctoral program. I also knew that following my program, I was going to an academic position at the Air Force Institute of Technology. Of course, I did have the pressure of fulfilling the Air Force requirement of completing the entire doctoral program within 36 months. I had always been told that completion of a doctorate was a matter of persistence, but I believed that because the Air Force was providing financial and employment security, I could handle the persistence requirement. Naively, I associated persistence only with coursework and dissertation completion.

During the 58 months of my program, I have persisted through two years of coursework, one wedding, a breast cancer diagnosis, three major surgeries, four cycles of chemotherapy, one year of failed assisted reproductive therapy, nine months of waiting for our daughter, and one year working as an instructor at the Air Force Institute of Technology and trying to finish my dissertation while being geographically separated from my committee. Through all of these challenges, many people touched my life, and I want to acknowledge some of them here for their support, motivation, and guidance.

I would first like to express my appreciation to my committee chair, Professor George Dreher, for the professionalism and dedication he demonstrated in working with me over the past three years. He always provided honest, constructive feedback and helped me curb my verbose writing tendencies. I appreciate the fact that he worked to

provide feedback quickly and made himself available to me via telephone, email, and office meetings as often as I needed. He is a true gentleman and scholar.

Professor Janet Near has been a great friend and mentor, both personally and professionally for me, since the onset of the program. I still have the email welcoming me to the doctoral program that she sent to me when I was stationed at a remote assignment in the Republic of Korea. From the beginning, she provided practical advice, expert knowledge, and kind reassurances. What I will always remember the most about Janet is that during and after months of chemotherapy, she was the one person who always called and emailed me to make sure I was okay. I treasure her kindness.

In addition to his professional contributions toward this research effort, I would like to thank Professor Tim Baldwin for the many kindnesses and depth of understanding he has shown me. I know that Tim understood my feelings about my dissertation, parenting, loss, and the feeling of comfort provided by a simple bouquet of flowers.

I would also like to thank Professor Carolyn Wiethoff for the expertise, friendship, and kindness she shared throughout my dissertation. She was always supportive and never doubted that I would one day finish. For this, I am very grateful

Finally, I want to thank my husband for his love, support, sacrifices, and dedication. When couples vow to love one another in sickness and in health, I do not think they expect this promise to be tested five months after making it. He has been there for me through everything, even when I was not able to be there for him. I share this accomplishment with him.

I thank you all for your patience, prayers, and persistence.

ABSTRACT

This dissertation tested the effects of community embeddedness on predicting turnover decisions of members of an organization characterized by frequent relocation and limited discretionary organizational exit. The theoretical premise was the organization members would value the links and fit to their community such that thoughts of leaving or actually leaving the organization would be lessened by their desire to remain enmeshed in their communities. Community embeddedness was believed to account for significant incremental variance, beyond that of job satisfaction, organizational commitment, job search, and job alternatives, in predicting turnover of members of the U.S. Air Force using an archival data set. The moderating effects of perceptions of career plateauing, perceived occupational portability, and occupational commutability on intent to turnover and actual turnover were also tested, but no significant findings resulted. I confirmed that community embeddedness did increase the prediction of actual turnover when considered in conjunction with turnover intentions, but community embeddedness did not increase the prediction of intent to turnover. Results suggested reconsideration of process models of turnover that identify intent to turnover as the direct antecedent of actual turnover is necessary to evaluate the proper alignment of community embeddedness within the models. Theoretical refinement is necessary to refine the boundary conditions of community embeddedness.

TABLE OF CONTENTS

LIST OF APPENDICES, FIGURES, AND TABLES

The views expressed in this article 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 U.S. Government.

CHAPTER 1

INTRODUCTION

Employee turnover is considered one of the most persistent and significant issues confronting employers today. According to a 2001 Bureau of National Affairs study, over 84% of human resource professionals surveyed cited turnover as the most serious problem in their organizations, up 10% from 1997 (Bureau of National Affairs, 2001). A more recent national survey (as cited in Griffeth & Hom, 2001) indicated 52% of companies in the private sector reported increasing turnover rates, with quit rates reaching approximately 1.1% per month.

Experts provide varying cost estimates of replacing an employee in the civilian sector, ranging from 50% to 60% of annual salary (Mitchell, Holtom, & Lee, 2001) to 93% to 200% of the employee's salary, depending upon technical skill and job duties (Cascio, 2000). Costs of turnover in the government sector are also significant. The nation's single largest employer is the U.S. Department of Defense (DoD), comprised of five service branches and employing a total of 1,381,497 military members, 654,147 civilians, and 1,197,776 Guard and Reserve members (U.S. DoD, 2004) as of December 31, 2003.

An example of costs associated with turnover in a large organization such as the DoD involves the United States Air Force (USAF), comprised of 372,305 military members (Air Force Personnel Center [AFPC], 2004). In the USAF, enlisted and pilot retention regularly falls below projected requirements (U.S. DoD, 2001). Putting aside issues of combat readiness and war fighting capabilities, the costs of recruiting enlisted

members and pilots are daunting in light of retention rates near 55% and 41%, respectively, for members after six years of service. Disregarding the other tangible costs of turnover such as separation, vacancy, and replacement costs, training costs alone for the DoD are staggering. A significant amount of initial training-related costs are incurred within the first year of entry into the military for enlisted members ($45,000 for enlistment and basic training) and within the first five years for USAF pilots ($798,000 for USAF Academy attendance and undergraduate pilot training; U.S. DoD, 2002). [Note: Per AFPC (2002), 44% of USAF pilots earned their commission from the USAF Academy.]. The USAF requires each member to serve 3 to 6 years beyond initial training for enlisted member and officer pilot, respectively, to help recoup initial training costs. Ongoing technical training for enlisted members to advance in their core competencies and rigorous flight and simulator training required for pilots to maintain proficiencies increase training costs even more.

Though significant efforts are made to retain these valued human resources, the USAF has experienced significant difficulty in the past eight years retaining its enlisted force, and to a lesser degree, its pilot force (AFPC, 2001a). Considering the real cost of training, ongoing budgetary battles, the potential tax dollars lost, and possible consequences accompanying decreased military strength, it is not a surprise that retention issues have plagued senior DoD officials over the past twenty years (U.S. DoD, 1978) and have taken a seemingly permanent place atop the critical issues list since 1998 (U.S. DoD, 2001).

Purpose of the Research

The DoD, like large employers in the civilian sector, has demonstrated an interest in identifying and capitalizing on factors associated with decreasing voluntary, dysfunctional turnover. Specifically, the DoD relies on DoD staff agencies and contractors such as the Defense Manpower Data Center (DMDC), AFPC, and RAND Corporation to conduct surveys (e.g., 2000 USAF Career and New Directions Survey, Hamilton & Datko, 2000; Career-related values of designated aviators and naval flight officers, Robertson, 1966) and engage in other feedback-gathering mechanisms (e.g., town hall meetings, web-based feedback sites) to assess the pulse of military members regarding their intentions to stay or depart the service. Academia has also demonstrated interest in investigating retention-related decisions of military members, as evidenced by studies using military samples (e.g., Atchison & Lefferts, 1972; Bluedorn, 1979; Hom, Katerberg, & Hulin, 1979; Price & Kim, 1993).

As expected, factors such as job satisfaction, satisfaction with pay and promotions, frequency of relocations, and availability of civilian jobs consistently ranked as some of the top reasons cited by USAF officer and enlisted members for departing as well as remaining in the military (Hamilton & Datko, 2000). Despite the significant attention given to such variables in management literature, results from a meta-analytic review of turnover antecedents, as reported by Griffeth, Hom, and Gaertner (2000), indicated only 4 to 5% of the variance regarding antecedents of employee turnover was accounted for by attitudinal variables. Maertz and Campion (1998) suggested empirical studies using existing models account for only 25% of explained variance in turnover, and called for renewed focus on how individuals make decisions to remain with

organizations and what forms the basis of this attachment. Thus, refocusing the lens on other factors that may influence turnover decisions is necessary.

Mitchell, Holtom, Lee, Sablynski, and Erez (2001) introduced a new construct termed *job embeddedness*, which they suggested is a significant predictor of voluntary turnover. Lee, Mitchell, Sablynski, Burton, and Holtom (2004) positioned job embeddedness as a factor to help determine why employees would not want to leave a job. Three dimensions, fit, links, and sacrifice, were believed to comprise an employee's organizational and community life. Additionally, Mitchell and Lee (2001) and Lee et al. (2004) reported that this new construct explained significant incremental variance over job satisfaction, organizational commitment, job alternatives, and job search in predicting turnover. Mitchell and Lee (2001) suggested more research be conducted on the relationship between job embeddedness and various types of leavers, such as those staying with an organization but who relocate to another city. As military families move approximately every two years, resulting in ten geographic relocations during the span of a 20-year career (U.S. Government Accounting Office, 2001), studying a military population provides the ability to assess construct generalizability and validation efforts using a population believed to represent a microcosm of societal demographics.

To date, published studies involving the development of the job embeddedness construct have been based on samples comprised of clerks from a retail grocery store and employees in a community-based hospital (N=208 and 177, respectively; Mitchell et al., 2001). Various researchers have noted that repeated evaluation of a construct or measure is necessary for ultimately determining the usefulness and validity of a new construct (e.g., Bacharach, 1989; Hanisch, Hulin & Roznowski, 1998; Kerlinger & Lee, 2000).

Given this demonstrated need for further exploration, the proposed study seeks to use members of the USAF to further our understanding of the effects of community embeddedness on intentions to quit and actual turnover in an environment associated with frequent job-related relocation and reduced discretionary organizational exit opportunities. This dissertation begins with a review of pertinent literature on definitions and taxonomies of turnover, historical turnover models, and job embeddedness (Chapter 2). After establishing the current state of job embeddedness theory and its relationship with turnover, I will introduce potential moderators believed to impact the relationship between community embeddedness and turnover. The ultimate purpose of this research effort is to develop a better understanding of the boundary conditions of the community embeddedness → turnover relationship with the intent of refining theoretical application of the job embeddedness construct (Chapter 2). Chapter 3 provides an in depth discussion of the methodology used, to include a detailed description of measures derived from the data set. Chapter 4 describes hypotheses results as well as results from exploratory supplemental analyses undertaken to further investigate areas of interest. I conclude with a discussion of conclusions based on research and exploratory supplemental analyses results in the final chapter, and suggest implications for theoretical and practical applications.

CHAPTER 2

LITERATURE REVIEW AND HYPOTHESES

In this chapter, I review literature related to the historical development of turnover models and introduce the job embeddedness construct. Turnover has been modeled from numerous perspectives, but this discussion will focus on models that differentiate the job embeddedness construct from similar attitudinal predictors of turnover such as job satisfaction, organizational commitment, and job search behavior. I will then discuss the literature pertaining to job embeddedness. Relatively few empirical studies have investigated job embeddedness, so opportunities certainly exist to further the understanding and utility of this construct.

Definitions of Turnover

Turnover, which has been defined as "the degree of individual movement across the membership boundary of a social system" (Price, 1977, p. 4), can be classified into two types, involuntary and voluntary. Involuntary turnover is movement not initiated by the individual such as dismissal, layoff, retirement, and death (Bluedorn, 1978). Most involuntary turnover actions are initiated by the organization rather than by the employee. Price (1977, p. 9) defined voluntary turnover as "individual movement across the membership boundary of a social system which is initiated by the individual." Maertz and Campion (1998, p. 50) further refined the Price definition by focusing on "instances wherein management agrees that the employee had the physical opportunity to continue employment with the company at the time of termination."

Dalton, Todor, and Krackhardt (1982) further delineated voluntary turnover into functional and dysfunctional categories. Functional turnover was characterized by the departure of sub-standard employees, while dysfunctional turnover was characterized by the departure of effective, highly skilled, or difficult to replace employees. The taxonomy offered by Dalton et al. (1982) was further refined to include unavoidable and avoidable quits (Abelson, 1987). Unavoidable quits were described as departures beyond the control of the organization (e.g., departure due to childbirth, marriage, family relocation, full-time care for relatives, or death). Avoidable quits were departures in which the organization had control (e.g., a member quits an organization to accept employment with an organization offering higher pay, better benefits, etc.). Dalton et al. theorized that the portion of turnover categorized as avoidable dysfunctional turnover, as opposed to unavoidable dysfunctional, turnover, was to a degree within the organization's control to manage. Voluntary turnover is of primary interest in this research project.

Traditional Models of Turnover

Turnover-related research in academic literature can be traced back to the 1900s (e.g., Bernays, 1910; Crabb, 1912). Not surprisingly, 100 years of turnover-related research has resulted in a variety of perspectives. Traditional research has primarily focused on developing predictive models of turnover (e.g., Lee & Mitchell, 1994; March & Simon, 1958; Mobley, 1977; Price, 1977, 2001). The tasks of describing and critiquing existing turnover models are not new endeavors in academia, as demonstrated by a few noted authors (e.g., Hom & Griffeth, 1995; Maertz & Campion, 1998; Mobley,

1982; Price, 1977, 2001). As noted by Steel (2002), consensus on how to model turnover has yet to be achieved.

Antecedents of Turnover

In the most recent meta-analytic review of antecedents and correlates of turnover, Griffeth, Hom, and Gaertner (2000) offered the most extensive meta-analytic treatment, to date, of antecedents and moderators related to turnover. This review updated earlier meta-analyses offered by Hom and Griffeth (1995) and Cotton and Tuttle (1986). As the literature pertaining to turnover is vast, focusing the literature review around the models identified by the Griffeth et al. (2000) ensures that the historically and statistically significant variables are addressed. Griffeth et al. (2000) identified six proximal precursors in the withdrawal process as the best predictors of turnover. These predictors included job satisfaction, organizational commitment, job search, comparison of alternatives, withdrawal cognitions, and quit intentions. The models pertaining to the aforementioned predictors will be presented in chronological order.

Theory of organizational equilibrium. In their often cited model, March and Simon (1958) used the Barnard-Simon theory of organizational equilibrium as the foundation of their model of turnover, which is also considered to be the first formal turnover theory (Hom & Griffeth, 1995). March and Simon (1958) identified two factors believed to affect the inducement-contribution balance which ultimately motivates individuals' employment participation decisions, perceived desirability of leaving the organization, and perceived ease of movement from the organization.

March and Simon (1958) proposed that two factors were causally related to perceived desirability of movement; job satisfaction and perceived possibility of

intraoganizational transfer. Job satisfaction was influenced by three variables: (a) conformity of job to self image, (b) predictability of job relationships, and (c) compatibility of job and other roles. Likewise, perceived possibility of intraorganizational transfer was preceded by 'size of the organization'. See Appendix A, Figure A1 for March and Simon's (1958) model of major factors affecting perceived desirability of movement. As depicted in Appendix A, Figure A2, perceived ease of movement was directly preceded by only one variable; the number of extraorganizational alternatives perceived. The March and Simon model influenced many subsequent researchers and turnover models (e.g., Lee & Mitchell, 1994; Mobley, 1977; Steers & Mowday, 1981).

Insert Figures A1 and A2 about here

Structural model. As depicted in Appendix A, Figure A3, Price (1977, p. 79) proposed a causal model identifying multiple correlates of turnover. Satisfaction and opportunity were the two primary drivers of turnover identified by Price (1977). Satisfaction, a social psychology variable was defined as "the degree to which the members of a social system have a positive affective orientation toward membership in the system" (Price, 1977, p. 79) The negative relationship between satisfaction and turnover was moderated by opportunity, a variable defined as "the availability of alternative roles in the environment" (Price, 1977, p. 81). Dissatisfaction resulted in turnover when opportunity was high.

Insert Figure A3 about here

In a revision of the Price (1977) model, as depicted in Appendix A, Figure A4, Price and Mueller (1981) indicated that 11 determinants of turnover preceded two intervening variables, job satisfaction and intent to stay, in the causal model of turnover. Among the new components were generalized training, kinship responsibility, and intent to stay. Generalized training was defined as "the degree to which the occupational socialization of an individual results in the ability to increase the productivity of different organizations" (Price & Mueller, 1981, p. 546), and was believed to be negatively related to intent to stay. Kinship responsibility was defined as "the degree of an individual's obligations to relatives in the community in which an employer is located" (Price & Mueller, 1981, p. 546), and was believed to be positively related to intent to stay. Opportunity, believed to moderate the relationship between job satisfaction and turnover by Price (1977), was thought to be positively and directly related with turnover in this model.

Insert Figure A4 about here

Turnover process model. Mobley's (1977) intermediate linkage model, as depicted in Appendix A, Figure A5, represented a heuristic model of the withdrawal decision process, examining the relationships between job satisfaction and turnover. A contribution of Mobley's theory was the addition of the perceived alternatives and intention to quit/stay variables (withdrawal intentions) preceding the turnover decision. Relying on Fishbein and Azjen's (1975, p. 369) theory that "the best single predictor of an individual's behavior will be a measure of his intention to perform that behavior," researchers have reported a strong correlation between intentions to quit and turnover.

Porter and Steers (1973) suggested that intent to turnover was the best single predictor of actual turnover. Subsequent research has supported this finding (e.g., Mobley, Griffeth, Hand, & Meglino, 1979; Price & Mueller, 1981; Steel & Ovalle, 1984).

Insert Figure A5 about here

An expanded version of the Mobley et al. (1979) model incorporated four more variables, all preceding intentions to quit, into the intermediate linkages model. These variables were job satisfaction-dissatisfaction, expected utility of alternative internal work roles, expected utility of alternative external work roles, and nonwork values and contingencies. Hom and Griffeth (1995, p. 58) credited Mobley's theory (Mobley, 1977; Mobley et al.) as being "unmatched in its far-reaching enduring influence."

Multi-route model. The Steers and Mowday (1981) model of turnover, referenced in Appendix A, Figure A6, incorporated individual, affective, and organizational variables. Affective variables of interest included organizational commitment, job involvement, and job satisfaction. Unlike the Price (1977) model where job satisfaction was believed to directly influence turnover, moderated by opportunity, Steers and Mowday (1981) argued that job satisfaction, as affected by nonwork influences, affected intent to stay/leave, which influenced turnover. Similarly, Mobley et al. (1979) modeled the search process prior to intentions to leave, whereas Steers and Mowday (1981) suggested job search actually followed leave intentions.

Insert Figure A6 about here

Unified model. Bluedorn (1982) offered a unified model of turnover, presented in Appendix A, Figure A7, in which he combined previous models. Based on previous research failing to support the opportunity and satisfaction interaction hypothesized by Price (1977), Bluedorn (1982) considered opportunity a determinant of satisfaction; thus, indirectly affecting turnover. Based on work by Marsh and Mannari (1977) and Mobley (1977), Bluedorn (1982) placed organizational commitment after job satisfaction but before job search and intent to leave. Results indicated job search should be repositioned within the model.

Insert Figure A7 about here

The key models discussed in this review greatly contributed to increasing our understanding of the turnover process. Though few studies have directly tested the March and Simon (1958) model, their contributions to the theoretical development of the concept of intent to turnover is evident in subsequent turnover models. As examples, Price (1977) positioned opportunity as a moderating variable between job satisfaction and turnover, suggesting that dissatisfaction with a job predicted turnover if availability of alternative employment was believed to be high; otherwise, dissatisfied workers were predicted to remain in their current positions. Price and Mueller (1981) expanded on Price (1977) by placing intent to stay after job satisfaction and prior to turnover in their revised model. In this model, opportunity was also believed to have a direct effect on turnover. Mobley's (1977) contribution of positing job search prior to intent to stay was also found in the Steers and Mowday (1981) multi-route and Bluedorn's (1982) unified model. Bluedorn (1982) also suggested organizational commitment followed job

satisfaction and preceded intent to turnover in his model. As meta-analyses of turnover studies (e.g., Hom & Griffeth, 1995) indicated about 50% of the variance in the prediction of turnover has been explained, further exploration is necessary. An effort intended to increase the explanatory ability of turnover models involves a construct termed *job embeddedness*.

Job Embeddedness

Mitchell, Holtom, Lee, Sablynski, and Erez (2001) combined the literatures on the embedded figures test (Witkin, Dyk, Faterson, Goodenough & Karp, 1962) and field theory (Lewin, 1951) to provide the theoretical foundation for a new construct termed *job embeddedness*. As described by Witkin et al. (1962, p. 39), the embedded-figures test "requests subjects to find a particular simple figure within a larger complex figure." A subject's score represented a measure of the extent to which his perception was influenced by the context in which an item occurs. Witkin et al. (p. 35) believed "that an individual with a field-dependent manner of perception tends to experience his surroundings in a relatively global fashion, passively conforming to the influence of the prevailing field or context." Drawing from Witkin et al., Mitchell et al. (2001) described embedded figures as figures that are immersed in the backgrounds of individuals. As individuals were unlikely to sever the bond with these background figures, the figures soon became a familiar part of their surroundings.

From field theory, Mitchell et al. (2001) found a similar pattern in that individuals function in a perceptual life space representing the many roles and aspects of their lives. Per Mitchell et al., connections made among these aspects within the life space may be loose or close knit, resulting in the formation of a net or womb-like structure. Depending

upon the number of connections and distance between each connection, an individual may become "embedded" in one or more ways within the net. As an example, a highly embedded individual would have multiple links that are closely knit (e.g., low differentiation).

Mitchell et al. (2001) described three critical aspects of job embeddedness, to include (a) the degree to which individuals had links to other people or activities, (b) the degree to which their jobs and communities were similar to other aspects of their lives, and (c) the degree to which the links could be easily severed. Mitchell et al. then identified these three sub-dimensions underlying job embeddedness based on the aforementioned critical aspects as link, fit, and sacrifice. These three sub-dimensions were considered in terms of two over-arching dimensions, an individual's organization and community.

The first sub-dimension, link, was described as "formal or informal connections between a person and institutions or other people" (Mitchell et al., 2001, p. 1104). These links may take the form of financial, psychological, or social connective tissue between work and non-work friends, groups, community, and living environment. Links may be considered in terms of importance and relativity to various populations. Deciding to leave one's place of employment could sever links, require reprioritization of links, or even require the need to establish new links.

The second sub-dimension, fit, was described as "an employee's perceived compatibility or comfort with an organization and with his or her environment" (Mitchell et al., 2001, p. 1104). Fit may take the form of the compatibility between personal values and goals with the organizational culture and job requirements. An example of poor fit

could be a person who is described as a conscientious objector being assigned to a combat unit during a conflict. Increased person-to-organization fit was believed to lead to increased organizational attachment.

Mitchell et al. (2001) also suggested the physical environment and culture in which an organization was situated could affect fit, regardless of the individual's perceptions of fit with the organization. As an example, an employee may perceive a high level of fit between himself and the organization (e.g., major airline); however, relocating to a new job also operated by the same organization but in another geographic location may result in a decrease or need for reconsideration of fit due to the change in political, religious, and weather climates. Additionally, the potential relocation could require the employee to forgo access to major shopping centers, professional sporting events, large universities, etc.

Sacrifice, the third sub-dimension, referred to the perceived material costs or psychological benefits an individual would forfeit after leaving a job. Sacrifice may entail an individual forfeiting job-related perks, work colleagues, stimulating research, job security, promotion opportunities, commuting distance, as well as items more easily quantifiable such as salary, healthcare packages, and stock options.

By considering the three sub-dimensions, link, fit, and sacrifice, within the context of the organizational and community dimensions, six sub-dimensions resulted. These six sub-dimensions included (a) organizational link, (b) community link, (c) organizational fit, (d) community fit, (e) organizational sacrifice, and (f) community sacrifice. Mitchell et al. (2001) suggested the six sub-dimensions could have differing effects depending upon the job, size of the organization, or their individual

characteristics. See Appendix A, Table A8 for a representation of the matrix depicting the job embeddedness construct, related dimensions, and sub-dimensions.

Insert Figure A8 about here

The initial evaluation of this new job embeddedness construct focused on four hypotheses. Job embeddedness was predicted to negatively correlate with intentions to leave and subsequent voluntary turnover, and to improve predictions of voluntary turnover above what was accounted for by job satisfaction, organizational commitment, perceived alternatives, job search, and desirability of movement. Data were collected via survey from two organizations experiencing relatively high turnover, a retail grocery store and a community-based hospital. Refer to Appendix B, Table B1, for the Mitchell et al. (2001) job embeddedness scale items.

Insert Table B1 about here

Correlational analyses indicated support for all hypotheses in both samples. Mitchell et al. (2001) reported significant relationships among job satisfaction, organizational commitment, job search behavior, and the six sub-dimensions of job embeddedness. The correlations between job satisfaction and the job embeddedness sub-dimensions were higher for the organizational sub-dimensions of fit and sacrifice than for the community sub-dimensions of fit and sacrifice. The relationship between job satisfaction and organizational link was reported as non-significant, and a significant correlation was reported for job satisfaction and community link. Similarly, the relationships between organizational commitment and the organizational and community

sub-dimensions of link, fit, and sacrifice were significant. The relationships between job search behavior and the six sub-dimensions were predominately non-significant, with the exception of statistically significant, negative relationships between organizational fit and organizational sacrifice ($r=-.32$, $p<.01$, for both sub-dimensions).

The correlations among the six sub-dimensions were all relatively low (below $r=.32$) for both samples, with the exception of the correlation between the community sacrifice and community fit sub-dimensions ($r=.66$ and .73, $p<.01$) and organizational sacrifice and organizational fit sub-dimensions ($r=.63$ and .64, $p<.01$) for the grocery and hospital samples, respectively. Only the organizational link and community link sub-dimensions resulted in low correlations with the other sub-dimensions. As evidenced by the aforementioned statistical results, Mitchell et al. (2001) did not present a strong case for discriminant validity among the sub-dimensions within the community and organization dimensions.

Mitchell et al. (2001) were clear in their presentation that their study provided only initial support in efforts to validate this new construct of job embeddedness. Mitchell et al. suggested that the job embeddedness instrument measured casual indicators for embeddedness (link, sacrifice, and fit), such that these factors caused an individual to become embedded. The researchers also acknowledged that job embeddedness was not evaluated against all variables considered to affect turnover (e.g., superior-subordinate relationships). Mitchell et al. suggested individuals whose job changes also involved geographic relocation may be more strongly affected by job embeddedness than respondents in the samples described.

In more recent work, Lee et al. (2004) discussed the relationship between job embeddedness and inertia. Inertia was defined as a tendency to maintain the status quo. Individuals who perceived themselves to be "stuck" or embedded in a job situation were also likely to be aware of forces pulling them toward the organization. As such, these individuals were not likely to consider leaving their positions, seeking an alternative job location, or seeking a different vocation.

Lee et al. (2004) evaluated the effects of job embeddedness on voluntary turnover, voluntary absences, organizational citizenship, and job performance by surveying a large, international financial institution. The authors clearly stated that job embeddedness was an effects and not an indicator model, meaning "the multi-dimensional construct of job embeddedness was formed from its six sub-dimensions with its indicators acting as causes and not reflections of it" (Lee et al., 2004, p. 15). Lee et al. hypothesized job embeddedness would be (a) positively related to inertia, (b) negatively related to voluntary absences, (c) positively associated with organizational citizenship, (d) positively associated with job performance and (e) negatively associated with intentions to leave and subsequent voluntary turnover. The hypothesized relationships between job embeddedness and inertia, voluntary absences, organizational citizenship, and job performance, respectively, were expected to go beyond the relationships between inertia, voluntary absences, organizational citizenship, and job performance with job satisfaction and organizational commitment. Similarly, the hypothesized relationships between job embeddedness and intent to leave and actual turnover were expected to account for more variance beyond that of job satisfaction, organizational commitment, job search, and perceived alternatives. All hypotheses were supported, except the hypothesized

relationship between job embeddedness and voluntary absences. Lee et al. believed these findings supported the theoretical and empirical robustness of the job embeddedness construct and expanded the construct's nomological network.

Similar to the correlation results reported in Mitchell et al. (2001), Lee et al. (2004) reported higher correlational values between job satisfaction and organizational commitment and the organizational sub-dimensions of job embeddedness compared to the community sub-dimensions. The relationships between organizational fit with job satisfaction and organizational commitment, respectively, were reported at r=.74 and .71 ($p<.01$). Likewise, organizational sacrifice and job satisfaction relationships were also very high (r=.71 and .70, $p<.01$, respectively). The correlations between the community sub-dimensions and job satisfaction and organizational commitment were lower, with the highest correlation reported at r=.31 ($p<.01$). Lee et al. and Mitchell et al. indicated these correlations, though notably high, indicated evidence of convergent and discriminant validity. Similar to Mitchell et al., job search behavior produced non-significant results with organizational link and community sacrifice, and negative, though low, correlations with community fit (r=-.09, $p<.01$), organizational fit (r=-31, $p<.01$), community link (r=-.08, $p<.01$), and organizational sacrifice (r=.31, $p<.01$) in the Lee et al. study.

Lee et al. (2004) also reported high correlations among the sub-dimensions within the community and organization dimensions. The organizational sacrifice sub-dimension correlated highly with other organizational sub-dimensions, as well as with the community sub-dimensions (r=.74, $p<.01$, for all sub-dimensions). Likewise, the community sacrifice sub-dimension correlated highly with the other sub-dimensions within the community dimension, as well as with the organizational sub-dimensions (r=

.60, $p<.01$, for all sub-dimensions). Again, a compelling case was not made for six, distinct sub-dimensions.

In more recent examinations of the job embeddedness construct, Sagas, Cunningham, and Fink (2003) considered the impact of the job embeddedness construct on occupational mobility; specifically, head coaching intentions of female assistant coaches. Sagas et al. (2003) suggested females, who were under-represented in head coaching positions, often indicated relationships and loyalty to team members resulted in many female assistant coaches turning down upward mobility opportunities. Results indicated that respondents who did not plan to apply for a head coaching position within the next year were more embedded than respondents who did plan to apply for a head coaching position only in terms of community fit, organization fit, and community sacrifice. The remaining three sub-dimensions, organizational sacrifice, community links, or organizational links, did not produce statistically significant results. Findings indicated job embeddedness may reduce turnover, but this turnover reduction may come at the cost of inhibiting mobility as well as reducing intentions to pursue a promotion. Sagas et al. suggested that job embeddedness may be a double-edged sword resulting in the possible need to discourage individuals, female assistant coaches in this case, from becoming too comfortable or embedded in a specific community or organization. Correlations among the community and organizational sub-dimensions were not reported.

Fink, Cunningham, and Sagas (2003) used a sports-related sample and the Mitchell et al. (2001) survey to evaluate the relationship between job embeddedness and gender as well as whether job embeddedness could explain as much or more variance in coaching turnover than standard attitudinal measures such as job satisfaction and

organizational commitment. Results indicated the combined variables (job satisfaction, organizational commitment, and job embeddedness) accounted for 42% of the explained variance, with job embeddedness accounting for a significant increase beyond gender, satisfaction, and commitment. Gender comparisons produced lower mean scores for the community sacrifice, community fit, organizational fit, and organizational link sub-dimensions for female respondents. Correlations among the organizational and community sub-dimensions were not reported.

In another empirical investigation of the job embeddedness construct, Cunningham, Fink, and Sagas (2003) tested the original multi-item job embeddedness scale (Mitchell et al., 2001), a new global-item measure, and a new single-item measure of job embeddedness using two samples of intercollegiate softball coaches and athletic department employees. They created global items for each dimension (e.g., "I feel compatible with my organization" and "I feel compatible with where I live" represented global items for organization and community fit dimensions, respectively). The single-item job embeddedness item was "we can describe job embeddedness like a net or web in which an individual becomes enmeshed or linked. How embedded do you feel in your job?" Results indicated the global and single-item measures were good surrogates of the multi-item measures offered by Mitchell et al. Cunningham et al. (2003) also reported high correlations between community fit and community sacrifice ($r=.70$, $p<.01$), as well as between organizational fit and organizational sacrifice ($r=.65$, $p<.01$). Again, the correlations between the community link and organizational link sub-dimensions and remaining two community and organizational sub-dimensions, respectively, were low, while correlations between the six sub-dimensions and job search were negative and low.

Correlations between the six sub-dimensions and job satisfaction and organizational commitment were positive and high (ranging from r=.48 to r=.73, p<.01) for all sub-dimensions, with the exception of community and organizational links, which produced non-significant results. This study also provided additional empirical evidence that the job embeddedness construct, using the multi-item, global, and single-item scales, explained variance related to intent to turnover beyond that of job satisfaction and organizational commitment.

In a recent study set involving healthcare workers, Holtom and O'Neill (2004) investigated the impact of job embeddedness in the health care industry, an environment with an annual average turnover of 20% of nurses. In their longitudinal analysis, Holtom and O'Neill (2004) employed the survey methodology and instruments used in previous research (e.g., Fink et al., 2003; Mitchell et al., 2001) to determine whether factors influencing job embeddedness varied between nurses and other healthcare workers.

Correlations between the six sub-dimensions and job satisfaction and organizational commitment were positive and ranged from r=.18 to r=.73 (p<.01) for all sub-dimensions, with the exception of organizational links, which produced non-significant results. The correlation between job satisfaction and organizational fit and organizational commitment and organizational sacrifice (r=.72 and .67, p<.01, respectively) were high.

Holtom and O'Neill (2004) mailed surveys to a random sample of 500 hospital workers to assess personal characteristics, perceptions of job satisfaction, organizational commitment, job embeddedness, job search activity, perceived alternatives, and turnover intentions. To evaluate actual turnover, the researchers attempted to contact voluntary

and involuntary leavers for a 12-month period following the survey administration. Response rates for the survey administration resulted in 232 useful surveys and 20 of 27 voluntary leavers were contacted. These survey results indicated the sample population used for this study is very similar to the sample used by Mitchell et al. (2001).

Holtom and O'Neill (2004) proposed three hypotheses, two of which had been empirically supported by previous research (e.g., Mitchell et al. 2001). First, a negative correlational relationship between job embeddedness and intent to turnover and actual turnover was hypothesized and supported. The researchers also reported job embeddedness improved the prediction of turnover beyond the contributions of job satisfaction, organizational commitment, job search, and perceived alternatives. The third hypothesis extended the empirical findings regarding job embeddedness as Holtom and O'Neill (2004) sought to test whether a variety of influences on retention, specifically, the six sub-dimensions of job embeddedness, would systematically vary between nurses and other healthcare workers. The researchers suggested that the multi-dimensional aspects of the job embeddedness construct would "transcend occupational choice or commitment" (Holtom & O'Neill, 2004, p. 220); thus, a significant difference between occupational categories was not anticipated. Results indicated that the only statistically significant difference between nurses and other hospital employees occurred with one variable, links to the community. Nurses reported a significantly higher mean score (M=1.53) compared to other hospital employees (M=1.27). Logistic regression analysis supported the salience of community links in relation to turnover as related to nurses and other healthcare workers. The researchers suggested that one of the implications of this finding is that organizations may be unknowingly encouraging

nursing turnover by paying to relocate nurses from their home communities. Also of importance is the researchers' suggestion that specialized retention plans may not be required to retain the nursing corps, as focusing on a variety of the aspects that enmesh individuals in their communities and organizations could benefit a wide spectrum of employees.

Summary

In the four published empirical studies evaluating the utility of job embeddedness as a predictor of intentions to quit and subsequent voluntary turnover, negative relationships were reported (Fink et al., 2003; Holtom & O'Neill, 2004; Lee et al., 2004; Mitchell et al., 2001). Likewise, the Mitchell et al. (2001) and Holtom and O'Neill (2004) results also provided support for the hypothesized increase in incremental variance over job satisfaction, organizational commitment, job alternatives, and job search in relation to predicting intentions to quit and actual turnover. The results reported between job satisfaction, organizational commitment, and two of the organizational sub-dimensions of job embeddedness, organizational fit and organizational sacrifice, in these studies were highly correlated. High correlations among variables are indicators that the variables are measuring the same construct (Nunnally, 1978), and could result in introducing unintended and uncontrolled effects of multicollinearity into subsequent analyses (Neter, Kutner, Nachtsheim, & Wasserman, 1996). Further, Campbell and Fiske (1959, p. 103) cited evidence of discriminant validity being invalidated due to "too high correlations with other tests purporting to measure different things."

Mitchell et al. (2001) based their case for discriminant validity of the organizational dimensions on the low correlation between the organizational links sub-

dimension and job satisfaction and organizational commitment, yet the high correlations between the organizational sacrifice and organizational fit sub-dimensions, job satisfaction, and organizational commitment were not specifically addressed in terms of discriminant analyses. As a correlation range from zero to .20 is regarded as having no or negligible correlation (Campbell & Fiske, 1959; Neter et al., 1996) and indicates distinct constructs are being measured (Nunnally, 1978), the case for discriminant validity for the community dimensions appears to be more empirically sound, as correlations were either not significant or below .19. Further, Mitchell et al. and Lee et al. (2004) did not provide compelling empirical evidence to support three, distinct sub-dimensions.

In terms of initial construct validation, Mitchell et al. (2001) relied on samples comprised of retail grocery workers and hospital employees, environments selected due to their association with high turnover. Reported study demographics indicated 77% of grocery story workers and 84% of hospital respondents were female. Female respondents also comprised the samples used by Sagas et al. (2003) and Cunningham et al. (2003). Hinkin (1995, p. 974) suggested "in designing a study to examine the psychometric properties of a new measure, it should be made clear why a specific sample was chosen." Mitchell et al. (p. 1109) indicated grocery store and hospital samples "operate in environments characterized by relatively high turnover," but no specific explanation was provided as to whether sample choice was based on an *a priori* criterion or reported based on post hoc observation and analysis.

In the proposed research project, effects of the community dimension of job embeddedness, termed *community embeddedness*, will be examined in terms of impact on intent to turnover and actual turnover using members of the USAF, an environment also

associated with high turnover and frequent job-related geographic relocations (U.S. DoD, 2001). Focus only on the community dimension of job embeddedness was based on two considerations. First, the evidence of discriminant validity provided by Mitchell et al. (2001) was arguably weak, resulting in difficulties in being able to separate the organizational sacrifice and organizational fit sub-dimensions from organizational commitment and job satisfaction. Second, given the inherent limitations of secondary data (Kiecolt & Nathan, 1985), I did not believe that measures of the organizational sub-dimensions of job embeddedness, as constructed by Mitchell et al. (2001), could all be adequately captured with the data available. Initial review of the available survey items indicated measures of job satisfaction, organizational commitment, and job search activity were available, but the organizational sacrifice and organizational fit sub-dimension measures were not well supported. As Mitchell et al. and Lee et al. (2004) did not convincingly discriminate between the sacrifice and fit sub-dimensions, I used only two sub-dimensions of community embeddedness; community link and community satisfaction. The community satisfaction sub-dimension is believed to encompass both the community fit and sacrifice sub-dimensions. Measures of the community embeddedness sub-dimensions, which form the community embeddedness dimension, as well as the job satisfaction, organizational commitment, and job search activity measures could be formed using the data set.

Empirical research has demonstrated that intent to turnover is consistently correlated with actual turnover (e.g., Griffeth, et al., 2000; Steel and Ovalle, 1984). Interestingly, Steel and Ovalle (1984) and Griffeth et al. reported a decrease in the strength of the correlational relationship between declaring an intent and actually

departing an organization as the time lag between declaring an intent and actually departing the organization increased. Steel and Ovalle (1984) analyzed turnover research using military and civilian samples, and reported correlations were the strongest when the lag time was less than 12 months between declaring an intent and actually departing for both civilian and military samples. As data are available for intent to turnover as well as actual turnover, with a 3-year time difference between respondents declaring intentions and actually engaging in a turnover decision, separate analyses considered intent to turnover and actual turnover. This provides an opportunity to further the empirical support of the predicted relationship between intent to turnover and actual turnover and the additive value of the community embeddedness dimension as a predictor of turnover.

This research also provides the opportunity to expand the boundaries of the community embeddedness dimension by evaluating the construct in a population not comprised predominantly of female respondents constrained to one geographic area. The sample to be used for this study offers heterogeneity in terms of respondent demographics such as gender, age, occupational status, and organizational tenure. Mitchell et al. (2001) called for more analysis of the job embeddedness construct in terms of occupations, geographic mobility requirements, relationships with other variables that may influence turnover decisions, and non-work factors that may influence turnover. The military sample to be used in this study can accommodate all of these suggestions.

Proposed Hypotheses

The study will be analyzed in three parts. First the community embeddedness dimension will be considered in terms of its contributions in predicting intent to turnover, beyond the contributions of job satisfaction, organizational commitment, and job search

activity. Next, the three potential moderators will be introduced, and their hypothesized relationships between community embeddedness and intent to turnover will be discussed. Finally, the community embeddedness dimension will be considered in terms of its predictive ability in relation to actual turnover, beyond the contributions of intent to turnover, job satisfaction, organizational commitment, and job search activity. See Appendix A, Figure A9 for the hypothesized model.

Insert Figure A9 about here

Community Embeddedness Dimension of Job Embeddedness

The community embeddedness dimension of job embeddedness is concerned with an employee's non-work domains such as religious, political, cultural, social, and personal associations, relationships, and activities. Mitchell et al. (2001), Holtom and O'Neill (2004), and Lee et al. (2004) used three sub-dimensions, fit, link, and sacrifice, in their discussion and analyses of job embeddedness. I propose to use two sub-dimensions, community satisfaction and community link, to create a community embeddedness dimension. Community link is similar to the Mitchell et al. and Lee et al. (2004) dimension, and a second sub-dimension, termed community satisfaction, reflects the concepts derived from the community fit and community sacrifice sub-dimensions, as developed by Mitchell et al. and Lee et al. (2004).

Community link. Mitchell et al. (2001, p. 1104) defined links as "formal or informal connections between a person and institutions or other people." To assess community links, Mitchell et al. asked respondents questions regarding marital status,

spouse employment status, home ownership status, and family roots. Literature related to community involvement and participation also supports the community link concept.

Lansing and Mueller (1967) reported individuals with ties to the community in the form of nearby relatives and friends living in the same geographic area impacted willingness to relocate. Noe and Barber (1993) found that marital status, having children in the home, and having an employed spouse were all significantly related to amount of community involvement. Abelson (1987) reported age, job tenure, marital status, and number of children needing care if ill affected withdrawal cognitions. Number of children was found to be related to turnover (Griffeth, Hom, & Gaertner, 2000), as was kinship responsibility, or the existence of obligations toward relatives living in the community (Price, 2001). In turn, kinship was believed to affect job satisfaction (Iverson & Maguire, 2000) and to reduce turnover (Price & Mueller, 1981).

Cohen (1995) described community involvement as the number of hobbies and affiliations one has that can influence organizational commitment. Organizational commitment, as demonstrated by previous researchers (e.g., Abelson, 1987; Bartol, 1983; Bluedorn, 1982; Griffeth, Hom, & Gaertner, 2000; Marsh & Mannari, 1977; Mowday, Porter, & Steers, 1982; Price, 2001; Price & Mueller, 1986; Steers, 1977; Tett & Meyer, 1993), can influence intent to turnover, and subsequently, actual turnover. Kirchmeyer (1992) reported attitudes and behaviors at work were affected by family and other nonwork domains (e.g., community, social clubs, hobby associations), and these nonwork spillovers could affect on-the-job behavior and withdrawal cognitions (Cohen, 1997; Near, Rice, & Hunt, 1980). Measurement of nonwork participation factors included perceptions of importance of jobs outside the work organization, hobbies and recreational

activities, religious organizations, political parties, family, friends, and relatives, and other miscellaneous organizations (Cohen, 1995; Randall, 1988).

Community involvement has also been linked to satisfaction. In a study in a remote mining village, comparable to some remote duty assignments of military members in terms of difficulty of physical environment, unattractiveness, etc., Iverson and Maguire (2000) found that community participation and kinship responsibility were significantly related, negatively and positively, respectively, to life satisfaction, which in turn was positively related to job satisfaction. In an earlier study, Iverson and Roy (1994) reported a positive relationship between community participation and job satisfaction. As suggested by Zelsman (2000), one of the benefits to the organization of employee community involvement was lower employee turnover. Based on the aforementioned findings, one could expect the degree to which military members are involved in activities (e.g., outdoor recreation, library, fitness center) in their military and civilian communities, and have links via marriage, children, and spouses working in the community, to result in the members developing links in the community.

Community satisfaction. As noted earlier, community satisfaction will be considered as a proxy for the community sacrifice and fit sub-dimensions in this research. Mitchell et al. (2001) suggested weather, amenities, and general culture impacted one's fit to a community, independent of organizational fit, and discussed community sacrifice in terms of foregoing conveniences (e.g., commute distance) and potential impact on relocation. Mitchell et al.'s measures were primarily based on modified attitudinal measures (e.g., perceptions of satisfaction with various aspects of a dimension), and appeared to overlap with the concept of community satisfaction. Community satisfaction

has been operationalized by different criteria; however, the primary research emphasis involved aspects of the physical environment, perceptions of community services, housing quality, and climate (Feldman & Bolino, 1998; Goudy, 1982; Hughey & Bardo, 1987; Ladewig & McCann, 1980; Marans & Rodgers, 1975).

As discussed in Fried (1984. p. 81), community satisfaction can be considered across four sub-dimensions, to include (a) immediate residential environment of home and neighborhood, (b) local availability and access to alternative resources and services, (c) local interpersonal interaction, and (d) the community as a polity in terms of providing services and in terms of responsiveness to residents. Satisfaction with the immediate residence and local community was found to be the most significant factor.

Community satisfaction has been found to be negatively related to willingness to relocate (Landau, Shamir, & Arthur, 1992; Swanson, Luloff, & Warland, 1979; Turban, Campion, & Eyring, 1992; Veiga, 1983), which, in turn, has been found to be significantly related to intent to turnover (Bach & Smith, 1977; Eby & Dematteo, 2000; Speare, 1974). Noe and Barber (1993) reported individuals were more willing to relocate to a similar community than to a dissimilar community, supporting previous findings by Brett, Stroh, and Reilly (1992) and Pinder and Schroeder (1987). In their study of relocation attitudes of USAF members, Fisher and Shaw (1994) reported a negative correlation between pre-move community satisfaction and pre-move attitudes toward moving. Likewise, expected post-move community satisfaction was positively related to pre-move relocation attitudes.

Local availability and access to alternative resources and services, another of Fried's (1984, p. 81) sub-dimensions of community satisfaction, is also relevant within

this sub-dimension. As some military assignments require the military member and family to relocate to an overseas base, these relocations can be likened to expatriate moves to job postings outside of the U.S. In their study of expatriate employees, Gregersen and Black (1990) reported that non-job factors (e.g., transportation, housing, food, and healthcare) influenced retention decisions. Fisher and Shaw's (1994) study of relocation attitudes and adjustments of military members also indicated the perceived value of community on move expectations and adjustments.

The predicted effect of community embeddedness with intent to turnover can be explained in terms of side-bet theory (Becker, 1960) and continuance commitment (Meyer & Allen, 1991). Becker (1960, p. 32) suggested "commitments come into being when a person, by making a side bet, links extraneous interests with a consistent line of activity." Further, individuals were more likely to remain with the organization due to the perceived costs associated with leaving such as side bets. Becker (1960) identified five broad categories of side bets, including (a) generalized cultural expectations, (b) self-presentation concerns, (c) impersonal bureaucratic arrangements, (d) individual adjustments to social position, and (d) non-work concerns. Recognition of the work- and non-work-related costs of leaving was required.

Meyer and Allen (1991) offered a three-component model of commitment, comprised of affective, normative, and continuance commitment. Continuance commitment was believed to develop from responses to side bets that increased the costs associated with leaving the organization, whereas affective and normative commitment were related to sensitivity to work and social conditions, respectively. Again, recognition of costs associated with leaving the organization was required. An example of a non-

work concern was the possible disruption to established roots in the community by leaving an organization (Powell & Meyer, 2004). They reported a negative relationship between continuance commitment and intent to turnover. This is consistent with the concept of community links.

The initial reaction to a relationship between community embeddedness and intent to turnover could be that the military "community" is so different than a civilian community that community embeddedness would not be expected to be influenced in a manner consistent with previous research. Community was defined as "an interacting population of various kinds of individuals in a common location who share common history, social, economic, and political interests" (Webster's Ninth New Collegiate Dictionary, 1986, p. 266). Using this definition of community, the military and civilian communities are not so far apart, as the military reflects a microcosm of society, comprised of individuals of varying backgrounds, nationalities, ethnicities, races, and religious beliefs (Frieze & Vivero, 2004). The essence of what comprises both the old and new communities will not be radically different, as all military communities are bound by similar traditions, customs, and laws. Thus, community embeddedness is expected to behave in a similar manner within both a military and civilian population.

Military members who value this ever present link to the military community will be less likely to want to leave the organization because leaving the organization will result in some changes in access and standing within the community. Continuing association with the organization represents an opportunity to satisfy a non-work concern side bet that allows the member to continue enjoying the benefits offered by the community. Following Mitchell et al. (2001) and Lee et al. (2004), community

embeddedness is predicted to be negatively related to intent to turnover. Given that the relationships between job satisfaction, organizational commitment, job search activity, and intent to turnover are well established in the management literature (e.g., Bluedorn, 1982; March & Simon, 1958; Steers & Mowday, 1981), the usefulness of this prediction depends on the unique contributions of the community embeddedness construct in accounting for turnover intentions. Thus, I offer the first formal hypothesis:

> *Hypothesis 1: After introducing appropriate control variables, community embeddedness will account for variance in turnover intentions beyond the variance accounted for by job satisfaction, organizational commitment, and job search activity.*

Possible Moderators

As a primary purpose of this research is to evaluate the boundary conditions of the relationship between community embeddedness and intent to turnover, consideration of potential moderators that may increase the understanding of how community embeddedness accounts for turnover intentions is warranted. Selection of moderating variables was initially based on anecdotal reasons and organizational lore regarding turnover-related decisions I have been exposed to during my military career and that were also reported in recent DoD-commissioned quality of life surveys (e.g., Hamilton & Datko, 2000). Thus, variables were identified that could be analyzed within the context of the secondary data set available and also have practical value in terms of addressing issues of concern from a DoD perspective (AFPC, 2001a). The three moderators include (a) perceptions of being career plateaued, (b) occupational portability, and (c) occupational commutability.

Career plateau. Career plateau has been defined as "the point in a career where the likelihood of additional hierarchical promotion is very low" (Ference, Stoner, &

Warren, 1977, p. 602), length of time in current position (Near, 1985; Veiga, 1981; 1983), length of time between promotions (Evans & Gilbert, 1984), and probability of receiving increased responsibility (Feldman & Weitz, 1988). Career plateauing has also been explained in terms of structural, content, and life plateauing (Bardwick, 1986), organizational and personal plateauing (Burke, 1989; Ference et al., 1977), objective and subjective plateaus (Tremblay, Roger, & Toulouse, 1995), and successful and unsuccessful career plateaus (Stoner, Ference, Warren, & Christensen, 1980).

For purposes of this project, Tremblay et al.'s (1995) conceptualization of subjective career plateauing will be utilized. Tremblay et al. (p. 226) defined subjective plateauing as "the expected period of time before the next promotion or movement, or the perceived probability of getting a promotion in the future." Like previous researchers (Chao, 1990; Tremblay & Roger, 1993, Tremblay et al.), I will use a perceptual measure of career plateauing.

Chao (1990) conceptualized career plateauing as a perceptual measure that considered a plateau as a continuous rather than dichotomous variable. She also used another measure of plateau defined by organizational tenure. Results indicated increased variance explained by the continuous plateauing variable over job tenure when accounting for intrinsic and extrinsic job satisfaction, career planning, and company identification.

Career plateauing has also been evaluated in terms of demographic, work-related, and organizational structural variables. The relationship between career plateauing and job satisfaction has received mixed results. A body of empirical studies reported a negative relationship (e.g., Burke, 1989; Chay, Aryee, & Chew, 1995; Grusky, 1966;

Veiga, 1981, 1983), while some studies reported a non-significant relationship (e.g., Near, 1985; Slocum, Cron, Hansen, & Rawlings, 1985). Chay, Aryee, and Chew (1995) reported plateaued individuals indicated lower levels of organizational commitment, job satisfaction, job challenge, supervisor support, career satisfaction, and extra-role behaviors. A positive relationship between career plateauing and intent to turnover was reported by Burke (1989), yet Tremblay et al. (1995) reported lower intentions to quit and higher satisfaction with the organization for individuals who had been plateaued longer. Near (1980, 1984) indicated career plateaued managers may seek off-the-job activities to compensate for disappointment related to being plateaued.

Allen, Poteet, and Russell (1998) evaluated the effects of hierarchical and content plateauing, as well as a combination of job and content plateauing, or being double plateaued, within a population of state government managers. Results indicated that individuals who considered themselves double plateaued or job content plateaued were more likely to report turnover intentions than hierarchically plateaued or nonplateaued respondents. Likewise, double plateaued respondents reported lower organizational commitment and job satisfaction than job content or hierarchically plateaued respondents. Finally, individuals who were hierarchically plateaued reported longer job tenure than content plateaued respondents.

These findings by Allen et al. (1998) regarding the effects of perceptions of job content plateauing were similar to the concept of inertia, as related to job embeddedness, introduced by Lee et al. (2004). Lee et al. (2004, p. 6) suggested inertia, or "being able to perform seemingly complex tasks with little if any active mental involvement," was manifested by the employee mindlessly staying on task while thinking of outside

activities. Lee et al. reported a strong relationship between inertia and intent to turnover but not between inertia and actual turnover.

The interaction effect of career plateauing on the relationship between community embeddedness and intent to turnover can be considered in terms of side-bet theory (Becker, 1960) and continuance commitment (Meyer & Allen, 1984, 1991). As previously discussed, individuals are predicted to remain with the organization due to the perceived costs associated with leaving, such as side bets. This was consistent with Bardwick's (1986) suggestion that career plateaued individuals were more likely to perceive themselves as having decreased employment and mobility opportunities; foregoing economic benefits such as pay, retirement, healthcare benefits. As a result, these individuals may have chosen to remain with the organization regardless of limited upward mobility opportunities.

Becker (1960) identified five broad categories of side bets, as discussed previously. Of interest is the category of non-work concern. Again, an example of a non-work concern is the possible disruption to established roots in the community by leaving an organization and seeking employment in another geographic region (Powell & Meyer, 2004), while risk of pension loss and job security represented work-related concerns (Meyer & Allen, 1991).

In Meyer and Allen's (1991) three-component model of commitment, comprised of affective, normative, and continuance commitment, continuance commitment was believed to develop from responses to side bets that increased the costs associated with leaving the organization, whereas affective and normative commitment were related to sensitivity to work and social conditions, respectively. Again, there was recognition of

costs associated with leaving the organization. Powell and Meyer (2004) reported a negative relationship between continuance commitment and intent to turnover. Further, economic and social side bets from both the work and non-work domains negatively affected turnover decisions (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Powell & Meyer, 2004).

Previous research has also evaluated the effects of work and non-work domains. Near, Rice, and Hunt (1980) and Cohen (1995) reported a relationship between workplace structures and attitudes and behaviors in the non-work domain and vice versa. Kirchmeyer (1992) reported non-work domain variables accounted for significant variance beyond organizational commitment and job satisfaction when accounting for hours spent in, and resources provided by certain non-work activities such as parenting, time spent in community work, and recreational activities. Cohen (1997) found nonwork domains accounted for variance beyond job satisfaction and organizational commitment when accounting for withdrawal cognitions.

Given the empirical evidence indicating a direct relationship between career plateauing, job satisfaction, organizational commitment, and intent to turnover; the impact of career plateaus on work-related and non-work related factors and subsequent relationship with intent to turnover; and the potential economic and social side-bets that plateaued individuals would forego if they chose to leave the organization (Bardwick, 1986; Elsass & Ralston, 1989; Fisher & Shaw, 1994), career plateauing is believed to directly moderate the relationship between community embeddedness and intent to turnover. Perceptions of likelihood of reaching a career plateau are predicted to have an increasingly positive impact as a moderator between community embeddedness and

intent to turnover such that more plateaued individuals are more likely to become embedded in their communities and are predicted to be less likely to want to leave the organization. As individuals may redirect their energies to non-work domains to compensate for frustrations and disappointments associated with being plateaued, the community domain is predicted to be more central to the person's life. Thus, I offer the following hypothesis:

> *Hypothesis 2: After introducing appropriate control variables, perceptions of being career plateaued will moderate the relationship between community embeddedness and intent to turnover such that increased perceptions of being career plateaued will result in an increased impact of community embeddedness on intent to turnover.*

Occupational portability. A variable termed occupational portability will be introduced in this study in an effort to determine whether the predicted relationship between community embeddedness and intent to turnover is moderated by the perceived interorganizational transferability of individuals' jobs. Occupational portability refers to an individual's perceived ease of transferability of occupational skills acquired from one organization to a different organizational environment based on the individual's perception of how his job skills, knowledge, and abilities acquired within the present organization are interpreted and translated into equivalent occupations by another organizational environment. Examples of occupationally portable jobs could include military pilots, computer systems operators, and electricians.

Occupational portability is somewhat similar to the concept of inter-role transition (Louis, 1980) where an individual moves from one organization to another and performs a similar job. Louis (1980, p. 333) defined inter-role career transition as (a) entering or re-entering a labor pool, (b) taking on a different role within the same organization, (c)

moving from one organization to another, (d) changing professions, or (e) leaving a labor pool. Occupational portability differs from inter-role career transition in that occupational portability is a combination of assuming different roles and moving from one organization and environment to another as opposed to being defined by only one of the five Louis (1980) sub-categories.

Occupational portability is also distinctly different from perceived alternatives to work and economic opportunity. Perceived alternatives to work has been conceptualized by number and availability of jobs (Price & Mueller, 1981, 1986; Steers & Mowday, 1981), job quality (Farrell & Rusbult, 1981), and attainability and desirability of alternatives (Mobley, 1977; Mobley, Griffeth, Hand, & Meglino, 1979; Mobley, Horner, & Hollingsworth, 1981). Perceived occupational portability differs from these aforementioned variables in a significant manner, as perceived occupational portability focuses on the individual's perception of how his job skills, knowledge, and abilities acquired within the present organization are interpreted and translated into equivalent occupations by another organization. Perceived occupational portability is not as focused on the individual's perceptions of quality, quantity, and availability of jobs as it is focused on the individual's perceptions of a potential employer's interpretations of job skills acquired by their current employing organization.

Economic opportunity has been defined as the objective counterpart to perceived alternatives (Hom & Griffeth, 1995), where the individual considers the job market and employment conditions. Steel (1996) used a variable termed perceived occupational demand, which was designed to measure an individual's perception of demand for their occupations in the civilian labor force, using a military sample. Unlike Steel's (1996)

perceived occupational demand variable, economic condition and demand are not considerations.

The difficulty of readily transferring knowledge, skills, and abilities has primarily been investigated using civilian employees and organizations; however, studies examining transitions from military to civilian organizations have also been completed (e.g., Bryant & Wilhite, 1990; Dunning & Biderman, 1973; Kilpatrick & Kilpatrick, 1979; McNeil, Lecca, & Wright, 1983). A general perception exists among many military members that they are more likely to be called upon to demonstrate their skills to future civilian employers more so than their civilian counterparts, as the civilian sector reportedly believes military members rely solely on using orders to force compliance rather than other leadership and management principles (Spiegel & Shultz, 2003).

As reported by Dunning and Biderman (1973), certain military occupations have varying degrees of transferability to similar civilian occupations. As examples, the combat arms occupational area has a relatively limited civilian application, while military to commercial pilot has a high transferable skill application. Additionally, senior military pilots face structural obstacles in the civilian aviation industry, limiting lateral transfers into positions commensurate with their military aviation experience. Military-sponsored transition assistance programs offered to retiring military personnel specifically stress the importance and challenges associated with "civilianizing" and tailoring a resume to translate military experience into a civilian friendly document (Department of Veterans Affairs, 2004). Mangum & Ball (1989) suggested military members serving in occupations that required certifications comparable to civilian requirements reported greater expectations of comparable civilian employment.

The predicted interaction between perceived occupational portability and community embeddedness, when predicting intent to turnover, was derived from two management concepts; human capital theory (Becker, 1964) and side-bet theory (Becker, 1960). In his writings on human capital, Becker (1964) discussed training in terms of on-the-job, general, and specific training. He suggested that on-the-job training, defined as "learning new skills and perfecting old ones while on the job" (Becker, 1964, p. 9), increased future marginal productivity of workers in the organizations providing such training, but the marginal product in other organizations was also increased as a result of general training. This argument was economically based, as labor market wage rates were determined by marginal productivities in other firms (Becker, 1964). Further, Becker (1964. p. 13) suggested "employees pay for general training by receiving wages below their current (opportunity) productivity." Becker (1964) went on to cite the military as an example of an organization that pays a portion of training costs but does not pay market wages for skilled personnel. General training was believed to be negatively related to intentions to stay in an organization and positively related to intent to turnover (Price, 2001; Price & Mueller, 1981). The general training received combined with perceptions of how other organizations perceived the quality of such training may influence individuals considering changing employers but remaining in the same occupation.

In side-bet theory, Becker (1960) suggested individuals were more likely to remain with an organization due to the perceived costs associated with leaving. These costs could take the form of organizational and community sacrifices. Perception of occupational portability is believed to facilitate an individual's belief that the opportunity

exists to leave one organization and accept a position in the same occupation in another organization.

Community embeddedness may affect an individual's decision to remain in an organization via interactions with perceptions of job satisfaction, organizational commitment, promotion potential, etc.; however, perceptions of occupational portability are believed to diminish these relationships by providing the individual with the opportunity for continuing employment in the same occupation but in a different environment. As noted by Neapolitan (1980), leaving one's organization was not the same as leaving one's occupation, as one tended to have greater investments in occupation. The opportunity to meaningfully fulfill the work domain by remaining in one's chosen career field may outweigh the satisfaction derived from community-related factors of the non-work domain. The perceived advantages of remaining in an organization to continue to share in the community aspects of work-related affiliation may be weakened by the perceived opportunity to easily change employer while remaining in the same occupation. Perceived occupational portability is predicted to weaken the embedded effects of community embeddedness on intent to turnover. Thus, I offer the following hypothesis:

> *Hypothesis 3: After introducing appropriate control variables, perceptions of occupational portability will moderate the relationship between community embeddedness and intent to turnover such that increased perceptions of occupational portability will result in a decreased impact of community embeddedness on intent to turnover.*

Occupational commutability. The third variable to be introduced in this study is occupational commutability. Occupational commutability refers to an individual's ability, by virtue of occupational area, to reside in a location geographically distanced

from the location where the actual work is performed. Examples of such occupations could include airline pilots, business consultants, entertainment industry workers, over-the-road drivers, maritime workers, and construction workers. Knowing that commuting to a geographically separated work location is a viable option, relocating for employment is not always necessary or required for workers in various occupations.

The concept of occupational commutability is based on the management concept of opportunity. Hickson, Hinings, Lee, Schneck, and Pennings (1971) defined opportunity as the availability of alternative roles in the environment. Price (2001) differentiated between local and non-local opportunity. Local opportunity was defined as the ability to reach the job site every day, whereas workers were not able to reach the non-local opportunities on a daily basis. Similarly, Kirschenbaum and Mano-Negrin (1999) discussed the impact of geographic location on job opportunities and called for further refinement of the opportunity construct, to include continued focus on occupational opportunities within local labor markets. Martin (1979), Price and Mueller (1986), and Price (2001) suggested increased opportunity directly increased turnover. Bluedorn (1979) found a positive relationship between environmental pull, or the number and quality of unoccupied roles in the organization's environment, and intent to turnover.

The predicted interaction of occupational commutability and community embeddedness, when predicting intent to turnover, is based on Becker's (1960) side bet theory. As previously discussed, non-work concerns, or side bets made outside the organization itself such as disrupting established roots in the community as a result of relocating to another geographic area was required (Powell & Meyer, 2004), could impact community embeddedness. Continuing with the example of pilots, airline pilots

often commute (e.g., living in Atlanta and being based in Baltimore) to maintain a quality of life for their children, to retain employment for their spouses, and to avoid urban environments (Carey, 1996; Leeth, 2003). This view was also supported by Dubin (1991), who reported that time spent commuting was more important than commuting distance. Thus, workers can commute long distances for employment while also residing in a community of their choosing. Thus, an individual can choose to work for a geographically separated employer while reaping the benefits offered by residing in his community of choice.

Given that the only occupational category represented in the data set that is clearly associated with occupational commutability is that of pilot, the next hypothesis is based on the perceived ease of employability of pilots versus non-pilots. The rationale is that the military pilot may leave the USAF because he believes he can readily obtain employment as a commercial pilot, while remaining in his community of choice. In this scenario, occupational commutability is believed to interact with the predicted relationship between community embeddedness and turnover intention because occupational commutability reduces the salience of community embeddedness. Thus, I offer the following hypothesis:

> *Hypothesis 4: After introducing appropriate control variables, the relationship between community embeddedness and intent to turnover will differ for individuals based on occupational commutability such that the impact of community embeddedness on intent to turnover will be less for individuals in commutable occupations compared to individuals in non-occupationally commutable jobs.*

Intent to turnover and actual turnover. Previous researchers have empirically demonstrated that individuals tend to consider departing an organization before actually leaving (e.g., Bluedorn, 1982; Mobley, 1977; Steers & Mowday, 1981). Research has

also supported the prediction that job satisfaction, organizational commitment, and job search activity precede intent to turnover (e.g., Bluedorn, 1982; Mobley, 1977; Mobley, et al. 1979). Thus, intent to turnover is believed to directly mediate the relationships between job satisfaction, organizational commitment, job search activity, and actual turnover. Since community embeddedness is believed to be a distinct construct, different than job satisfaction, organizational commitment, and job search activity (Lee et al., 2004; Mitchell, et al., 2001), it is necessary to assess whether intent to turnover also serves as a direct mediator between community embeddedness and actual turnover, while also demonstrating community embeddedness's distinctiveness from job satisfaction, organizational commitment, and job search activity. The final hypothesis evaluates the mediating effect of intent to turnover on the relationship between community embeddedness and actual turnover; thus:

> *Hypothesis 5: After introducing appropriate control variables, intent to turnover will directly mediate the relationship between community embeddedness and actual turnover, while also mediating the relationships between job satisfaction, organizational commitment, and job search activity and actual turnover.*

CHAPTER 3

METHODOLOGY

In the previous chapter, I described the hypotheses to be tested to evaluate the relationships between community embeddedness, intent to turnover, and actual turnover, as well as hypotheses predicting a moderating effect between career plateauing, occupational portability, and occupational commutability, and community embeddedness, respectively, and their effects of intent and actual turnover. In this chapter, I describe the secondary data set and surveys used, as well as the sample demographics used to test the research hypotheses.

Data

The secondary data to be used in this study were collected via the 1999 Survey of Active Duty Personnel [1999 SADP] (Hamilton & Datko, 2000), one of many surveys of active-duty military personnel by the Defense Manpower Data Center (DMDC) since 1969. The secondary data set was made available by DMDC, Office of the Secretary of Defense, Washington, D.C. The 1999 SADP addressed topics such as satisfaction with military life, retention, financial positions of members, personnel, deployment and operations frequencies, and quality of life programs.

Insert Appendix C about here

Though data were collected from members of all branches of the U.S. Armed Forces, only data from USAF military members were utilized as each military branch has

unique processes, vocabulary, and intricacies. Bluedorn (1979) suggested author affiliation with a specific service branch does not infer expertise in terms of data analyses; however, using data from a familiar service branch can be more easily interpreted or "verstehened" (Weber, 1947) than data from sister service branches. Using the same rational offered by Bluedorn (1979), who used data specific to the U.S. Army in his research of a causal model of turnover in military organizations, I, too, used data from the USAF, as this is the branch of the Armed Forces of which I am a member.

Data collection and preparation. DMDC researchers mailed surveys to a nonproportional stratified, random sample of 66,040 service members beginning in late August 1999, and the survey field closed on January 4, 2000. The population of the survey consisted of all active-duty members, below the rank of admiral or general, in the Army, Navy, Marine Corps, USAF, and Coast Guard, with at least 6 months of active-duty service. The specific portion of the sample to be used in this study consisted of enlisted members and officers in the USAF who participated in the 1999 SADP. To ensure data accuracy, the DMDC researchers compared items requiring factual data inputs against the DMDC Master data files (e.g., age, number of dependents) and annotated corrections made to the data file in DMDC Report No. 2000-005 (Wright, Williams, & Willis, 2000).

Sample

The total (all Service Branches) sample consisted of 66,040 members, and resulted in a 51% response rate. Data specific to the USAF was comprised of 80% male and 20% female respondents. The data were first sorted by pay grade in order to identify officer and enlisted respondents, resulting in 6,116 officer, 6,874 enlisted, and 3,126

system missing cases, for a total of 16,116 cases specific to the USAF. As rules, policies, and laws regarding active-duty, Guard, and Reserve forces differ, I limited the data set to active-duty members only. Thus, Guard and Reserve respondents (n=2,612) were removed from the total data set, leaving 13,504 cases. In order to more efficiently reduce the data set, the USAF-only data set was subdivided into officer and enlisted data. The active duty, officer-only data set (n=6,116) was further streamlined by deleting cases, to include (a) members departing the service due to disability or retirement (n=12 and 541, respectively) per DMDC 2002 records (2002 Active Duty Retention Status, 2002), (b) officers with occupational codes erroneously coded as enlisted occupations (n=5), (c) respondents with 17 years or greater of service (n=740), (d) respondents indicating that they had 20 or more years of service (n=6) and not previously deleted via the previous criterion, and (e) system missing (n=1,446). Items c and d were used to remove cases that precluded turnover decisions with minimal risk (e.g., vestment in the system achieved, resulting in access to a full retirement package without achieving more promotions). The officer data set was reduced to 3,366 cases.

Using a similar process and logic, the active duty, enlisted-only data set (n=7,388) was assembled by deleting cases, to include (a) members departing the service due to disabilities or retirements (n=731 and 31, respectively), (b) enlisted members in occupational codes erroneously coded as officer codes (n=2), (c) members with 17 years or greater of service (n=636), and (d) system missing (n=3,069). The enlisted data set was reduced to 2,919 cases. Three data sets resulted, to include enlisted (n=2,919), officer (n=3,366), and combined (n = 6,285) sets. Additional parameters were considered in the analyses of each hypothesis and will be discussed as appropriate.

Initial Analysis

Items were selected from the survey that in terms of face and content validity (Litwin, 1995) appeared to match items used in the Mitchell et al. (2001) instrument to measure the community embeddedness sub-dimensions of community link and community satisfaction. This process of adapting survey items and constructs to represent specific populations has also been done in other studies (e.g., job embeddedness, Fink et al., 2003; Cunningham et al., 2003; Sagas et al., 2003; West & Hom, 2003; satisfaction with military life, Bleda, Gitter, & D'Agostino, 1977; job satisfaction, Bluedorn, 1979; Motowidlo & Lawton, 1984). The community link dimension was constructed using items matching the original Mitchell et al. (2001) items for this dimension. Scale reliabilities and interecorrelations met criteria established by Nunnally (1978). Appendix B, Table B2 contains the items comprising the two sub-dimensions, the corresponding Mitchell et al. items, and scale reliabilities.

Measures

This section will provide information regarding the operationalization of analysis variables. Reliability estimates, descriptive statistics, and correlations were based on a randomly selected half of the USAF sample (n=3,180). Scale items for the community embeddedness dimension and other survey variables of interest are provided in Appendix B, Tables B2 and B3, respectively.

Insert Tables B2 and B3 about here

Intent to turnover. Two items were used to form the dependent variable, intent to turnover, and included items 32 and 35. A five-item Likert-type response format was

used for both items. The items were added together to form an intent to turnover index. A higher score indicated a greater intention to leave. A Cronbach's alpha of .91 was obtained. The average index score was 4.93 based on a range of 2 to 10. See Appendix B, Table B3 (I) for this measure.

This intent to turnover index was also used by Bluedorn (1979), who used the same items as indicated above to construct the index for his study of leave intentions of military personnel. Bluedorn (1979) reported a convergent validity coefficient of r = .86, and a Cronbach's alpha of .92. Motowidlo and Lawton (1984) used a similar single-item measure asking respondents to indicate likelihood of re-enlisting.

Actual turnover. Though intent to turnover was assessed via survey responses from 1999, actual turnover was assessed using actual duty status of survey respondents as of June 2002. Duty status data were provided by the DMDC by using confidential respondent identifiers (social security number) to track respondents against the DoD master personnel file. Duty status categories provided by the DMDC included (a) currently on active duty, (b) regular retirement, (c) separated not retired, (d) medical retirement, and (e) other discharge (e.g., violation of Uniform Code of Military Justice, administrative discharge, ineligible to re-enlist). For purposes of this project, individuals who were currently on active duty as of June 2002 (category a) and separated but not retired (category c) were used, as the remaining two categories would not reflect individuals in a voluntary turnover situation. Data were recoded from *stayed* and *separated not retired* to 0 and 1, respectively. In terms of percentages of members actually staying and leaving, 82.3% actually stayed and 17.7% actually departed.

Community satisfaction. Again, community satisfaction was believed to represent the Mitchell et al. (2001) sub-dimensions of community fit and community sacrifice. Items comprising the community satisfaction sub-dimension were consistent with other measures of community satisfaction (Fried, 1984; Whorton & Moore, 1984) that focused on the residence and immediate community, job availability, concern for health care, concern for housing, satisfaction with public education, local convenience satisfaction, and local interpersonal satisfaction. Eleven items were selected based on face and content validity and are presented in Appendix B, Table B2. The Cronbach's alpha and scale average were .77 (n=3,181) and 2.33, respectively.

Community link. Four items from the 1999 SADP were used to form this sub-dimension of community embeddedness, and included marital status (item 54), married and spouse employed in the same geographic location (item 55), number of dependents in household (item 60), and 13 sub-items from item 52 (on average during a month, how often do you use the following on base programs, facilities, or services and civilian off base programs, facilities, or services?). As noted in Appendix B, Table B2, the items comprising this dimension significantly overlapped with items used by Mitchell et al. (2001).

Data were recoded as follows. For marital status, data were coded 2 for *married* and 1 for *all other options* (e.g., separated, divorced, widowed, never married). In terms of married and spouse employed in the same geographic location, respondents were presented 11 selections referring to various types of employment and 5 responses referring to other activities (e.g., unemployed, in school, retired). Selection of any of the 11 employment-related items resulted in a count value of 2, while selection of an

unemployment-related item or unmarried status resulted in a value of 1. Regarding number of dependents, respondents were asked to identify the number of children and/or dependents across various ranges (e.g., < 1 year old, 23-64 years old). Selection of any number and/or age of dependent resulted in a count value of 2, while indicating no dependents resulted in a count value of 1. For item 52, respondents were asked to indicate frequency of use of 13 various on-base and civilian activities and facilities (total 26) via a response format of 0, 1-5, 6-10, 11-15, 16-20, 21-25, and 26 or more times per month. These response ranges were recoded to 0 through 6, respectively. Selection of an activity resulted in a count value of 1, while non-selection resulted in a count value of 0. The count values were summed and averaged, resulting in a range from 0 to 1. Marital status, spouse's employment status, dependent status, and average facility usage were then summed into an overall count variable, resulting in a 0 to 7 range. The Cronbach's alpha and scale average were .65 (n=2,972) and 1.78, respectively. Refer to Appendix B, Table 2 and Table B3 (VIII) for this measure.

Community embeddedness. Following Lee et al.'s (2004) operationalization of the community embeddedness dimension, an average of the items comprising the two sub-dimensions were computed and a composite score reported. The Cronbach's alpha and scale average were .69 (n=2,906) and 4.3, respectively.

Job satisfaction. This variable was measured via ten items (51 and 39 a, i, j-m, u, z, and bb). Response formats used for these items were identical. The Cronbach's alpha and scale average were .79 (n=3,099) and 2.97, respectively. Refer to Appendix B, Table B3 (II) for this measure.

Organizational commitment. This variable was comprised of six items (50 f – k). These items were based on an organizational commitment scale by Porter and Smith (Cook, Hepworth, Wall, & Warr, 1981). Item 50g was reverse scored. Scale reliability and average were .80 (n=3,221) and 2.56, respectively. Refer to Appendix B, Table B3 (III) for this measure.

Job search activity. Item 48 asked the respondents to indicate which of 11 activities he had engaged in regarding exploring the possibility of leaving the military during the past six months. These items were similar to an existing ten-item scale developed by Kopelman, Rovenpor, and Millsap (1992) that was used by Mitchell et al. (2001). Data was originally coded as 1 (not marked) and 2 (marked). Data were recoded to 1 (marked) and 0 (not marked). Consistent with previous research using this measure (e.g., Bretz, Boudreau, & Judge, 1994; Cavanaugh, Boswell, Roehling, & Boudreau, 2000), a count variable was then created to represent the level of job search activity, ranging from 0 (none of the above) to 10 (all activities except "none of the above" selected), resulting in a 3.15 average (n=3,262). Refer to Appendix B, Table B3 (IV) for this measure.

Career plateau. Following previous researchers (Chao, 1990; Tremblay & Roger, 1993; Tremblay et al., 1995), career plateau was assessed via a perceptual measure. Item 33 asked respondents planning to stay on active duty to indicate the length of time until their next expected promotion. The recoded response format was less than one year (1), 1 year to less than 2 years (2), 2 years or more (3), and no promotion expected (4). The average was 2.2 (n=3,256). Refer to Appendix B, Table B3 (V) for this measure.

Perceptions of occupational portability. Four items were used to assess the measure of occupational portability. Respondents were asked to indicate level of agreement with items 45e, 45f, 45g, and 45h. Item 45e was reverse scored. The Cronbach's alpha and scale average were .83 (n=3,232) and 2.01, respectively. Refer to Appendix B, Table B3 (VI) for this measure.

Occupational commutability. The one distinct occupational category available in this data set associated with occupational commutability was that of a pilot. Individuals identified as military pilots were coded as 1 and all others officers were coded as 0. Given that only officers can serve as pilots, the pilot/non-pilot analyses of commutable occupations were based on the officer-only portion of the data. Refer to Appendix B, Table B3 (VII) for the occupational area categories.

Control variables. Six items corresponding to respondent demographic characteristics were included in the analyses as control variables. The items included (a) age (per DMDC master file), (b) gender (item 101), (c) race (item 104), (d) education (item 106), (e) income (item 88), and (f) number of relocations (item 12). Gender was coded male (1) and female (2). Race was coded (1) all other and (2) white. Education ranged from 1 through 6, where (1) represented high school, (2) some college but less than 1 year, (3) 1 or more years of college but no degree, (4) associate's degree (5) bachelor's degree, and (6) graduate or professional degree. Income ranged from 1 to 10, representing increments from $1,000 to $10,000 monthly. Number of relocations ranged from 1 to 10 or more relocations.

The effects of race, education, income, gender, and age have all been found to be significantly related to intent to turnover (Griffeth, Hom, & Gaertner, 2000; Lane,

Mathews, & Presholdt, 1988; Price & Kim, 1993). Job tenure, a proxy for length of service, and age have also been found to be significantly related to perceptions of career plateauing (Allen, Russell, Poteet, & Dobbins, 1999; Lawrence, 1984) and job satisfaction (Bedeian, Ferris, & Kacmar, 1992; Lawrence, 1984). Bamundo and Kopelman (1980) reported significant relationships between job satisfaction and occupational level (rank), income, age, education, and job longevity (time-in-service). Riordan, Griffeth, and Weatherly (2003) reported a relationship between age, income, and rank with turnover cognitions, job satisfaction, organizational commitment, search behavior, and actual turnover. Allen and Meyer (1993) demonstrated an interaction between age, length of service, and organizational commitment. Steers (1977) reported a relationship between age and education with organizational commitment. All variables were found to be significantly related to intent to turnover by Hamilton and Datko (2000).

Given the demonstrated relationships among age, rank, and tenure, only age was used as a control to reduce the risk of introducing multicollinearity issues into the analysis. Age was selected over rank and tenure as the control variable as it is a continuous variable, where as rank and tenure were collapsed into interval ranges by DMDC researchers.

CHAPTER 4

RESULTS

Instrument Validation

The first step in measurement assessment included a comparison of the community embeddedness dimension and the related sub-dimensions of organizational commitment, job satisfaction, and job search activity dimensions derived from the 1999 SADP (Hamilton & Datko, 2000) data with the associated dimensions used by Mitchell et al. (2001). I administered a survey questionnaire (survey #1) comprised of measures used by Mitchell et al. (2001) to a sample of 73 junior military officers enrolled in a graduate program at the Air Force Institute of Technology (AFIT), Wright-Patterson Air Force Base, OH. Survey #2 was comprised of similar variables derived from the 1999 SADP data and was administered to the same students one week later. Refer to Appendices C and D, respectively, for surveys 1 and 2. Respondent participation was strictly voluntary, and respondent anonymity was maintained. All data were entered by the researcher, and necessary items were recoded as discussed previously. Scales were computed for each measure as described in the previous section.

Insert Appendices C and D about here

Convergent and discriminant validity were estimated using the multitrait-multimethod (MTMM) process as described by Campbell and Fiske (1959). Multiple traits were represented by the seven dimensions of interest in the survey, and included:

(a) community embeddedness, (b) community satisfaction, (c) community link, (d) community sacrifice and community fit (combined for analysis purposes), (e) job satisfaction, (f) organizational commitment, and (g) job search activity. The multiple methods included assessing the aforementioned constructs via different measures (e.g., the use of the 36-item job satisfaction measure (Spector, 1997) employed by Mitchell et al. (2001) and the 9-item job satisfaction measure derived from the 1999 SADP.) The multitrait-multimethod correlation matrix is presented in Appendix B, Table B4.

Insert Table B4 about here

To provide a framework to interpret correlational relationships, the following semantic descriptions of coefficient range values suggested by Hinkle, Wiersma, and Jurs (1982, p. 100) were used: (a) very high (.90 - 1.0); (b) high (.70 - .90); (c) moderate (.50 - .70); (d) low (.30 - .50); and (e) little if any correlation (.00 - .30).

Campbell and Fiske (1959) indicated four aspects of the MTMM matrix could be utilized to assess validity. In terms of convergent validity, the entries in the validity diagonal should be significantly different from zero and large enough to warrant further examination of validity. As indicated in Appendix B, Table B4, the correlations in the validity diagonal ranged from .56 to .82 ($p<=.01$) and represented moderate to high relationships (Hinkle et al., 1982). The correlation between the community satisfaction dimension, as derived from the 1999 SADP, and the combined community sacrifice and community fit dimensions (B_1, Bb_2), based on the Mitchell et al. (2001) measures, was the lowest value on the validity diagonal at .56 ($p<=.01$) however, it is worth noting that the correlation between the community embeddedness dimensions (A_1, A_2) derived from

the two sources was higher at .65 ($p<=.01$). These moderate to high correlations in the validity diagonal should be considered as representing the lower boundaries of association, as "within the heteromethod blocks, measurement errors are independent, and tend to lower the values both along the validity diagonal and in the heterotrait triangles" (Campbell & Fiske, 1959, p. 97). Based on the Campbell and Fiske (1959) criterion of correlation values being significantly different from zero such that further examination is warranted, convergent validity was demonstrated for all measures.

The second criterion offered by Campbell and Fiske (1959) was that the validity diagonal value should be higher than the values in the corresponding row and column in the heterotrait-heteromethod triangles. As depicted in Appendix B, Table B4, all values, except the correlation between B_1 and Bb_2 (Community Satisfaction and the combined Community Sacrifice/Community Fit dimension), easily met this requirement. The community sacrifice and community fit measures were combined and compared against community satisfaction based on the theoretical argument presented earlier suggesting community satisfaction was a reasonable proxy for these two sub-dimensions. The correlation between B_1 and Bb_2, ($r=.56$, $p<=.01$), was moderate and the same as the correlation between B_1 and A_2 (community embeddedness, as developed by Mitchell et al. (2001)). Thus, discriminant validity was demonstrated for the majority of variables.

The third criterion was "that a variable should correlate higher with an independent effort to measure the same trait than with measures designed to get at different traits which happen to employ the same method" (Campbell & Fiske, 1959, p. 101). As such, values in the validity diagonals should be higher than the values in the heterotrait-monomethod triangles. This requirement was met to a great degree in the

MTMM in Table B4; however, the values in A_1, B_1, and A_2, Bb_2, r=.89 and .87 ($p<=.01$), respectively, were greater than most of the other values in the validity diagonal. This situation did not necessarily result in a failure to meet this criterion, as the community embeddedness dimensions (A_1 and A_2) were partially comprised of the community satisfaction, B_1, and community sacrifice/community fit, Bb_2, subscales, respectively. Further, Campbell and Fiske (1959, p. 97) reported that "within the monomethod sections, errors of measurement will be correlated, raising the general level of values found."

The final criterion offered by Campbell and Fiske (1959) called for similarities of trait interrelationship patterns in all of the heterotrait triangles of both the monomethod and heteromethod blocks. This criterion was largely supported, with the exception of the some of the non-significant correlations involving the organizational commitment and job search variables, specifically the following heterotrait comparisons from Appendix B, Table B4; (A_1, E_1/A_2, E_2), (A_1, F_1/A_2,F_2), (B_1, E_1/Bb_2, E_2), (D_1, E_1/D_2, E_2), and (E_1, F_1/E_2, F_2). A possible explanation for this result related to the characteristics of the sample population. The respondents were all military officers completing an 18-month graduate degree program. As the officers incurred an extended service commitment as a result of their participation in the graduate program, a possible issue of range restriction regarding the job search activity variable may have resulted, as the officers would not have been eligible to leave the military for at least 36 months following completion of their AFIT graduate program (AFPC, 2001b). The job search activity variable resulted in a mean score of 2.4 and 1.8, based on a 0 to 10 range, using the 1999 SADP and Mitchell et al. (2001) measures, respectively. Likewise, the organizational commitment variable

derived from the 1999 SADP and Mitchell et al. (2001) measures produced mean scores of 4.1 and 4.4, based on 1 to 5 and 1 to 7 ranges, respectively. Respondents ranking their occupational identification highly also indicated higher levels of organizational commitment compared to those ranking their occupational identification at moderate or lower levels. These findings were consistent for the measures of organizational commitment derived from the 1999 SADP and the Mitchell et al. surveys as well as previous researchers investigating commitment among military members (e.g., Kim, Price, Mueller, & Watson, 1996; Witt, 1993).

Though Campbell and Fiske (1959) did not specifically address values in the reliability diagonals as they related to convergent and discriminant validity, all values except the Mitchell et al. (2001) community link dimension (C_2, C_2; α=.49) met or exceeded the .70 reliability level suggested by Nunnally (1978). Though the reliability statistic for this dimension was lower than desired, the reliability statistic (α=.72) for the overall community embeddedness dimension calculated from the community fit, link, and sacrifice dimensions exceeded .70. A possible explanation for the low reliability statistic again related to the sample population. As the respondents were graduate students on assignments of fixed 18-month duration, this may have contributed to a possible range restriction on two of the five items comprising the Mitchell et al. community link dimension. These items included, “do you own the home that you live in” and “how many of your relatives live in the local area”. Seventy-seven percent of respondents indicated they rented their homes, while 87% indicated they had no relatives in the local community. Based on the criteria set forth by Campbell and Fiske (1959) to assess

convergent and discriminant validity, overall, the measures derived from the 1999 SADP appeared to be comparable to the measures used by Mitchell et al. (2001).

In terms of predictive validity, the theory underlying community embeddedness suggested that more embedded members would be more committed to the organization, more satisfied with their jobs, less likely to intend to leave the organization, and less likely to actually depart the organization. As evidenced in the MTMM in Appendix B, Table B4, the community embeddedness construct was either positively or not significantly related to organizational commitment and job satisfaction, or negatively or not significantly related to job search activity. Thus, both methods of measuring community embeddedness demonstrated predictive validity as well as convergent and discriminant validity.

Assessment of Measures

The initial analysis steps involved computing scale reliabilities and averages for the measures, and were discussed and reported in the previous chapter. Data used to compute interaction terms were centered in an effort to mitigate potential effects of multicollinearity (Tabachnick & Fidell, 2001). Correlations were also computed among analysis and control variables in an effort to assess the degree of multicollinearity. These correlations are presented in Appendix B, Table B5.

Insert Table B5 about here

Only the correlation between age and education ($r=.61$, $p<=.01$), organizational commitment and job satisfaction ($r=.52$, $p<=.01$), organizational commitment and intent to turnover ($r=-.52$, $p<=.01$), and job search activity and intent to turnover ($r=.52$,

p<=.01) were above .5, so problems due to multicollinearity were not anticipated; however, tests to assess multicollinearity were completed. Also, the three moderators, career plateauing, occupational portability and occupational commutability, were independent of the predictor variables, a necessary condition for the investigation of moderator variables (Zedeck, 1971). Finally, the cross-product terms (items 17 – 26 in Appendix B, Table B5) computed to test hypotheses 2- 4, did not result in significant correlations with other variables of interest.

The correlation between community embeddedness and one of its sub-components, community link, was very high (r=.90, p<=.01); however, community embeddedness and its two sub-components, community satisfaction and community link, were not in the same analyses together, so multicollinearity was not expected to be an issue. Though the correlation between community link and community embeddedness was very high, it was noteworthy that community embeddedness resulted in positive correlations with age, income, job satisfaction, and organizational commitment, while community link only produced significant correlations with age, and income. Community satisfaction resulted in significant correlations with age, income, education, job satisfaction, organizational commitment, job search activity, and community embeddedness. Following Neter et al. (1996), the variance inflation factor (VIF), a formal method for detecting the presence of multicollinearity, was evaluated and met acceptable parameters for each regression computation. Underlying assumptions for statistical tests of hypotheses (e.g., major departures from normality, outliers, multicollinearity) were tested and met.

Hypothesis One

The primary purpose of the first hypothesis was to determine the level of unique contribution that the community embeddedness dimension added to the overall explained variance in intent to turnover beyond that of the historical predictors of job satisfaction, organizational commitment, and job search. The following parameters were used to refine the data for analysis of hypothesis one. First, only respondents with an active duty service commitment of 1 year or less were considered. The intent of this parameter was to consider only respondents that would be eligible to depart the military within one year, as military members can only initiate separation actions with 365 days of requested date of separation (AFPC, 2001b). Thus, cases retained for analyses were more likely to represent respondents who had a reasonable opportunity to make decisions regarding staying or leaving the military than if the remaining service obligation exceeded the 1-year cutoff. Similarly, only respondents with 10 years or less of service were considered for analyses in an effort to reduce potential error associated with individuals with high organizational tenure who may only remain in the military to obtain retirement benefits after completing 20 years of service. Per Air Force Manual 36-2241 (AFPC, 2003, p. 277), military members are not vested into the 20-year retirement plan until successfully completing 12 years of service and achieving the necessary military rank. At this time, a member would not need to receive another promotion to be able to remain in the service for the remaining 8 years required to earn a full military retirement. As a result of imposing these parameters on the data, the remaining data represented a conservative approach to test the hypotheses, as only respondents unencumbered by service

commitment and not fully vested into the retirement program were considered. The reduced data set was comprised of 562 cases, consisting of 334 enlisted and 228 officers.

Linear regression with simultaneous entry was used for analysis using SPSS (version 12.0). With this method, all variables are entered at the same time, and Beta weights (β) are determined simultaneously. Unique contributions of each variable are the focus. Simultaneous entry is generally employed when all predictors are intended to be used, and no theoretical reason exists to consider a subset of predictors. In order to compare the size of influence of the independent variables on the dependent variable, Beta weights produced from the preceding analyses were used. Beta weights allowed for comparison of the size of the influence of independent variables measured using different metrics or scales of measurement (Vogt, 2000).

Intent to turnover was first regressed on the following variables of interest, to include (a) six control variables, (b) job satisfaction, organizational commitment, job search activity, and (c) community embeddedness. As noted in Appendix B, Table B6 (Model 1), the adjusted R^2 for the equation using intent to turnover as the dependent variable was .44 ($F=44.20$, $p<.001$). Community embeddedness did not significantly contribute to the model, as indicated by the statistically insignificant Beta ($\beta= -.04$).

Insert Table B6 about here

Exploratory Supplemental Analyses

To further examine the first hypothesis, additional analyses were conducted focusing on two areas. First, as intent to turnover and actual turnover have been used as proxy variables for one another (i.e., Steel & Ovalle, 1984), and actual turnover data for this data were available, analyses using actual turnover were also completed. The

correlation between intent to turnover and actual turnover in this data set was .61 (p<.01). [Note: Exploratory supplemental analyses hypotheses are designated by the hypothesis being evaluated and the order of analysis. As an example, the first supplemental analysis of the first hypothesis is depicted as H1.1.]

As the dependent variable, actual turnover, was a dichotomous variable, logistic regression was used for this portion of the analysis (H1.1). Logistic regression makes no assumptions regarding the distribution of independent variables, so the relationship between the predictor and response variables is not a linear function. Logistic regression relies on transforming data by taking the natural logarithms to reduce nonlinearity. As linear regression relies on a straight line that best approximates the data, logistic regression produces a logistic curve that best approximates the data. Where linear regression relies on ordinary least square estimates, logistic regression uses maximum likelihood estimation to calculate the log odds of the dependent variable.

Test statistics appropriate for evaluating logistic regression output and model fit are provided in Appendix B, Table B6. The Hosmer and Lemeshow's goodness of fit test (Hosmer & Lemeshow, 2000) is a test of model fit where a test statistic greater than .05 indicates a well-fitting model. The Hosmer-Lemeshow test statistics for Model 2 was χ^2=8.87, p=.35, 8 df.; thus, the data fit quite well.

The classification tables predict the correct and incorrect estimates for the dependent variable. A perfectly fit model would result in 100% of cases being correctly assigned. In this case, the model correctly classified 70.7% of the cases.

The exponentiated beta (Exp β) represents the ratio-change in the odds of the event of interest for a 1-unit change in the predictor in logistic regression. The odds ratio

is “the increase (or decrease if the ratio is less than one) in odds of being in one outcome category when the value of the predictor increases by one unit” (Tabachnick & Fidell, 2001, p. 548). The coefficients, represented by β, are the natural logs of the odds ratios. Odds ratios greater than 1 indicate an increase in odds of an outcome (i.e., actual turnover) with a 1-unit increase in the predictor (i.e., community embeddedness). Odds ratios less than 1 indicate a decrease in odds of the outcome with a 1-unit change in the predictor (Tabachnick & Fidell, 2001). As indicated in Appendix B, Table B6 (Model 2), the odds ratio associated with community embeddedness (Exp β=.80, p<.001) is less than 1, indicating that actual turnover was 0.8 times as likely (or 20% less likely; 1-.8=.2) with a 1-unit increase in the predictor, community embeddedness. Actual turnover was coded as 0 for individuals who stayed in the military compared to 1 for those who departed the military. The effect of community embeddedness, based on data collected in the 1999 SADP survey, decreased the odds of an individual actually departing the military in the year 2002 by 20%. Thus, the exploratory supplemental analysis provided evidence to support hypothesis one when actual turnover was considered as the dependent variable.

The second area of exploratory supplemental analysis considered community embeddedness’s two sub-dimensions, community satisfaction and community link, and their effects on intent to turnover and actual turnover (H1.2 and H1.3, respectively). As indicated in Appendix B, Table B7, no significant findings resulted for community link or community satisfaction with intent to turnover as the dependent variable (Model1); however, community link did significantly contribute to the model when actual turnover was the dependent variable (Model 2, Exp β=.76, p<.001). The odds ratio associated with community link (Exp β=.76, p<.001) is less than 1, indicating that actual turnover

was 0.76 times as likely (or 24% less likely; 1-.76 = .24) with a 1-unit increase in the predictor, community link. The effect of community link, based on data collected in the 1999 SADP survey, decreased the odds of an individual actual departing the military in the year 2002 by 24%.

Insert Table B7 about here

In their assessments of the job embeddedness construct, Mitchell et al. (2001) used only gender as a control variable. When the first hypothesis was reconsidered using only gender as a control instead of the six variables proposed in this research project and actual turnover as the dependent variable (H1.5), the coefficient for community embeddedness produced a significant result (Exp β=.79, p<.001), indicating actual turnover was .79 times as likely (or 21% less likely) with a 1-unit increase in the predictor, community embeddedness. See Appendix B, Table B8 for results. These results supported previous findings (i.e., Holtom & O'Neill, 2004; Lee et al., 2004; Mitchell et al., 2001) that indicated a negative relationship existed between community embeddedness and subsequent actual turnover.

Insert Table B8 about here

Further analyses were completed using gender as the only control variable and the two sub-dimensions, community link and community satisfaction, in the regression. See Appendix B, Table B9 for results. Again, intent to turnover and actual turnover were considered separately as dependent variables (H1.6 and H1.7, respectively). Community

satisfaction did not produce a significant result when the dependent variable was intent to turnover (Table B9, Model 1) or when actual turnover and only gender was used as the control variable (Table B9, Model 2). Community link, however, did produce significant results. When intent to turnover was the dependent variable (Table B9, Model 1) and gender was the only control variable considered, community link produced a negative beta coefficient (β=-.07, p<.10). Likewise, a significant exponentiated beta resulted for community link when actual turnover was the dependent variable (Table B9, Model 2, Exp β=.73, p<.05) and gender was the only control variable considered.

Insert Table B9 about here

Based on analysis results, support of hypothesis one was found when actual turnover was considered as the dependent variable (refer to Appendix B, Table B6, Model 2). Further, results from the exploratory supplemental analyses indicated partial support for hypothesis one. Specifically, as depicted in Tables B8, community embeddedness did significantly contribute to the model when actual turnover was considered as the dependent variable and only gender was used as the control variable. Further, the community link sub-dimension of community embeddedness produced significant results when actual turnover was the dependent variable (Appendix B, Table B7, Model 2), as well as when only gender was used as the control variable and actual turnover was the dependent variable (Appendix B, Table B9, Model 2).

Hypothesis Two

The intent of the second hypothesis was to evaluate the interaction effect between perceptions of being career plateaued and community embeddedness on intent to turnover

such that increased perceptions of being career plateaued would result in an increased impact of community embeddedness on intent to turnover. This hypothesis was evaluated by examining the level of significance of the interaction term (community embeddedness x career plateau). The sample parameters used were the same as parameters used to test the first hypothesis. Career plateauing, originally coded as (1) next promotion was less than one year away, (2) next promotion expected in 1 year to less than 2 years, (3) next promotion 2 years or more, and (4) no promotion expected, was recoded to 0 for members who anticipated a promotion within the next two years (categories 1 and 2 from original coding), and 1 for members who anticipated a promotion after two years (categories 3 and 4 from original coding).

Based on regression results, as reported in Appendix B, Tables B10A and B10B (Models 1 and 2, Hypothesis 2, respectively), the community embeddedness x career plateau cross-product term did not produce significant results in Model 1 or Model 2. Results failed to support hypothesis two.

Insert Tables B10A and B10B about here

Exploratory Supplemental Analyses

Similar to the supplemental analyses for hypothesis one, the supplemental analyses of hypothesis two also involved consideration of hypothesis two using actual turnover as the dependent variable (Appendix B, Table B10B, H2.1). Additional analyses included (a) gender as the only control variable (Appendix B, Tables B11a and B11b, H2.2 and H2.3, respectively), and (b) the two sub-dimensions of community embeddedness, community satisfaction and community link. Both sets of analyses were

computed separately using intent to turnover and actual turnover as dependent variables. Considering the hypothesis with actual turnover as the dependent variable instead of intent to turnover, as depicted in Appendix B, Table 10B, Model 2, H2.1, no significant results were produced. When only gender was considered as a control variable, the community embeddedness x career plateau cross-product term did not produce any statistically significant results with intent to turnover or actual turnover as the dependent variable. The supplemental analyses failed to support hypothesis two.

Insert Tables B11A and B11B about here

No significant findings resulted when community satisfaction and community link were used as main effects variables and interaction terms were comprised of community satisfaction x career plateau and community link x career plateau. These same analyses were also considered using only gender as a control variable. Due to the non-significant findings, these data were not presented in an appendix.

Hypothesis Three

The third hypothesis involved evaluating the moderating effect of occupational portability on the relationship between community embeddedness and intent to turnover. The increased perception of occupational portability was predicted to decrease the impact of community embeddedness on intent to turnover. This hypothesis was evaluated by examining the level of significance of the cross-product term of community embeddedness x occupational portability using linear regression. The sample parameters used were the same as those used to test the previous hypotheses. The occupational

portability measure was scored using a 1 to 5 response format, with a lower score indicating a higher level of perceived occupational portability than a higher score.

As indicated in Appendix B, Table 10A, the community embeddedness x occupational portability interaction term did not produce statistically significant results when intent to turnover was the dependent variable (Model 1). Hypothesis three was not supported.

Exploratory Supplemental Analyses

Supplemental analyses as described for the previous hypotheses were also computed for hypothesis three. Reconsidering the hypothesis using actual turnover rather than intent to turnover as the dependent variable did not produce significant results, as depicted in Appendix B, Table B10B, Model 2, H3.1. When regressions were estimated with community embeddedness and occupational portability as the main effect variables, an interaction term comprised of community embeddedness x occupational portability, and only gender as the control variable, no significant results were found when intent to turnover or actual turnover was the dependent variable (Appendix B, Tables B11A and B11B, H3.2 and H3.3, respectively). Similarly, regressions were estimated using intent to turnover and actual turnover, separately, as the dependent variable and community satisfaction, community link, and occupational portability as main effect variables, and interaction terms comprised of community satisfaction x occupational portability and community link x occupational portability. These same analyses were also considered using only gender as a control variable. No significant results were produced with intent to turnover or actual turnover as the dependent variable; thus, these data were not presented in the appendix.

Hypothesis Four

The purpose of the fourth hypothesis was to evaluate the moderating effect of occupational commutability on the relationship between community embeddedness and intent to turnover. The impact of perceptions of occupational commutability was predicted to lessen the impact of community embeddedness on turnover intentions for individuals in less commutable occupations as compared to individuals in more commutable occupations. The data of interest were officers with 10 years or less of active duty service and 1 year or less of an active duty service commitment (n=224). The officer-only cases were used for this hypothesis, as only officers can be pilots in the USAF. Occupational commutability was considered in two categories; pilot (1) or non-pilot (0), (n=57 and 167, respectively).

Analyses results, as indicated in Appendix B, Table B10A (Models 1, Hypothesis 4), failed to produce any statistically significant results for the community embeddedness and occupational commutability interaction term using intent to turnover. Hypothesis four was not supported.

Exploratory Supplemental Analyses

Similar to the supplemental analyses for the previous hypotheses, the supplemental analyses also involved consideration of hypothesis four using actual turnover as the dependent variable. Additional analyses also included (a) gender as the only control variable and (b) the two sub-dimensions of community embeddedness, community satisfaction and community link. Both sets of analyses were computed separately using intent to turnover and actual turnover as dependent variables.

When the hypothesis was considered using actual turnover rather than intent to turnover as the dependent variable (H4.1), the cross-product interaction term was significant (Appendix B, Table B10B, Model 2, H4.1, Exp β=.01, p<.10). When only gender was considered as a control variable and intent to turnover (H4.2) and then actual turnover (H4.3) were used as the dependent variables, no significant results were produced (Appendix B, Tables B11A and B11B, H4.2 and H4.3). Also similar to previous supplemental analyses, regressions were estimated using intent to turnover and actual turnover, separately, as the dependent variable and community satisfaction, community link, occupational commutability, and interaction terms comprised of community satisfaction x occupational commutability and community link x occupational commutability. These same analyses were also considered using only gender as a control variable. No significant results were produced with intent to turnover or actual turnover as the dependent variable; thus, these data were not presented in the appendix. The only significant result was produced when actual turnover was used as the dependent variable rather than intent to turnover (Table B10B, H4.1); however, the significance level of .10 did not provide strong evidence to suggest this hypothesis was supported

Hypothesis Five

The intent of hypothesis five was to evaluate the ability of intent to turnover to mediate the relationship between community embeddedness and actual turnover, while also mediating the relationships between job satisfaction, organizational commitment, and job search activity with actual turnover. The sample was comprised of cases where respondents had 10 years or less of tenure and 1 year or less of remaining service commitment. Two models were tested. In the full model, actual turnover was regressed,

using simultaneous entry, on all control variables, job satisfaction, organizational commitment, job search activity; community embeddedness, and intent to turnover. The second regression equation (reduced model), which also used the simultaneous entry method, represented the reduced, or nested, model, and was comprised of all variables identified above, with the exception of the intent to turnover variable.

Test statistics appropriate for evaluating logistic regression output and model fit are provided in Appendix B, Table B12. Data suggested that both the reduced and full models fit the data well. A variable is considered a mediator if four conditions are present. These include (a) the independent variable affects the mediator; (b) the independent variable significantly affects the dependent variable in absence of the mediator, (c) the mediator has a significant, unique effect on the dependent variable, and (d) the effect of the independent variable on the dependent variable decreases after the addition of the mediator to the model (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). A popular statistical test to assess whether mediation has occurred is the Sobel test (Sobel, 1982), which calculates the critical ratio as a test of whether the indirect effect of the independent variable on the dependent variable via the mediating variable is significantly different from zero (Preacher & Hayes, 2004).

As indicated by the exponentiated beta values for community embeddedness for the reduced and full models for Model 1 (Exp β=.80 and .76, $p<.001$, respectively), intent to turnover was not mediating the relationship between community embeddedness and actual turnover, as the Sobel test statistic ($z=-.41$) and related p-value ($p<.68$) for Model 1 were not significant. Thus, hypothesis five was not supported.

Insert Table B12 about here

Exploratory Supplemental Analyses

Similar to the supplemental analyses for the previous hypotheses, the supplemental analyses for hypothesis five considered equations using only gender as the control variable in addition to job satisfaction, organizational commitment, job search, and community embeddedness as predictors in the logistic regression equations (H5.1). As depicted by the exponentiated beta values for community embeddedness for the reduced and full models for Model 2 (Exp β=.79 and .77, p<.001, respectively), intent to turnover was not mediating the relationship between community embeddedness and actual turnover when only gender was used as the control variable, as the Sobel test statistic (z=-.64) and related p-value (p<.52) were not significant. Supplemental analysis failed to provide evidence to support hypothesis five.

Of the five hypotheses considered, only evidence was found to indirectly support the first hypothesis. Community embeddedness did make a unique contribution in predicting actual turnover; however, insufficient evidence was found to support the hypothesized relationship between community embeddedness and intent to turnover. A summary of hypotheses and results is presented in Appendix B, Table 13.

Insert Table B13 about here

CHAPTER 5

DISCUSSION

In the previous chapter, I presented the results from the five research hypotheses testing the effects of community embeddedness on intent to turnover and actual turnover as well as the interaction effects of community embeddedness and career plateauing, occupational portability, and occupational commutability. A discussion of results from exploratory supplemental analyses related to each of the research hypotheses was also presented. I begin this chapter with an overview of major findings, followed by a more detailed discussion of each hypothesis. I close with discussions of limitations of the study and possible theoretical and practical contributions of this research to the turnover literature.

This dissertation considered the role of community embeddedness as a precursor to turnover decisions among members of an organization characterized by frequent relocation and limited discretionary organizational exit. The theoretical premise was that organization members would value the links and fit to their community such that thoughts of leaving or actually leaving the organization would be lessened by the desire to remain enmeshed in the community. The work explicitly considered whether or not community embeddedness would uniquely account for variation in turnover intentions and actual turnover, beyond that accounted for by more traditional antecedents of turnover. Data for the study were gathered from members of the USAF. The research also examined some potential moderators of the community embeddeddness-

turnover relationship. Here the focus was on career plateauing, perceived occupational portability, and occupational commutability.

Discussion of Major Findings

Hypothesis one. Results of the current study did not support the hypothesized relationship between community embeddedness and intent to turnover. Initial interpretation of the lack of statistical support for this hypothesis could be construed as uninteresting; however, results from the exploratory supplemental analyses were thought provoking and potentially beneficial from both theoretical and practitioner perspectives.

An important strength of this study was the 3-year lag between self-reported intent behavior and independently-provided actual turnover data for the same respondents. The correlation between intent to turnover and actual turnover was .61, which was consistent with previous uses of these measures in tests of the job embeddedness construct (e.g., Holtom & O'Neill, 2004; $r = .45$, $p < .01$; Mitchell et al., 2001; $r = .30$, $p < .01$); however, the 3-year time lag between intent and actual data for this research was greater than the 1-year lag used by the aforementioned researchers. The data set (n=560) representing actual turnover decisions from this study was much larger than the data set for the grocery (n=15) and hospital workers (n=15), providing for increased accuracy and precision of results (Alreck & Settle, 1995; Fink & Kosecoff, 1998).

With the exception of an insignificant correlation between job search activity and community embeddedness, the predicted relationships between the historical predictors, job satisfaction and organizational commitment, and community embeddedness in this study were consistent with correlation results reported by Mitchell et al. (2001) and

Holtom and O'Neill (2004). Thus, further analyses were conducted in order to explore whether the failure to support hypothesis one was attributable to population characteristics that differed between the current study and past work devoted to this topic.

The first research hypothesis in this study mirrored the hypothesis tested by Mitchell et al. (2001) and Holtom and O'Neill (2004) with a key difference being sample demographics. Mitchell et al. used two samples, grocery store workers (n=177) and hospital employees (n=208), and Holtom and O'Neill (2004) used a sample of hospital employees (n=208); while the current study was based on active duty military members (n=562).

Aside from the difference in sample size between this study and other published research regarding job embeddedness (Holtom & O'Neill, 2004; Mitchell et al., 2001); the samples also differed in terms of other demographic characteristics. [Note: Based on the sample characteristics, the hospital sample from the Mitchell et al. study appeared to be the same sampled used by Holtom and O'Neill (2004)].

The military sample and Mitchell et al. (2001) and Holtom and O'Neill (2004) samples were similar in terms of organizational tenure and respondent marital status; however, the samples differed in terms of respondent age and gender composition. The majority of the military sample was comprised of male respondents, compared to the predominantly female grocery and retail worker samples. Also, the military respondents were about 10 years younger, on average, than the Mitchell et al. and Holtom and O'Neill (2004) respondents. Neither Mitchell et al. nor Holtom and O'Neill (2004) reported demographic statistics regarding education, income, number of relocations, or race of respondents.

Given the differences between my sample and previous samples, I examined the moderating effects of age and gender on the relationships between community embeddedness and both intent to turnover and actual turnover. No statistically significant results were found. I also examined the moderating effects of income, education, and race. No significant results were observed.

The final control variable of interest, frequency of relocation, was not specifically addressed in previous research; though Mitchell et al. (2001) called for further evaluation of the embeddedness construct in populations characterized by frequent relocation, such as the military. Thus, a reasonable assumption would be that the grocery and hospital worker samples were not characterized by frequent relocation. The average number of relocations for this study, noting that the respondents were limited to individuals with 10 years or less of service, was 2.4, and the average military member could expect to relocate 10 times across a 20-year career (U.S. Government Accounting Office, 2001). As such, it was reasonable to test for possible interaction effects between community embeddedness and number of relocations on intent to turnover and actual turnover. The interaction term, in both instances, was not statistically significant at the .05 level.

Thus, age, gender, and relocation history differences between this and previous samples did not provide insights into why community embeddedness did not account for variance beyond the variance explained by the historical predictors of turnover when the dependent variable was intent to turnover. Thus, in this military sample, both community embeddedness and intent to turnover appear to act as independent precursors of actual turnover decisions.

Community embeddedness may only contribute to the actual departure decision once an individual has decided that leaving the organization is an option. It is then that he may consider the community links, fit, and sacrifices that would be foregone as a result of his departure decision.

Hypothesis two. The second hypothesis predicted that perceptions of being career plateaued and community embeddedness would interact such that embeddedness would be a more powerful predictor of turnover intentions among plateaued respondents. This hypothesis was not supported. Further, none of the exploratory supplemental analyses produced significant results.

Similar to previous research efforts involving secondary measures of career plateaus (e.g., Chao, 1990; Tremblay, Roger, & Toulouse, 1995), this research effort may also have been impacted by the difficulty in operationalizing the career plateau measure. The career plateauing measure used in this study initially appeared to be sufficient, but the tenure restriction of 10 years or less of active duty service may have been problematic. Perhaps the career plateauing measure used in this study had less application to military members with 10 years or less of service than it would with members with more tenure with the organization. Based on potential measurement problems associated with the plateauing measure, I have two suggestions for future researchers.

First, the career plateau measure, as used in this study, could be analyzed in a military population with less stringent parameters regarding respondents' organizational tenure. By examining this hypothesis using respondents vested in the organization (12 years or more of service) who have a minimal service commitment (less than 1 year of

obligation), the distinction between individuals who perceive themselves to be career plateaued and not plateaued could be better defined.

A second recommendation would be to define the concept of career plateauing in terms of job title and responsibility. Successful military members, defined by increased opportunities for promotion, follow specific career tracks regardless of occupational specialty. Every military member is aware of the positions required to further advance within their occupational specialty and organization. To ensure military members are aware of these requirements, the USAF provides this information in detailed sets of regulations (Air Force Assignment System Officer Assignments, 2003). A measure could be developed to assess an individual's perception of being career plateaued based on the individual's time in a specific rank and current and projected duty history. Further, a researcher could objectively assess the individual's perception of being career plateaued by making a similar comparison between respondents' time in rank and career history.

The predicted value of perceptions of career plateauing and its effects on and interactions with community embeddedness still warrant further study. Since the community embeddedness construct has a short history in the management literature, the use of secondary data to investigate community embeddedness and career plateauing may continue to be challenging, as the data may not contain items appropriate to compute the community embeddedness measure. Future data collection efforts involving military samples would benefit by collecting specific data related to objective and subjective measures of career plateauing as well as perceptions of job performance and community embeddedness.

Hypothesis three. The third hypothesis predicted an interaction between occupational portability and embeddedness such that an increased perception of occupational portability would result in a decreased impact of community embeddedness on intent to turnover. Neither the research hypothesis nor the exploratory supplemental analyses resulted in significant findings.

The occupational portability measure assessed an individual's perception of ease of transferability of occupational skills acquired from one organization (the military) to a different organizational environment. This measure was distinguished from economic or labor market opportunity. Perhaps occupational portability should not be studied independently of labor market conditions. That is, the portability measure may only have relevance when there is a corresponding demand for talent in the external labor market.

Hypothesis four. The fourth hypothesis predicted an interaction between perceptions of occupational commutability and community embeddedness such that the impact of community embeddedness on intent to turnover would be less for individuals in occupations believed to be more commutable compared to individuals in non-commutable occupations. This hypothesis was not supported. The exploratory supplemental analyses also did not provide evidence of support.

Occupational commutability, referring to an individual's ability to reside in a location geographically distanced from the location where he needs to physically be to actually perform work, was represented by military pilot officers and non-pilot officers in the analysis. Again, the data parameters used to evaluate this hypothesis represented a very conservative approach, and perhaps expanding the career fields considered would have provided additional insights into the utility of the occupational commutability

variable and the occupational commutability x community embeddedness interaction term.

One possible explanation for the lack of significant findings may be attributable to environmental conditions impacting members between the three years from 1999 to 2002. The intent to turnover data were based on data collected from the 1999 SADP, and the actual turnover data were provided by the DMDC in 2002. In this 3-year interval, a significant event impacted the United States, the September 11, 2001, terrorist attacks. Following the terrorist attacks, pilot employment opportunities with the major commercial airlines declined dramatically (Bureau of Labor Statistics, 2005), possibly resulting in a perception of few civilian alternatives or low job security with commercial airlines. Military pilots are in the unique position of having an obvious civilian employment opportunity; however, the opportunities are sensitive to fluctuations in the economy. Essentially, the potential error introduced may have influenced the relationship between occupational commutability and community embeddedness and its subsequent effect on intent to turnover. This is consistent with previous research addressing perceptions of labor market opportunity (Mobley, et al., 1979; Motowidlow & Lawton, 1984). An examination of this hypothesis using expanded military career specialties may provide a more robust test of this hypothesis.

Hypothesis five. The fifth hypothesis predicted a mediating role of intent to turnover between community embeddedness and actual turnover. The insignificant findings indicated that, despite previous research (e.g., Price & Mueller, 1981; Steel & Ovalle, 1984) suggesting intent to turnover was a strong predictor of actual turnover, intent to turnover did not 'transmit the effects" (MacKinnon, et al., 2002) of community

embeddedness to the dependent variable, actual turnover. The insignificant finding regarding the mediating role of intent to turnover, considered in conjunction with results from the exploratory supplemental analyses associated with hypothesis one, indicated that community embeddedness directly affected actual turnover in a military population but not intent to turnover for military members with less than 10 years of service. The relationship between community embeddedness and actual turnover may be further explained by a social roles theory.

Gouldner (1957), a social scientist, suggested that individuals may have distinct, latent roles or identities in organizations, termed cosmopolitans and locals, and these roles are believed to have a notable impact on how individuals behave toward one another and toward the organization. Cosmopolitans are described as individuals "low on loyalty to the employing organization, high on commitment to specialized role skills, and likely to use an outer reference group orientation" (Gouldner, 1957, p. 290). Locals are defined as "individuals high on loyalty to the employing organization, low on commitment to specialized roles, and likely to use an inner reference group orientation" (Gouldner, 1957, p. 290). Generally, cosmopolitans identify more with their particular specialty and are more likely to be mobile, while locals tend to identify more with the organization than their specialty and are more likely to remain with an organization in one geographic location (Gouldner, 1957). Thus, community embeddedness may be a more useful predictor of actual turnover for individuals characterized as locals, as these individuals would be more likely to be enmeshed in the fabric of the community. Compared to the presumably *local* characterizations of retail grocery and hospital workers represented in previous samples testing community embeddedness, the highly

technical career fields and demands for frequent job-related mobility in the military profession suggests the respondents in this study would be characterized as *cosmopolitans*. Thus, community embeddedness may be a more useful predictor in samples comprised of *locals*. An interesting extension of this hypothesis would be to examine individuals' latent social role identities as predictors of their turnover decisions.

In addition to the possible influence of social roles theory, the perceived definition of *community* by members of a military population may also influence how the community embeddedness variable interacts with intent to turnover and actual turnover. Research (RAND Research Brief, 1998) suggests that military members live in a sub-culture defined and encouraged by the DoD. Such sub-cultures could very well exist, as the military has a long, unique history, and its members have access to DoD-sponsored housing, healthcare, childcare, educational facilities, recreational facilities, educational scholarships, etc. Further, geographic proximity of residential housing and work overflows into the development of social circles and interaction opportunities for both the military member and the dependent spouse and children. This concept of a military sub-culture is consistent with Fried's (1984) research indicating factors such as immediate residential environment, local availability and access to resources, interpersonal interaction, and community politics (Fried, 1984) could affect community satisfaction.

The constant exposure and interaction of military members to on-the-job and off-the-job communities may blur the lines between military and civilian *community* for military personnel. Data generated from the validation of the research instruments from the AFIT graduate students (n=73), as discussed in Chapter 4, supported this suggestion, as 45% of respondents (n=33) identified an overlap between civilian and military

communities of 50% or greater, while 44% (n=32) of respondents indicated at least a 25% overlap between the military and civilian environments. Only 11% (n=8) of respondents indicated no overlap existed. As samples comprised of civilian employees (e.g., hospital or retail grocery workers) did not report conflicting definitions of *community*, this would suggest that community embeddedness may behave differently in military populations than in civilian populations, as military members live in a sub-culture that is not necessarily sensitive to geographic location. The differing perspectives of what constitutes a community coupled with possible "cosmopolitan" social roles may explain the results regarding this hypothesis.

Limitations

Like all research efforts, this study had methodological limitations. Most of the limitations were related to the use of an archival data set and were identified at the onset of the study along with preventative measures taken designed to mitigate potential error bias. The secondary data set was based on a DoD-commissioned survey, so inputs regarding design or scope of the questionnaire or items were not possible. Previous researchers have indicated potential problems associated with common method variance (e.g., Campbell & Fiske, 1959; Fiske, 1982; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) and self-report measures (Podsakoff & Organ, 1986), yet primary remedies are not suited for archival data. Kiecolt and Nathan (1985) specifically addressed issues associated with secondary analysis of survey data such as item comparability and variable operationalization. Though many items required self-report and perceptual responses, the majority of items asked respondents to provide inputs on actual, verifiable events, as opposed to evaluations of events so the influence of method covariance is less likely

(Crampon & Wagner, 1994). The DMDC researchers' strict adherence to protecting respondent confidentiality also reduced the likelihood of common method variance (Podsakoff et al., 2003). The researchers were so adamant about protecting respondent confidentiality that access to relatively innocuous data in original (uncollapsed) format four years after survey administration was denied.

Related to survey design was the lack of exact overlap of scale items used to assess the dimensions of the variable of interest, community embeddedness. Though the lack of item comparability was potentially a threat to validity, the high face and content validity likely reduced this threat. Likewise, the independent instrument validation procedures increased confidence in the operationalization of the community embeddedness variable as well as the job satisfaction, organizational commitment, job search activity, and intent to turnover variables derived from the archival data set.

In terms of the career plateauing measure, objective and subjective measures would have been ideal for analysis, allowing more accurate categorization of respondents. DMDC researchers collected the data necessary to objectively assess career plateauing (e.g., time-in-grade information), but collapsed data ranges limited data utility. The data did, however, provide insight into definite career stages (e.g., junior enlisted, non-commissioned officer, senior non-commissioned officer; company grade officer, field grade office). As noted in the discussion of the second hypothesis, expanding the tenure parameters of respondents (e.g., more than 10 years of active duty service) could provide an opportunity to operationalize the career plateauing variable such that respondents could possibly be categorized into slow, average, and fast track in terms of rate of promotion attainment.

The occupational portability measure was appropriate, but additional information regarding perceptions of the labor market would be a useful addition to the theoretical argument supporting the value of occupational portability and its interactions with community embeddedness and subsequent turnover. Likewise, specific occupational data would have aided in expanding the investigation opportunities across more categories for the occupational commutability analysis. This study limited the evaluation of occupational commutability to pilot officers as a result of public information available from the secondary data set. As the USAF offers over 200 occupational area choices, opportunities for evaluating the occupational commutability variable beyond the pilot career field are possible.

Another limitation of the data involved the lack of performance measures. Respondents provided information pertaining to their own promotion potential as well as perceptions of fairness of the promotion system, but self-reported performance data were not captured. The impact of job performance has been acknowledged (e.g., Dreher, 1982; Youngblood, Mobley, & Meglino) and would be useful in terms of evaluating effects on intent to turnover and perceived occupational portability and commutability across varying levels of performers.

A final limitation of the study involved a threat to internal validity, a history effect (Campbell & Stanley, 1963). The history effect refers to potential error introduction based on the measurement of behavior at different points in time which could result in differences reflecting the impact of the independent variable or extraneous and unwanted effects occurring as a result of cultural change, such as the terrorist attacks of September 11, 2001, and the corresponding impact on the economy, specifically

commercial airline hiring opportunities. The experimenter had no control over such events, and the potential error introduced could not be calculated based on available data; however, it is worth noting again that the positive correlation between intent to turnover and actual turnover in this study was consistent with previous uses of these measures.

Despite the potential limitations of the survey data, methodological and measurement strengths also need to be acknowledged. First, the DMDC researchers, the primary individuals responsible for a significant portion of DoD-sponsored surveys, were trained in survey and sampling design. The data handling, coding, data correction procedures, etc. were precisely explained and published in annexes to the survey. Also, the lead researcher made herself available to me via telephone, email, and written correspondence in order to answer questions regarding data collection procedures, analyses, sampling, and statistical methods employed. Also, because a random sample of all military members was used, generalizability to the population of military members was strong.

Another significant strength of this study was the availability of data that allowed for the assessment of the relationships between community embeddedness, intent to turnover, and actual turnover, over a 3-year time horizon. Few turnover studies have captured intent to turnover and actual turnover from such a large population over three years (see Steel & Ovalle, 1984). As evidenced in Steel and Ovalle (1984), the majority of studies with protracted timeframes involved military samples. Previous studies, to date, involving job embeddedness and turnover have sampled grocery workers (n = 177) and hospital workers (n = 208) with only a 1-year turnover lag. Given the data set size and 3-year time lag between intent to turnover and actual turnover status, evidence

supporting the stability of intent and actual departure, as related to community embeddedness, increased the bodies of knowledge associated with job embeddedness and turnover theories. Additionally, because all respondents worked for the USAF and were bound by the same governing laws and directives regarding organizational exit, the sample represented a fairly homogeneous population; thus, differences identified would not be due to differences in policy but rather differences caused by the variables of interest.

Finally, while working with military samples can limit the generalizability of the findings, Fisher and Shaw (1994) effectively argued that civilian employees and military personnel share commonalities in terms of transfer experiences and relocation attitudes. They further noted that both military and civilian employers required members to relocate. Individual military members, not an entire organization, relocate to new assignments, as individual civilian employees often relocate for job-related purposes. Both the military and civilian member must deal with departing one community and becoming a part of a new community, though arguably, military members have the opportunity to become more entrenched in the military community than their civilian counterparts. The military sample used in this study provided a unique opportunity to begin defining the boundary conditions applicable to job embeddedness theory by testing the community embeddedness sub-dimension in a population synonymous with frequent job-related relocation and limited discretionary organizational exit opportunities.

Implications for Theory and Practice

I discuss the theoretical and practical implications of the study in this section. I first present implications for turnover theory, followed by how this study's findings can assist managers in addressing voluntary turnover.

Theory. This study advanced research from both theoretical and practitioner perspectives. From a theoretical perspective, this study sought to further define the boundaries of the community embeddedness dimension by examining the construct in a large population of individuals working in an industry with demonstrated turnover problems, frequent relocation requirements, and reduced discretionary organizational exit choices. Mitchell et al. (2001) called for further study of embeddedness construct using different settings and types of workers (e.g., occupations requiring frequent relocations), and this study addressed this need.

The primary theoretical contribution of this study related to the possible placement of community embeddedness in process models of turnover. Historically, turnover has been modeled such that predictors like job satisfaction, organizational commitment, job search behavior, and job search alternatives preceded intent to turnover, which directly preceded actual turnover. Community embeddedness did not appear to be a factor when an individual was simply thinking about departing the organization, but rather community embeddedness only played a significant role when an individual was prepared to act on a turnover decision. In the military, action on turnover could take the form of extending an enlistment period, reenlisting for a predetermined amount of time, separating from the military, or accruing additional service obligation by accepting reassignment or promotion. It was when a declared intention actually generated a

required turnover behavior that community embeddedness appeared to be the most influential. A military member simply stating that he is planning to separate or is not planning on remaining does not result in the member being removed from the military. A military member may discuss intentions to depart without impacting his ability to remain employed by the military. The member only jeopardizes affiliation with the organization by taking deliberate and specific steps to depart. It is at this juncture between acknowledging, either publicly or privately, the intent to depart and engaging the administrative processes required for military separation that community embeddedness is believed to contribute. The military member does not necessarily risk losing the links, fit, and attributes of the community he values until making the actual separation decision.

Practice. This study's contribution to the practitioner directly pertains to giving managers more tools to possibly reduce voluntary turnover. Recognizing the value placed on a sense of belonging to the community, be it a community such as the military or a more traditional community associated with neighbors from various occupational backgrounds, managers have the opportunity to capitalize on the benefits of community embeddedness by encouraging involvement in community-sponsored activities, functions, and events.

From a position of corporate social responsibility, employers can contribute to the attractiveness of their local communities via philanthropic support of initiatives directed at increasing the quality and availability of public resources, the environment, and local and global economies. Such proactive behavior not only benefits the organization, the employees, the local community, and attracts likeminded employers to the area, but the benefits could spillover to increase employees' organizational and community

identification. Employee participation in events that are outwardly visible and beneficial to the community in which he lives may increase the number of links to the community. Increased identification with the community could translate to increased embeddedness, resulting in increased interest in remaining in the community and maintaining ties with such employers.

Conclusion

This research has demonstrated that community embeddedness appears to be a more valuable predictor of actual turnover than intent to turnover in populations with strong on-the-job and off-the-job communities and with workers with low discretionary mobility. Overall, the community embeddedness dimension of job embeddedness has the capacity to advance our understanding of turnover-related decisions by offering a new research direction, while still acknowledging historically and empirically significant affective variables such as job satisfaction, organizational commitment, and job alternatives and their effects on turnover.

Research focusing on further refining and defining the boundaries of community embeddedness is still necessary. To date, this construct has not provided consistent results across different demographic samples and settings, so further exploration of the types of settings where community embeddedness can inform the prediction of turnover is necessary. Further, community embeddedness has only been evaluated as a predictor of turnover. Given the correlations between community embeddedness and other historical variables of interest in management research such as organizational commitment, job satisfaction, and job search activity, studies evaluating community embeddedness as antecedents and outcomes of these constructs could also expand the

utility of existing theoretical models. Though still a relatively new construct, advancements in both the theoretical and the practical application of community embeddedness are possible.

REFERENCES

Abelson, M. A. (1987). Examination of avoidable and unavoidable turnover. *Journal of Applied Psychology, 72*(3), 382-386.

Air Force Personnel Center. (2001a). Air *Force Retention Information*. Retried January 1, 2002, from www.apfc.randolph.af.mil/AFRetention/ RetentionInformation /Pages /Intro.asp

Air Force Personnel Center. (2001b). *Active duty service commitment, June 2000.* (Air Force Instruction 36-2107). Randolph Air Force Base, TX: Author.

Air Force Personnel Center. (2002). *Air Force Retention Information*. Retrieved January 1, 2002, from www.apfc.randolph.af.mil/ AFRetention/ RetentionInformation/ Pages/Intro.asp

Air Force Personnel Center. (2003). *Promotion fitness examination (PFE) study guide, July 2001*. (Air Force Pamphlet 36-2241, Volume 1*).* Randolph Air Force Base, TX: Author.

Air Force Personnel Center. (2004). *Active Duty Demographics*. Retrieved February 1, 2004, from www.afpc.randolph.af.mil/demographics/

Allen, N. J., & Meyer, J. P. (1993). Organizational commitment: Evidence of career stage effects? *Journal of Business Research, 26*(1), 49-61.

Allen, T. D., Poteet, M. L., & Russell, J. E. A. (1998). Attitudes of managers who are more or less career plateaued. *The Career Development Quarterly, 47*(2), 159-172.

Allen, T. D., Russell, J. E. A., Poteet, M. L., & Dobbins, G. H. (1999). Learning and development factors related to perceptions of job content and hierarchical plateauing. *Journal of Organizational Behavior, 20*, 1113-1137.

Alreck, P. L., & Settle, R. B. (1995). *The survey research handbook* (2nd ed.). New York: Irwin/McGraw-Hill.

Atchison, T. J., & Lefferts, E. A. (1972). The prediction of turnover using Herzberg's job satisfaction technique. *Personnel Psychology, 25*, 53-64.

Bach, R. L., & Smith, J. (1977). Community satisfaction, expectations of moving and migration. *Demography, 14*, 147-168.

Bacharach, S. F. (1989). Organizational theories: Some criteria for evaluation. *Academy of Management Review, 14*(4), 496-515.

Bamundo, P. J., & Kopelman, R. E. (1980). The moderating effects of occupation, age, and urbanization on the relationship between job satisfaction and life satisfaction. *Journal of Vocational Behavior, 17*, 106-123.

Bardwick, J. M. (1986). The *plateauing trap: How to avoid it in your career*. New York: Amacom.

Bartol, K. M. (1983). Turnover among DP personnel: A causal analysis. *Communications of the ACM, 26*(10), 807-811.

Becker, H S. (1960). Notes on the concept of commitment. *American Journal of Sociology, 66*(1), 32-40.

Becker, H. S. (1964). *Human Capital: A theoretical and empirical analysis, with special reference to education*. New York: National Bureau of Economic Research.

Bedeian, A. G., Ferris, G. R., & Kacmar, K. M. (1992). Age, tenure, and job satisfaction: A tale of two perspectives. *Journal of Vocational Behavior, 40*, 33-48.

Bernays, J. (1910). *Auslease und Anpassung der Arbeiterschaft der Geschlossenen, Grossindustri, Schriften des Verein Fur Sozialpolitik*. Leipzig: Verlag von Dunder und Humblot.

Bleda, P. R., Gitter, G. A., & D'Agostino, R. B. (1977). Enlisted men's perceptions of leader attributes and satisfaction with military life. *Journal of Applied Psychology, 62*(1), 43-49.

Bluedorn, A. C. (1978). A taxonomy of turnover. *Academy of Management Review, 3*, 647-651.

Bluedorn, A. C. (1979). Structure, environment, and satisfaction: Toward a causal model of turnover from military organizations. *Journal of Political and Military Sociology, 7*, 181-207.

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

Brett, J. M., Stroh, L. K., & Reilly, A. H. (1992). Job Transfer. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 323-362). New York: Wiley.

Bretz, R. D., Boudreau, J. W., & Judge, T. A. (1994). Job search behavior of employed managers. *Personnel Psychology, 47*, 275-301.

Bryant, R., & Wilhite, A. (1990). Military experience and training effects on civilian wages. *Applied Economics, 22*, 69-81.

Bureau of National Affairs. (2001). *Focus on turnover***.** Retrieved January 1, 2002, from www.bna.com/press/2002/worksurv2.htm

Burke, R. J. (1989). Examining the career plateau: Some preliminary findings. *Psychological Reports, 65*, 295-306.

Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod correlation matrix. *Psychological Bulletin, 56*, 81-105.

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental design for research*. Boston, MA: Houghton Mifflin Company.

Carey, S. (1996, November 29). You think you have a long commute? Think again. *The Wall Street Journal*. Retrieved March 17, 2004, from http://wallstreetjournal.com

Cascio, W. F. (2000). *Costing human resources*. Cincinnati, OH: South-Western.

Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. *Journal of Applied Psychology, 85*(1), 65-74.

Chao, G. T. (1990). Exploration of the conceptualization and measurement of career plateau. A comparative analysis. *Journal of Management, 16*(1), 181-193.

Chay, Y. W., Aryee, S., & Chew, I. (1995). Career plateauing: Reactions and moderators among managerial and professional employees. *The International Journal of Human Resource Management, 6*(1), 61-78.

Cohen, A. (1995). An examination of the relationships between work commitment and nonwork domain. *Human Relations, 48*(3), 239-263.

Cohen, A. (1997). Nonwork influences on withdrawal cognitions: An empirical examination of an overlooked issue. *Human Relations, 50*(12), 1511-1536.

Cook, J. D., Hepworth, S. J., Wall, T. D,. & Warr, P. B. (1981). *The experience of work: A compendium and review of 249 measures and their uses*. New York: Academic Press.

Cotton, J. L., & Tuttle, J. M. (1986). Employee turnover: A meta-analysis and review with implications for research. *Academy of Management Review, 11*(1), 55-70.

Crabb, J. T. (1912). Scientific hiring. *Efficiency Society Transactions, 1*, 313-318.

Crampton, S. M., & Wagner, J. A., III. (1994). Percept-percept inflation in microorganizational research: An investigation of prevalence and effect. *Journal of Applied Psychology, 79*(1), 67-76.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297-334.

Cunningham, G. B., Fink, J. S., & Sagas, M. (2003). *Extensions and further examination of the job embeddedness construction*. Manuscript submitted for publication.

Dalton, D. R., Todor, W. D., & Krackhardt, D. M. (1982). Turnover overstated: The functional taxonomy. *Academy of Management Review, 7*(1), 117-123.

Defense Manpower Data Center Master File 2002 [Computer Program]. Arlington, VA: Defense Manpower Data Center [Producer and Distributor].

Department of Veterans Affairs. (2004). *Job opportunities*. Retrieved March 1, 2004, from www.va.gov

Dreher, G. F. (1982). The role of performance in the turnover process. *Academy of Management Journal, 25*(1), 137-147.

Dubin, R. (1991). Commuting patterns and firm decentralization. *Land Economics*, *67*(1),15-29.

Dunning, B. B., & Biderman, A. D. (1973). The case of military "retirement". *Industrial Gerontology, 17*, 18-37.

Eby, L. T., & Dematteo, J. S. (2000). When the type of move matters: employee outcomes under various relocation situations. *Journal of Organizational Behavior, 21*, 677-687.

Elsass, P. M., & Ralston, D. A. (1989). Individual responses to the stress of career plateauing. *Journal of Management, 15*(1), 35-47.

Evans, M. G., & Gilbert, E. (1984). Plateaued managers: Their need gratifications and their effort-performance expectations. *Journal of Management Studies, 21*(1), 99-108.

Farrell, D., & Rosbult, C. E. (1981). Exchange variables as predictors of job satisfaction, job commitment, and turnover: The impact of rewards, costs, alternatives, and investments. *Organizational Behavior and Human Performance, 28*, 78-95.

Feldman, D. C., & Bolino, M. C. (1998). Moving on out: When are employees willing to follow their organizations during corporate relocation? *Journal of Organizational Behavior, 19*(3), 275-288.

Feldman, D. C., & Weitz, B. A. (1988). Career plateaus reconsidered. *Journal of Management, 14*(1), 69-80.

Ference, T. P., Stoner, J. A. F., & Warren, E. K. (1977). Managing the career plateau. *Academy of Management Review, 2*, 602-612.

Fink, J. S., Cunningham, G. B., & Sagas, M. (2003). Job embeddedness: Effects on coaches' turnover intentions. *Research Quarterly for Exercise and Sport, 74*(1), A87-87 Supplement.

Fink, A., & Kosecoff, J. (1998). *How to conduct surveys: A step-by-step guide*. Thousand Oaks: Sage University Press.

Fisher, C. D., & Shaw, J. B. (1994). Relocation attitudes and adjustment: A longitudinal study. *Journal of Organizational Behavior, 15*(3), 209-224.

Fishbein, M., & Azjen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fiske, D. W. (1982). Convergent-discriminant validation in measurements and research strategies. In D. Brinberg & L. Kidder (Eds.), *New directions for methodology of social and behavioral science: Forms of validity in research* (No. 12, 77-92). San Francisco: Jossey-Bass.

Fried, M. (1984). The structure and significance of community satisfaction. *Population and Environment, 7*(2), 61-86.

Frieze, E., & Vivero, R. (2004, January 1). Building an Army of One. *Harvard Political Review*. Retrieved April 13, 2004, from http://www.hpronline.org/news

Goudy, W. J. (1982). Further consideration of indicators of community attachment. *Social Indicators Research, 11*(2), 181-192.

Gould, S., & Penley, L. E. (1985). A study of the correlates of the willingness to relocate. *Academy of Management Journal, 28*(2), 472-478.

Gouldner, A. W. (1957). Toward an analysis of latent social roles. *Administrative Science Quarterly, 2*(3), 281-306.

Gregersen, H. B., & Black, J. S. (1990). A multifaceted approach to expatriate retention in international assignments. *Group & Organization Management, 15*(4), 461-485.

Griffeth, R. W., & Hom, P. W. (2001). *Retaining valued employees*. Thousand Oaks, CA: Sage University Press.

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 next millennium. *Journal of Management, 26*(3), 463-488. 2000

Grusky, O. P. (1966). Career mobility and organizational commitment. *Administrative Science Quarterly, 10*, 488-503.

Hamilton, C. J., & Datko, L. M. (2000). *Report on career decisions in the Air Force: Results of the 2000 USAF Career and New Directions Survey*. Retrieved August 1, 2003, from www.afpc.randolph.af.mil/AFRetention/Surveys.htm

Hanisch, K. A., Hulin, C. L., & Roznowski, M. (1998). The importance of individuals' repertoires of behaviors: The scientific appropriateness of studying multiple behaviors and general attitudes. *Journal of Organizational Behavior, 19*(5), 463-480.

Hickson, D. J., Hinings, C. R., Lee, C. A., Schneck, R. E., & Pennings, J. M. (1971). A strategic contingencies' theory of intraorganizational power. *Administrative Science Quarterly, 16*, 216-229.

Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management, 21*(5), 967-988.

Hinkle, D. E., Wiersma, W., & Jurs, S. G. (1982). *Basic behavioral statistics*. Boston: Houghton-Mifflin.

Holtom, B. C., & O'Neill, B. S. (2004). Job embeddedness: A theoretical foundation for developing a comprehensive nurse retention plan. *Journal of Nursing Administration, 34*(5), 216-227.

Hom, P. W., & Griffeth, R. W. (1995). *Employee Turnover*. Cincinnati, OH: South-Western Publishing.

Hom, P. W., Katerberg, R., & Hulin, C. L. (1979). Comparative examination of three approaches to the prediction of turnover. *Journal of Applied Psychology, 64*(3), 280-290.

Hosmer, D. W., & Lemeshow, S. (1989). *Applied logistic regression* (2nd ed.). New York: John Wiley & Sons, Inc.

Hughey, J. B., & Bardo, J. W. (1987). Social psychological dimensions of community satisfaction and quality of life: Some obtained relations. *Psychological Reports, 61*, 239-246.

Iverson, R. D., & Maguire, C. (2000). The relationship between job and life satisfaction: Evidence from a remote mining community. *Human Relations, 53*(6), 807-839.

Iverson, R. D., & Roy, P. (1994). A causal model of behavioral commitment: Evidence from a study of Australia blue-collar employees. *Journal of Management, 20*(1), 15-41.

Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4th ed.). Fort Worth, TX: Harcourt College Publishers.

Kiecolt, K J., & Nathan, L E. (1985). *Secondary analysis of survey data*. Beverly Hills, CA: Sage University Press.

Kilpatrick, A. C., & Kilpatrick, E. G. (1979). Retirement from the military: Problems of adjustment. *Social Casework, 60,* 282-288.

Kim, S., Price, J. L., Mueller, C. W., & Watson, T. W. (1996). The determinants of career intent among physicians at a U.S. Air Force Hospital. *Human Relations, 49*(7), 947-976.

Kirchmeyer, C. (1992). Nonwork participation and attitudes. A test of scarcity vs. expansion models of personal resources. *Human Relations, 45*(8), 775-795.

Kirschenbaum, A., & Mano-Negrin, R. (1999). Underlying labor market dimensions of "opportunities": The case of employee turnover. *Human Relations, 52*(10), 1233-253.

Kopelman, R. E., Rovenpor, J. L., & Milsap, R. E. (1992). Rational 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*(3), 269-287.

Ladewig, H., & McCann, G. C. (1980). Community satisfaction: Theory and measurement. *Rural Sociological Review, 45*(10), 110-131.

Landau, J. C., Shamir, B., & Arthur, M. B. (1992). Predictors of willingness to relocate for managerial and professional employees. *Journal of Organizational Behavior, 13*(7), 667-680.

Lane, I. M., Mathews, R. C., & Preshold, P. H. (1988). Determinants of nurses' intentions to leave their profession. *Journal of Organizational Behavior, 9*(4), 367-372.

Lansing, J. B., & Mueller, E. (1967). *The geographic mobility of labor*. Ann Arbor, MI: Institute of Social Research.

Lawrence, B. (1984). Age grading: The implicit organizational timeline. *Journal of Occupational Behaviour, 5*, 23-35.

Lee, T. W., & Mitchell, T. R. (1994). An alternative approach: The unfolding model of employee turnover. *Academy of Management Journal, 19*(1), 51-89.

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.

Leeth, B. (2003). *Pilot mentor network: The best and worst things about being a pilot.* Available from http://www.pilotmentornetwork.com/leethcolumn/7-3-03-commuting.html

Lewin, K. (1951). *Field theory in social science*. New York: Harper.

Litwin, M. S. (1995). *How to measure survey reliability and validity*. Thousand Oaks, CA: Sage University Press.

Louis, M. R. (1980). Career transitions: Varieties and commonalities. *Academy of Management Review, 5*(3), 329-340.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7*(1), 83-104.

Maertz, C. P., & Campion, M. A. (1998). 25 years of voluntary turnover research: A review and critique. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology,* (Vol. 13, pp. 49-81).

Magnum, S. L., & Ball, D. E. (1989). The transferability of military-provided occupational training in the post-draft era. *Industrial and Labor Relations Review, 42*(2), 230-245.

Marans, R. W., & Rodgers, W. (1975). Toward an understanding of community satisfaction. In A. H. Hawley and V. P. Rock (Eds.), *Metropolitan America in contemporary perspective (*pp. 299-352). New York: Halstead Press.

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

Marsh, R. M., & Mannari, H. (1977). Organizational commitment and turnover: A prediction study. *Administrative Science Quarterly, 22*(1), 57-75.

Martin, T. N., Jr. (1979). A contextual model of employee turnover intentions. *Academy of Management Journal, 22*(2), 313-324.

McNeil, J. S., Lecca, P. J., & Wright, R. (183). *Military retirement: Social, economic, and mental health dilemmas*. Totowa, NJ: Rowman & Allanheld.

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.

Meyer, J. P., & Allen, N. J. (1991). The three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61-89.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*(1), 20-52.

Mitchell, T. R., Holtom, B. C., and Lee, T. W. (2001). How to keep your best employees: Developing an effective retention policy. *Academy 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 relationships between job satisfaction and employee turnover. *Journal of Applied Psychology, 62*(2), 237-240.

Mobley, W. H. (1982). *Employee Turnover: Causes, consequences, and controls*. Reading, MA: Addison-Wesley.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin, 86*(3), 493-522.

Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors to hospital employee turnover. *Journal of Applied Psychology, 63*, 408-414.

Motowidlo, S. J., & Lawton, G. W. (1984). Affective and cognitive factors in soldiers' reenlistment decisions. *Journal of Applied Psychology, 69*(1), 157-166.

Mowday, R. T., Porter, L. W., & Steers, R.M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.

Neapolitan, J. (1980). Occupational change in mid-career: An exploratory investigation. *Journal of Vocational Behavior, 16*(2), 212-225.

Near, J. P. (1980). The career plateau: Causes and effects. *Business Horizons, 23*(5), 53-57.

Near, J. P. (1984). Reactions to the career plateau. *Business Horizons, 27*(4), 75-79.

Near, J. P. (1985). A discriminant analysis of plateaued versus nonplateaued managers. *Journal of Vocational Behavior, 26*(2), 177-188.

Near, J. P., Rice, R. W., & Hunt, R. G. (1980). Relationship between work and nonwork domains: A review of empirical research. *Academy of Management Review, 5*(3), 415-429.

Neter, J., Kutner, M. H., Nachtsheim, C. J., & Wasserman, W. (1996). *Applied linear statistical models*, (4th ed.). Boston: McGraw-Hill.

1999 Survey of Active Duty Personnel [CD-ROM]. Arlington, VA: Defense Manpower Data Center [Producer and Distributor].

Noe, R. A., & Barber, A. E. (1993). Willingness to accept mobility opportunities: Destination makes a difference. *Journal of Organizational Behavior, 14*(2), 159-175.
Nunnally, J. C. (1978). *Pscyhometric theory* (2nd ed.). New York: McGraw-Hill.

Pinder, C. C., & Schroeder, K. G. (1987). Time to proficiency following job transfers. *Academy of Management, 30*(2), 336-353.

Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.

Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management, 12*(4), 531-545.

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

Powell, D. M., & Meyer, J. P. (2004). Side-bet theory and the three-component model of organizational commitment. *Journal of Vocational Behavior,* 65 (1), 157-177.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717-731.

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

Price, J. L. (2001). Reflections on the determinants of voluntary turnover. *International Journal of Manpower, 22*(7), 600-624.

Price, J. L., & Kim, S. W. (1993). The relationship between demographic variables and intent to stay in the military: Medical personnel in a U.S. Air Force hospital. *Armed Forces & Society, 20*(1), 125-144.

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

Price, J. L., & Mueller, C. W., (1986). *Absenteeism and turnover of hospital employees*. Greenwich, CT: JAI Press.

RAND Research Brief. (1998). *Assessing quality of life programs* (RB-7518). Arlington, VA: RAND.

Randall, D. M. (1988). Multiple roles and organizational commitment. *Journal of Organizational Behavior, 9*(4), 309-317.

Riordan, C. M., Griffith, R. W., & Weatherly, E. W. (2003). Age and work-related outcomes: The moderating effects of status characteristics. *Journal of Applied Social Psychology, 33*(1), 37-57.

Robertson, D. (1966). *Career-related values of designated aviators and naval flight officers*. (Research Report Number, SRR 67-6, AD-643440), San Diego, CA: United States Navy Personnel Research Activity.

Sagas, M., Cunningham, G. B., & Fink, J. S. (2003). *Downfalls of embeddedness: Examining the effects of job embeddedness on head coaching intentions among women coaches*. Manuscript submitted for publication.

Slocum, J. W., Jr., Cron, W. L., Hansen, R. W., & Rawlings, S. (1985). Business strategy and the management of plateaued employees. *Academy of Management Journal, 28*(1), 133-154.

Sobel, M. E. (1982). Asymptotic intervals for indirect effects in structural equation models. In S. Leinhart (Ed.), *Sociological methodology 1982* (p. 290-312). San Francisco: Jossey-Bass.

Speare, A. (1974). Residential satisfaction as an intervening variable in residential mobility. *Demography, 11*, 173-188.

Spector, P.E. (1997). *Job Satisfaction.* Thousand Oaks, CA: Sage Publications, Inc.

Spiegel, P. E., & Shultz, K. S. (2003). The influence of preretirement planning on transferability of skills on naval officers' retirement satisfaction and adjustment. *Military Psychology, 15*(4), 285-307.

Steel, R. P. (1996). Labor market dimensions as predictors of the reenlistment decisions of military personnel. *Journal of Applied Psychology, 81*(4), 421-428.

Steel, R. P. (2002). Turnover theory at the empirical interface: Problems of fit and function. *Academy of Management Review, 27*(3), 346-360.

Steel, R. P., & Ovalle, N. K. (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. (1977). Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly, 22*(1), 46-56.

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

Stoner, J. A. F., Ference, T. P., Warren, E. K., & Christensen, K. K. (1980). *Managerial career plateaus*. New York, NY: Center for Research on Career Development.

Swanson, L. E., Luloff, A. E., & Warland, R. H. (1979). Factors influencing willingness to move: An examination of nonmetropolitan residents. *Rural Sociology, 44*, 719-736.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Boston, MA: Allyn and Bacon.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*, 259-293.

Tremblay, M., & Roger, A. (1993). Individual, familial, and organizational determinants of career plateau. *Group & Organization Management, 18*(4), 411-435.

Tremblay, M., Roger, A., & Toulouse, J.M. (1995). Career plateau and work attitudes: An empirical study of managers. *Human Relations, 48*(3), 221-237.

Turban, D. B., Campion, J. E., & Eyring, A. R. (1992). Factors relating to relocation decisions of research and development employees. *Journal of Vocational Behavior, 41*(2), 183-199.

2002 Active Duty Retention Status [CD-ROM]. Arlington, VA: Defense Manpower Data Center [Producer and Distributor].

U.S. Department of Defense. (1978). *America's volunteers: A report on the All-volunteer Armed Forces, Washington, D.C.*: Office of the Assistant Secretary of Defense, Manpower. Washington, DC: U.S. Government Press.

U.S. Department of Defense. (2001). *Quadrennial Defense Review Report. 30 Sept 2001*. Washington, D.C.: Office of the Assistance Secretary of Defense, Manpower. Washington, DC: U.S. Government Office.

U.S. Department of Defense. (2002). *Department of Defense: Directorate for Information and Operations*. Retrieved January 1, 2002, from www.dior.whs.mil

U.S. Department of Defense. (2004). *Department of Defense; Directorate for Information and Operations*. Retrieved February 10, 2004, from http://web1.whs.osd.mil/DIORHOME.HTM

U.S. Government Accounting Office. (2001). *GAO-01-841*. Military Personnel. Washington, DC: U.S. Government Office.

Veiga, J. F. (1981). Plateaued vs. nonplateaued managers: Career patterns, attitudes and path potential. *Academy of Management Journal, 24*(3), 566-578.

Veiga, J. F. (1983). Mobility influences during managerial career stages. *Academy of Management Journal, 26*(1), 64-85.

Vogt, W. P. (2000). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences* (2nd ed.). London: Sage University Press.
Weber, M. (1947). *The theory of social and economic organization* (A.M. Henderson and Talcott Parsons, Trans.). New York: Free Press.

Webster's ninth new collegiate dictionary. (1986). Springfield, MA: Merriam-Webster, Inc.

West, M. S., & Hom, P. W. (2003, August). *How job embeddedness deters Mexican workers from quitting maquila factories*. Paper presented at the annual meeting of the Academy of Management, Seattle, WA.

Whorton, J. W., & Moore, A. B. (1984). Summative scales for measuring community satisfaction. *Social Indicators Research, 15*, 297-307.

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

Witt, L. A. (1993). Reactions to work assignment as predictors of organizational commitment: The moderating effect of occupational identification. *Journal of Business Research, 26*(1), 17-30.

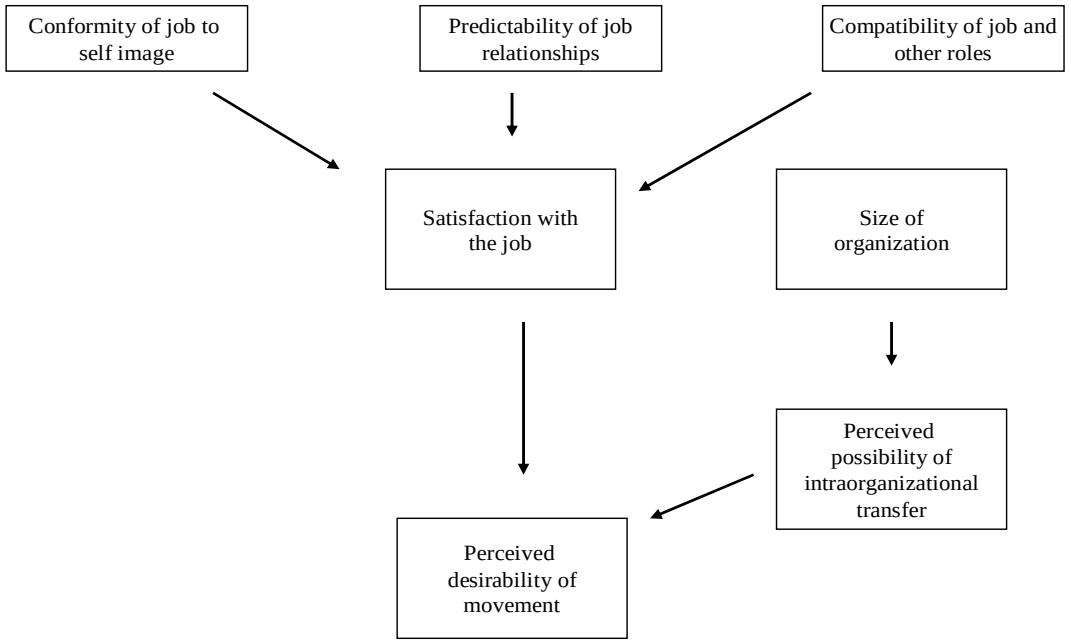
Wright, L. C., Williams, K., & Willis, E. J. (2000). *1999 Survey of Active Duty Personnel: Administration, datasets, and codebook* (Report No. 2000-005). Arlington, VA: Defense Manpower Data Center.

Youngblood, S. A., Mobley, W. H., & Meglino, B. M. (1983). A longitudinal analysis of the turnover process. *Journal of Applied Psychology, 68*(3), 507-516.

Zedeck, S. (1971). Problems with the use of “moderator” variables. *Journal of Applied Psychology, 76,* 295-310.

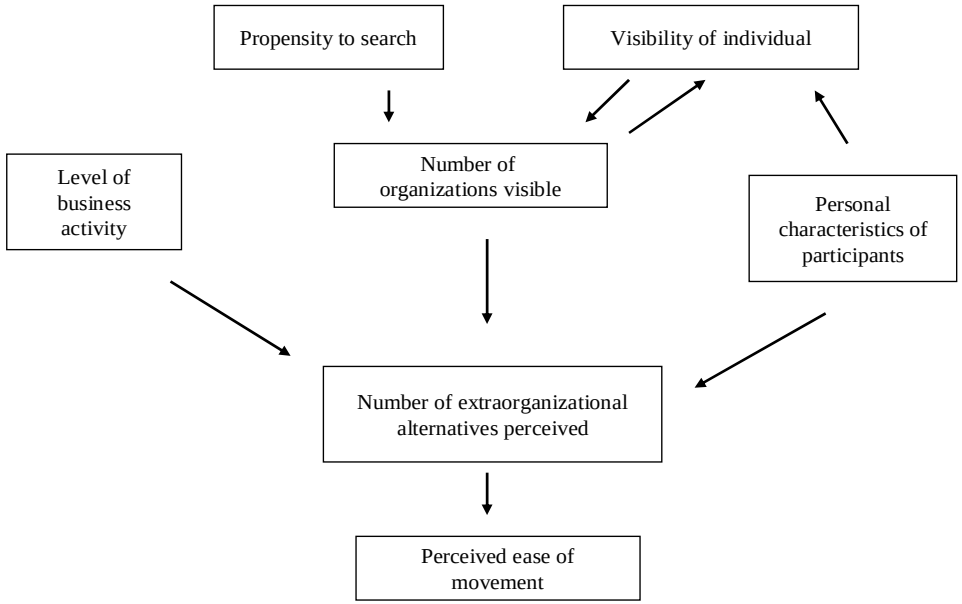
Zelsman, M. (2000). Charitable merry-go-round. *InfoWorld*, *22*(51), 39-40.

Appendix A, Figure A1: Major Factors affecting Perceived Desirability of Movement



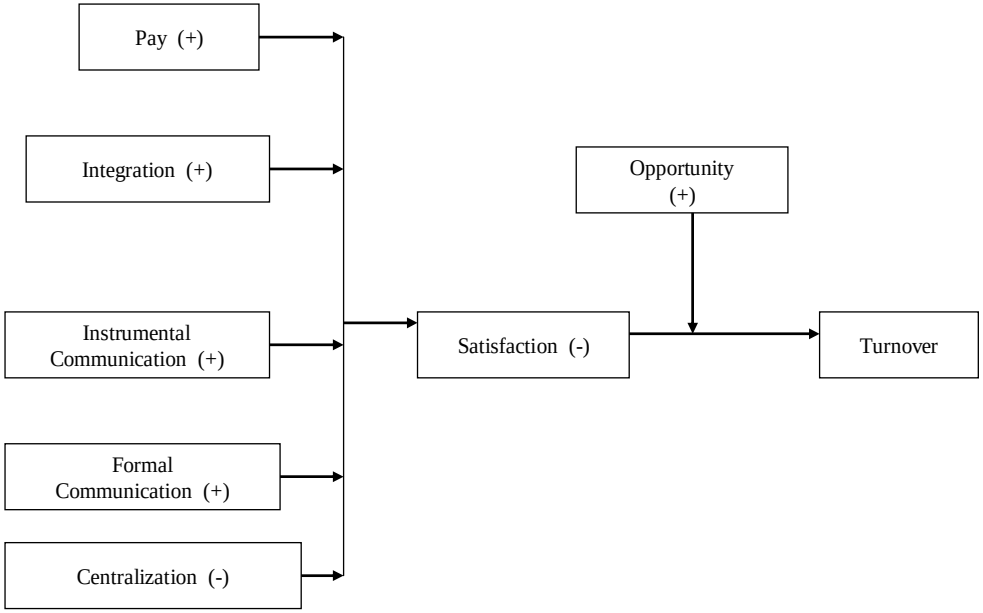
Source: March, J., & Simon, H. (1958). *Organizations*. New York: Wiley.

Appendix A, Figure A2: Major Factors affecting Perceived Ease of Movement



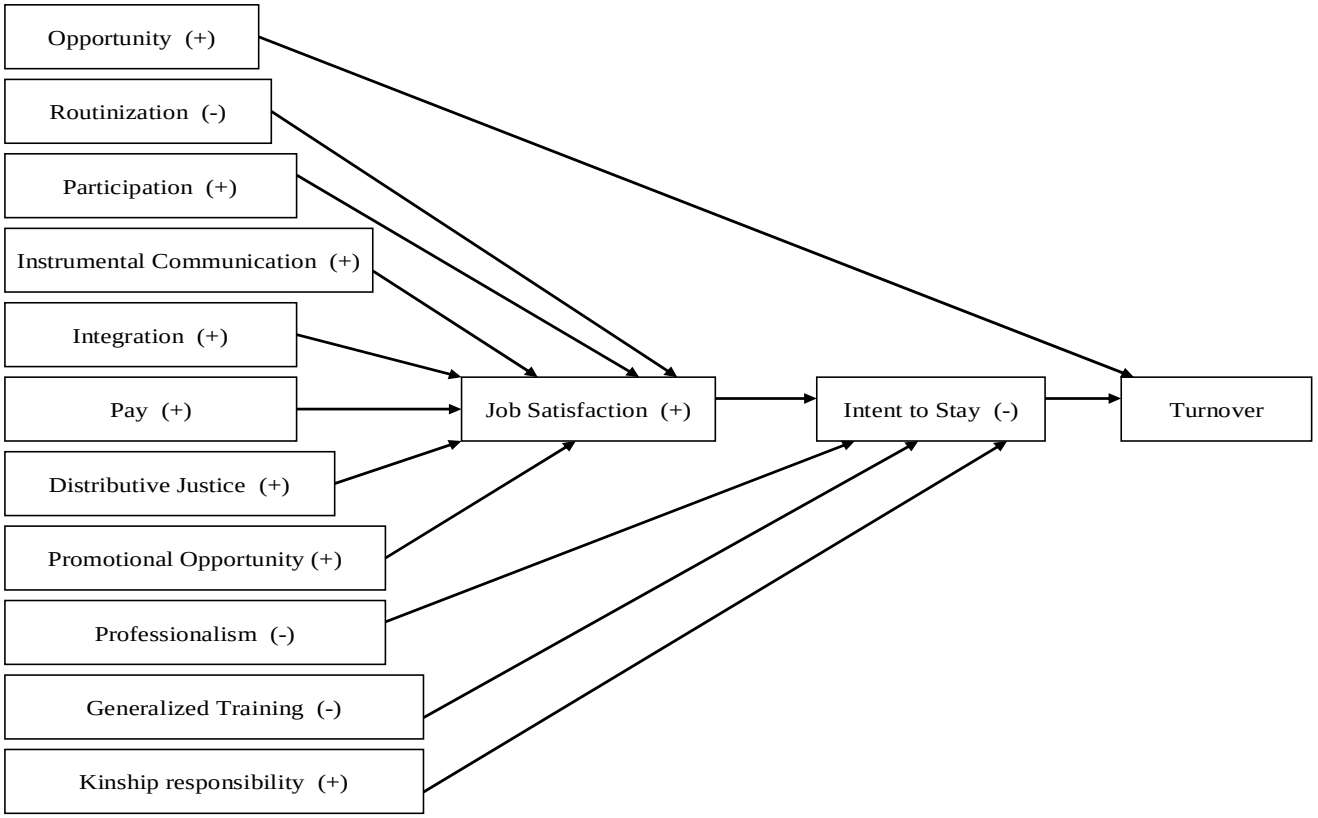
Source: March, J., & Simon, H. (1958). *Organizations*. New York: Wiley.

Appendix A, Figure A3: Relationships between the Determinants, Intervening Variables, and Turnover



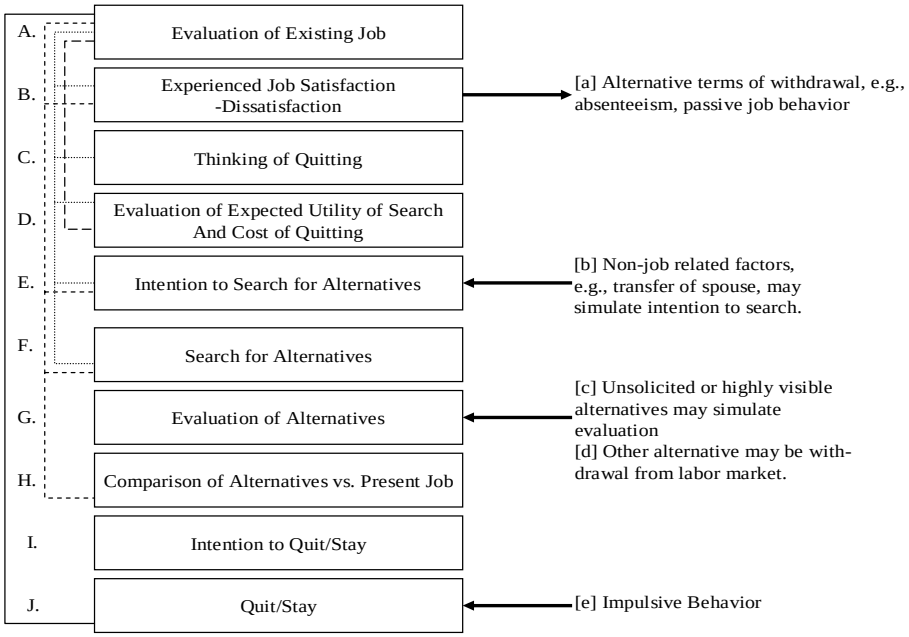
Source: Price, J. L. (1977). *The study of turnover*. Ames, IA: Iowa State University Press.

Appendix A, Figure A4: Revised Causal Model



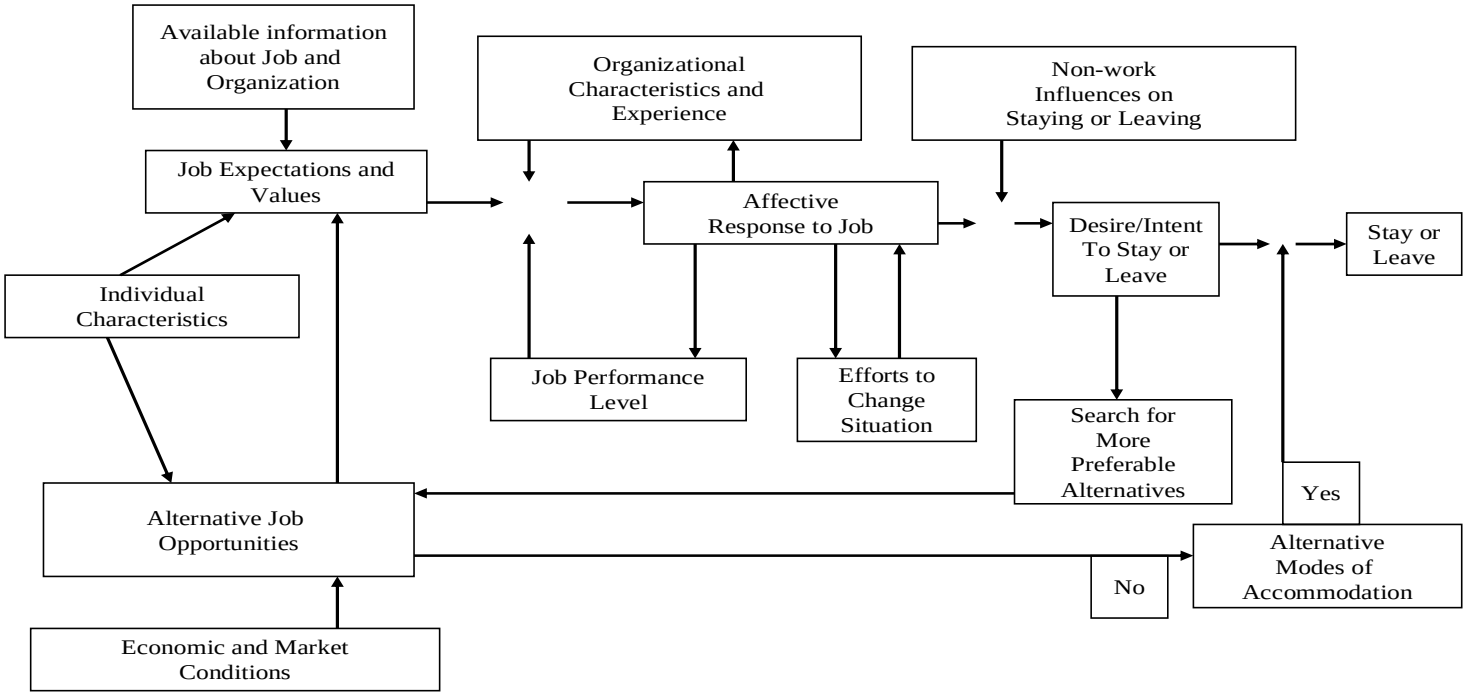
Source: Price, J. P., & Mueller, C. W. (1981). A causal model of turnover for nurses. *Academy of Management Journal, 24*(3), 543-565.

Appendix A, Figure A5: Intermediate Linkages Model



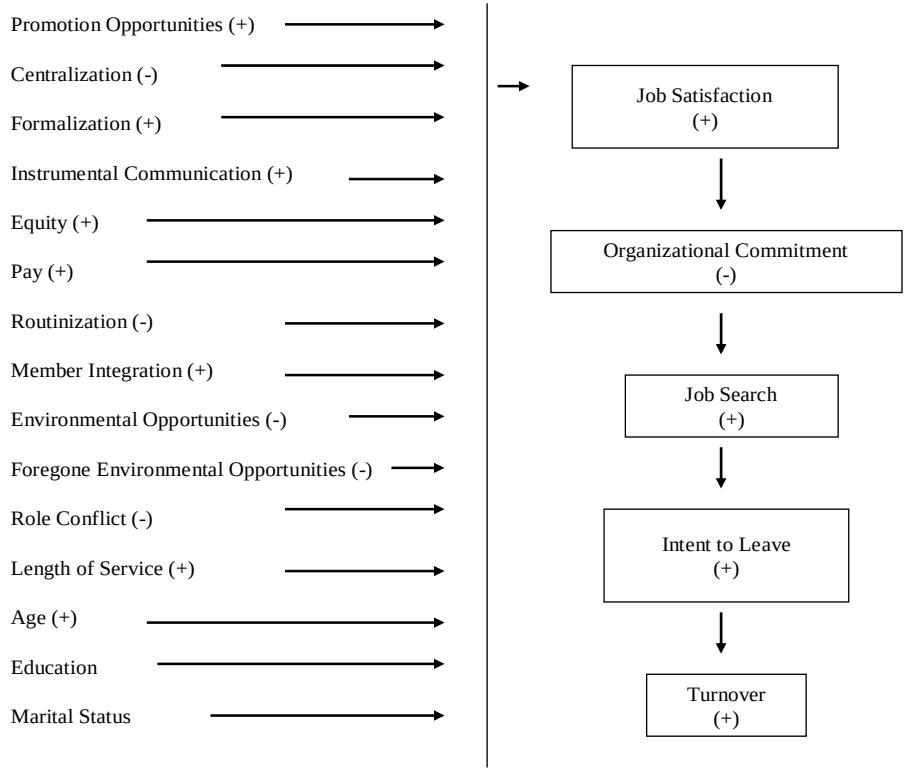
Source: Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62,* 238.

Appendix A, Figure A6: Multi-Route Model



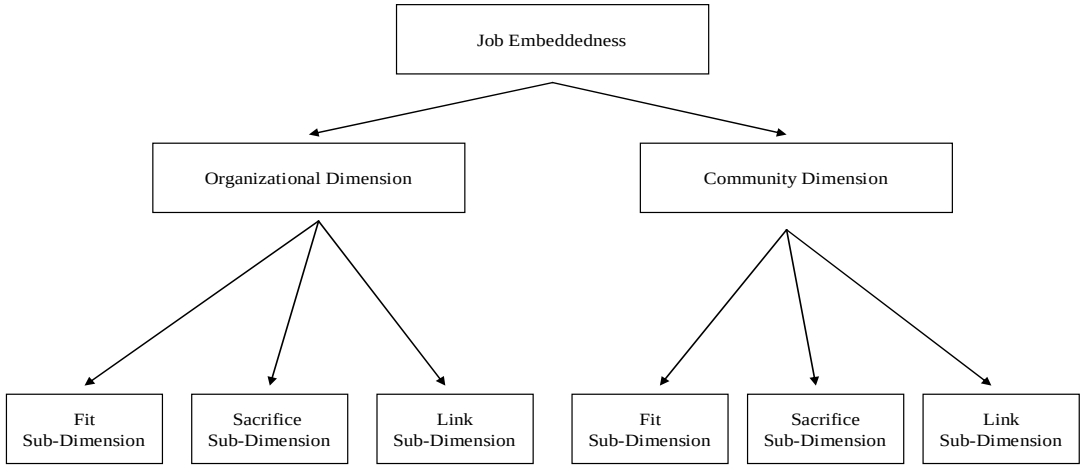
Source: Steers, R. M., & Mowday, R. T. (1981). Employee turnover and post decision accommodation processes. *Research in Organizational Behavior, 3,* 235-281.

Appendix A, Figure A7: Unified Model of Turnover



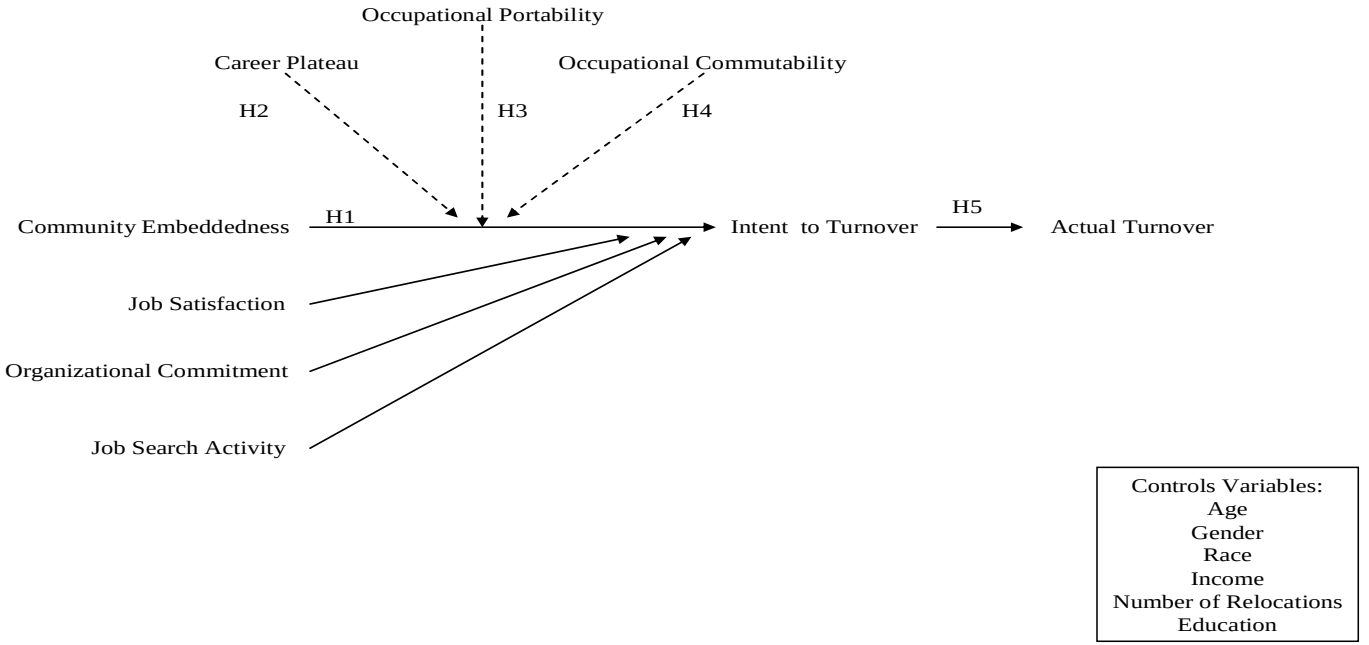
Source: Bluedorn, A. C. (1982). A unified model of turnover from organizations. *Human Relations, 35*(2), 135-153.

Appendix A, Figure A8: Job Embeddedness Construct: Matrix of Sub-dimensions



Source: 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), 1101-1121.

Appendix A, Figure A9: Hypothesized Model of Community Embeddedness and Turnover



Appendix B, Table B1: Job Embeddedness Scale Items

Factor 1: Fit to Community (α = .78, .79)
a. I really love the place where I live.

b. The weather where I live is suitable for me.

c. This community is a good match for me.

d. I think of the community where I live as home.

e. The area where I live offers the leisure activities that I like.

f. I like the family-oriented environment of my community.*

Factor 2: Fit to Organization (α = .75, .86)
a. I like the members of my work group.

b. My coworkers are similar to me.

c. My job utilizes my skills and talents well.

d. I feel like I am a good match for this company.

e. I fit with the company's culture.

f. I like the authority and responsibility I have at this company.

g. I feel personally valued at work.

h. I like my work schedule.

i. My values are compatible with the organization's values.**

k. I feel good about my professional growth and development.**

l. I can reach my professional goals while working for this organization.**

Factor 3: Links to Community (α = .77, .50)
a. Are you currently married?

b. If you are married, does your spouse work outside the home?

c. Do you own the home you live in?

d. My family roots are in this community.**

e. How many family members live nearby?**

f. How many of your close friends live nearby?**

Factor 4: Links to Organization (α = .65, .62)
a. How long have you been in your present position?

b. How long have you worked for this company?

c. How long have you worked in the industry?

d. How many coworkers do you interact with regularly?

e. How many coworkers are highly dependent on you?

f. How many work teams are you on?

g. How many work committees are you on?

Factor 5: Community-related Sacrifice (α = .61, .59)
a. Leaving this community would be very hard.

b. People respect me a lot in my community.

c. My neighborhood is safe.

Factor 6: Organization-related Sacrifice (α = .82, .82)
a. I have a lot of freedom on this job to decide how to pursue my goals.

b. The perks on this job are outstanding.

c. I feel that people at work respect me a great deal.

d. I would sacrifice a lot if I left this job.

e. My promotional opportunities are excellent here.

f. I am well compensated for my performance.

g. The benefits are good on this job.

h. The health-care benefits provided by this organization are excellent.

i. The retirement benefits provided by this organization are excellent.

j. The prospects for continuing employment with this company are excellent.

*Not included in Mitchell and Lee (2001) instrument; ** Only used with Grocery sample in Mitchell et al. (2001).; Alpha ordering is 1) grocery and 2) hospital.

Source: 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.

Appendix B, Table B2: Community Sub-Dimensions from 1999 SADP and Mitchell et al. (2001)

Item	1999 SADP Sub-Dimension / Item Description	Mitchell et al. (2001) Sub-Dimension / Item Description
	Community Satisfaction (α =.77)	***Community Sacrifice (α = .61, .59)****
9a	Satisfaction with cost of residence	1. Leaving this community would be very hard.
9b	Satisfaction with condition and quality of residence	2. People respect me a lot in my community.
9c	Satisfaction with amount of livable space in residence	3. My neighborhood is safe.
9d	Satisfaction with privacy of residence	
9e	Satisfaction with quality of housing in area where you live.	***Community Fit (α = .78, .79)***
9f	Satisfaction with safety of the area where you live	1. I really love the place where I live.
9g	Satisfaction with distance to workplace	2. The weather where I live is suitable for me.
9h	Satisfaction with distance to shopping area	3. This community is a good match for me.
9i	Satisfaction with distance to recreation areas	4. I think of the community where I live as home.
50b	The military community is there for me when I need it.	5. The area where I live offers the leisure activities I like.
50d	The members of the military community sometimes turn to me for help or support	6. I like the family-oriented environment of my community
	Community Link (α =.65)	***Community Link (α = .77, .50)***
54	What is your marital status?	1. Are you currently married?
55	Married and spouse employed ?	2. If you are married, does your spouse work outside the home?
60	Number of Dependents in household?	3. Do you own the home you live in?
52	On average during a month, how often do you use the following on-base/off-base programs, facilities, or services (13 items)?	4. My family roots are in the community.**
		5. How many family members live nearby?**
		6. How many of your close friends live nearby?**
	Community Embeddedness (α =.69)***	***Community Dimension (not reported)***

*Alpha ordering is grocery, hospital for Mitchell et al., (2001) items; ** Used only with grocery sample in Mitchell et al. (2001); *** Standardized scores used as sub-dimensions use different response formats

Appendix B, Table B3: Measures based on 1999 SADP Items

I. Intent to Turnover (2 items) (α = .83)

Item 32. Suppose that you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?

Item 35. If you could stay on active duty as long as you want, how likely is it that you would choose to serve in the military for at least 20 years?

Response format: "very likely" (1) to "very unlikely" (5) for both items

II. Job Satisfaction (10 items) (α = .79)

Item 51. Now, taking all things together, how satisfied are you with the military way of life?

Item 39. How satisfied are you with the following?

a. Basic pay

i. Retirement pay you would get

j. Cost of living adjustments (COLA) to retirement

k. Other retirement benefits such as medical care and use of base services

l. Pace of your promotions

m. Chance for future advancement

u. Your personal workload

z. Amount of enjoyment from your job

bb. Job Security

Response format: "very satisfied" (1) to "very dissatisfied" (5) for all items

III. Organizational Commitment (6 items) (α = .80)

Item 50. How much do you agree or disagree with the following statements?

b. I talk up may Service to my friends as a great organization to be a part of.

c. There is not much to be gained for me by sticking with a military career. (reverse)

d. I am proud to be a member of my Service.

e. I find that my values and the values of my Service are very similar.

f. Being a member of my Service inspires me to do the best job I can.

g. I would turn down another job for more pay in order to remain in my Service.

Response format: "strongly agree" (1) to "strongly disagree" (5)

IV. Job Search Activity (10 items)

Item 48. During the past 6 months, have you done any of the following to explore the possibility of <u>leaving</u> the military (Mark all that apply).

a. Thought seriously about leaving the military

b. Wondered what life might be like as a civilian

c. Discussed leaving and/or civilian opportunities with family members or friends

d. Talked about leaving with my immediate supervisor

e. Gathered information on education programs or colleges

f. Gathered information about civilian job options (e.g., read newspaper ads, attended a job fair)

g. Attended a program that helps people prepare for civilian employment

h. Prepared a resume

i. Applied for a job

j. Interviewed for a job

V. Career Plateauing (4 items)

Item 33. If you stay on active duty, when would you expect your next promotion to a higher grade?

a.	less than 3 months	items a-c, recoded to 1
b.	3 months to less than 7 months	item d, recoded to 2
c.	7 months to less than 1 year	item 3, recoded to 3
d.	1 year to less than 2 years	item f-g, recoded to 4
e.	2 years or more	
f.	Does not apply, I do not expect a promotion	
g.	Does not apply, I have no opportunities for promotion	

VI. Occupational Portability (4 items) (α = .83)

Item 45. How much do you agree or disagree with the following statements?

e. Very little of my experience and training can be directly transferred to a civilian job. (reverse scored)

f. It would be easy for me to get a good civilian job if I left the military now.

g. I have a pretty good idea of the kinds of jobs I could get as a civilian.

h. I have a pretty good idea of what pay I could get as a civilian.

Response format: "strongly agree" (1) to "strongly disagree" (5)

VII. Occupational Commutability Areas (Source: DMDC master file)

E0	Infantry, Gun Crews, and Seamanship specialties	O1	General officers and Executives
E1	Electronic Equipment Repairers	O2	Tactical operations officers (pilots)
E2	Communications & Intelligence Specialties	O3	Intelligence officers
E3	Health Care Specialties	O4	Engineering & Maintenance
E4	Other Technical and Allied Specialties	O5	Scientists & Professionals
E5	Functional Support and Administrative Specialties	O6	Health care officers
E6	Electronic/Mechanical Equipment Repairers	O7	Administrators
E7	Crafts workers	O8	Supply, Procurement, & Allied officers
E8	Service & Supply Handlers	O9	Non-occupational
E9	Non-occupational		

VIII. Community Link: Frequency of use of On-Base and Off-Base Facilities (13 items)

Item 52. On average during a month, how often do you use the following on base programs, facilities, or services and civilian programs, facilities, or services? For each of the 13 items, mark one response for on base and one response for off base.

1. Fitness center/gym
2. Library services
3. Outdoor recreation areas (e.g., campgrounds, picnic areas, beach, stables)
4. Outdoor recreation equipment rental
5. Recreation center (e.g., recreation room, music/TV, game room/amusement machines)
6. Golf course
7. Bowling center
8. Recreation lodging/hotel or resorts
9. Clubs/dance/night club
10. Commissary/supermarket/grocery store
11. Main exchange/department store
12. Social activities for service members (e.g., trips, special events, tournaments)
13. Auto, crafts, and hobby shops

Appendix B, Table B4: Multitrait-Multimethod Correlation Matrix from Instrument Validation Surveys

		Method 1 (Measures from 1999 SADP)						**Method 2 (Measures from Mitchell et al., 2001)**					
		A_1	B_1	C_1	D_1	E_1	F_1	A_2	Bb_2	C_2	D_2	E_2	F_2
Traits	A_1	(.76)											
	B_1	.89**	(.80)										
Method 1	C_1	.34**	---	(.73)									
	D_1	.38**	.37**	---	(.81)								
	E_1	.31*	.28*	---	.49**	(.70)							
	F_1	---	---	---	-.37**	-.32**	(.70)						
	A_2	**.65****	.56**	.27*	.28*	.31*	---	(.72)					
Method 2	Bb_2	.49**	**.56****	---	---	.29*	---	.87**	(.83)				
	C_2	.47**	---	**.73****	---	---	---	.54**	---	(.49)			
	D_2	.37**	.44**	---	**.67****	.45**	-.29*	.28*	.27*	---	(.92)		
	E_2	---	---	---	---	**.63****	-.34**	---	---	---	---	(.84)	
	F_2	-.36**	-.33**	---	-.26*	-.26*	**.82****	-.27*	---	---	-.25*	---	(.71)

Note: The validity diagonal is the set of values that are bolded and underlined. The reliability diagonals are the two sets of values in parentheses. Each heterotrait-monomethod triangle is enclosed by a solid line. Each heterotrait-heteromethod triangle is enclosed by a broken line.

*Correlation is significant at the .05 level (2-tailed); ** Correlation is significant at the .01 level (2-tailed)
Non-significant correlations are indicated by "----"
A_1 – Community Embeddedness
B_1 – Community Satisfaction
C_1 – Community Link
D_1 – Job Satisfaction
E_1 – Organizational Commitment
F_1 – Job Search Activity
A_2 – Community Embeddedness
Bb_2 – Dimension comprised of Community Sacrifice and Community Fit
C_2 – Community Link
D_1 – Job Satisfaction
E_2 – Organizational Commitment
F_2 – Job Search

Appendix B, Table B5: Intercorrelations of Control, Analysis, and Moderator Variables

Item	N	M	SD	Scale Range	1	2	3	4	5	6	7	8	9	10	11
1	562	27.2	4.5	19-49	1										
2	562	1.3	.45	1-2	---	1									
3	562	1.8	.42	1-2	.12**	---	1								
4	549	4.1	2.3	1-11	.36**	.10*	.12**	1							
5	562	2.4	1.3	1-10	.30**	-.10*	---	.14**	1						
6	561	3.8	1.7	1-6	.61**	---	.12**	.47**	.13**	1					
7	538	2.8	.63	1-5	.10*	---	---	.11*	---	.20**	1				
8	555	3.1	.74	1-5	.16**	---	---	---	---	.19**	.52**	1			
9	561	4.9	2.6	0-10	---	---	---	---	.13**	.09*	-.32**	-.32**	1		
10	551	9.4	1.4	4-13	.21**	---	---	.26**	---	---	.12**	.15**	---	1	
11	562	5.8	1.3	4-8	.13**	---	---	.19**	---	---	---	---	---	.90**	1
12	551	3.6	.60	1-5	.20**	---	---	.22**	---	.27**	.37**	.26**	-.09*	.42**	---
13	562	2.3	.89	1-4	.11**	---	.09*	.16**	---	.09*	---	---	---	.10*	---
14	556	3.9	1.0	1-5	.24**	---	.11**	.15**	---	.35**	---	---	.22**	.11**	---
15	560	6.8	2.8	2-10	---	---	.12**	---	---	---	-.31**	-.52**	.52**	-.12**	-.09*
16	562	.5	.5	0-1	---	.09*	---	---	-.12*	---	-.13**	-.29**	.36**	-.17**	.17**
17	551	.12	1.2	-4.4-4.8	---	---	---	---	---	---	---	---	---	---	---
18	545	.15	1.4	-5.3-8.9	-.10*	---	---	---	---	---	---	---	---	---	---
19	562	.08	1.1	-3.0-2.5	---	-.09*	---	---	---	---	---	---	---	---	---
20	556	.03	1.2	-3.0-3.9	-.11*	---	---	---	---	---	---	---	---	---	---
21	551	.06	.55	-2.0-2.9	---	---	---	---	---	---	---	---	---	---	---
22	545	.10	.64	-2.5-4.7	---	---	---	---	---	---	---	---	---	---	---
23	224	.15	.44	-.10-.90	.28**		.09*	.26**	.22**	.32**	.10*	---	.09*	.09*	---
24	222	.10	.64	-2.2-2.5	---	----	---	---	---	---	---	---	---	---	---
25	224	.05	.62	-1.6-2.0	---	---	---	---	---	---	---	---	---	---	---
26	222	.27	.27	-1.3-1.1	---	---	---	---	---	---	---	---	---	---	---

* Correlation is significant at the .05 level (2-tailed); ** Correlation is significant at the .01 level (2-tailed); Non-significant correlations are indicated by "---"

Appendix B, Table B5 (Continued): Intercorrelations of Control, Analysis, and Moderator Variables

Item	N	M	SD	Scale Range	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
12	551	3.6	.60	1-5	1														
13	562	2.3	.89	1-4	.12**	1													
14	556	3.9	1.0	1-5	.17**	---	1												
15	560	6.8	2.8	2-10	-.11*	---	.11*	1											
16	562	.5	.5	0-1	---	---	-.10*	.61**	1										
17	551	.12	1.2	-4.4-4.8	---	---	---	---	---	1									
18	545	.15	1.4	-5.3-8.9	---	---	---	---	---	---	1								
19	562	.08	1.1	-3.0-2.5	---	---	---	---	---	.89**	---	1							
20	556	.03	1.2	-3.0-3.9	---	---	---	---	---	---	.89**	---	1						
21	551	.06	.55	-2.0-2.9	---	---	---	---	---	.44**	---	---	---	1					
22	545	.10	.64	-2.5-4.7	---	---	---	---	---	---	---	---	---	---	1				
23	224	.15	.44	-.10-.90	.12**	---	.10*	---	---	---	.46**	---	---	---	---	1			
24	222	.10	.64	-2.2-2.5	---	---	---	---	---	-.09*	.16**	---	---	---	---	.25**	1		
25	224	.05	.62	-1.6-2.0	---	---	---	---	---	---	.13**	---	---	---	---	.09*	.91**	1	
26	222	.27	.27	-1.3-1.1	---	---	---	---	---	---	.46**	---	---	---	---	.33**	---	-.10*	1

Appendix B, Table B5 (Continued): Intercorrelations of Control, Analysis, and Moderator Variables

1. Age of Member as of May 31, 1999
2. Gender (Male = 1; Female = 2)
3. Race (1 = All other; 2 = White)
4. Income (Month increases from $1,000 to $10,000 in $1,000 increments)
5. Number of relocations (1 to 10+)
6. Education (1 = high school; 2 = some college but less than 1 year; 3 = 1 or more years of college but no degree; 4 = associate's; 5 = bachelor's; 6 = graduate or professional
7. Job Satisfaction
8. Organizational Commitment
9. Job Search Activity
10. Community Embeddedness
11. Community Link
12. Community Satisfaction
13. Career Plateau
14. Occupational Portability
15. Intent to Turnover
16. Actual Turnover (0 = Stay; 1 = Leave)
17. Community Embeddedness x Career Plateau
18. Community Embeddedness x Occupational Portability
19. Community Link x Career Plateau
20. Community Link x Occupational Portability
21. Community Satisfaction x Career Plateau
22. Community Satisfaction x Occupational Portability
23. Occupational Commutability
24. Community Embeddedness x Occupational Commutability
25. Community Link x Occupational Commutability
26. Community Satisfaction x Occupational Commutability

Items 1 – 22 data parameters = Members with $\leq$ 10 years of service & $\leq$ 1 year remaining service obligation
Items 23 – 26 data parameters = Members with $\leq$ 10 years of service, $\leq$ 1 year remaining service obligation, and officers only

Appendix B, Table B6: Main Effects

	Model 1 Intent to Turnover				Model 2 (Logistic Regression) Actual Turnover	
Variables	**(B)**	**SE B**	**(β)**		**Exp β[a]**	
Control						
- Gender	.38	.21	.06^{+}		1.85**	
- Race	.42	.22	.06^{+}		1.05	
- Age	-.08	.03	-.11**		.99	
- Education	.28	.08	.16***		1.17^{+}	
- Number of Relocations	-.22	.08	-.10***		.74***	
- Income	.01	.05	.01		.96	
			.03*	*Δ Adj R^2*	1.34^{+}	
Job Satisfaction	-.13	.18	-.03			
Organizational Commitment	-1.5	.15	-.38***		.43***	
Job Search	.43	.04	.40***		1.41***	
			.41*	*Δ Adj R^2*		
Community Embeddedness	-.07	.07	-.04	H1	.80***	H1.1
			n.s.	*Δ Adj R^2*		
R^2	.45					
Adj. Model R^2	.44					
F	44.20***					
-2 log-likelihood					609.02	
Hosmer and Lemeshow Test (χ^2)					8.87 (.35) [b]	
Classification Percentage					70.7	

$^{+}$p < .10; *p < .05; **p < .01; ***p < .001; B = unstandardized; β = Standardized; Two-tailed tests; [a]The entries are exponentiated **β**'s.
[b] significance level indicated in parentheses; a value greater than .05 indicates a well-fitting model
Data parameters = Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562

Appendix B, Table B7: Supplemental Main Effects Analysis

	Model 1 Intent to Turnover					Model 2 Actual Turnover	
Variables	**(B)**	**SE B**	**(β)**			**Exp β[a]**	
Control							
- Gender	.37	.21	.06^{+}			1.85**	
- Race	.43	.22	.06^{+}			1.07	
- Age	-.08	.03	-.11**			.99	
- Education	.27	.08	.16***			1.14	
- Number of Relocations	-.22	.08	-.10*			.75***	
- Income	.01	.05	.01			.96	
			.03*	*Δ Adj R^2*			
Job Satisfaction	-.17	.18	-.04			1.29	
Organizational Commitment	-1.5	.15	-.39***			.42***	
Job Search	.43	.04	.39***			1.41***	
			.41*	*Δ Adj R^2*			
Community Link	-.09	.08	-.04			.76***	H1.3
Community Satisfaction	-..05	.17	-.01			1.08	
			n.s.	*Δ Adj R^2*	H1.2		
R^2	.45						
Adj. Model R^2	.44						
F	40.21***						
-2 log-likelihood						606.11	
Hosmer and Lemeshow Test (χ^2)						6.0 (.65) [b]	
Classification Percentage						70.5	

$^{+}$p < .10; *p < .05; **p < .01; ***p < .001; B = unstandardized; β = Standardized
Simultaneous Entry; [a]The entries are exponentiated **β**'s.
[b] significance level indicated in parentheses; a value greater than .05 indicates a well-fitting model
Data parameters = Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562

Appendix B, Table B8 – Supplemental Main Effects Analysis (Control = Gender)

	Model 1 Intent to Turnover			Model 2 (Logistic Regression) Actual Turnover		
Variables	**(B)**	**SE B**	**(β)**		**Exp β[a]**	
Control						
- Gender	.42	.21	.07*		1.92**	
			n.s.	*Δ Adj R^2*		
Job Satisfaction	.07	.18	.02		1.56**	
Organizational Commitment	-1.52	.15	-.39***		.44***	
Job Search	.45	.04	.41***		1.38***	
			.42*	*Δ Adj R^2*		
Community Embeddedness	-.10	.07	-.05	H1.4	.79***	H1.5
			n.s.	*Δ Adj R^2*		
R^2	.42					
Adj. Model R^2	.42					
F	78.31***					
-2 log-likelihood					628.24	
Hosmer and Lemeshow Test (χ^2)					6.63 (.58)[b]	
Classification Percentage					69.7	

+p < .10; *p < .05; **p < .01; ***p < .001; B = unstandardized; β = Standardized

Simultaneous Entry

Data parameters = Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562

[a]The entries are exponentiated **β**'s; [b] significance level indicated in parentheses; a value greater than .05 indicates a well-fitting model

Appendix B, Table B9 – Supplemental Main Effects Analysis (Control = Gender)

	Model 1 Intent to Turnover					Model 2 Actual Turnover	
Variables	**(B)**	**SE B**	**(β)**			**Exp β[a]**	
Control							
- Gender	.41	.21	.06*			1.91**	
			n.s.	*Δ Adj R^2*			
Job Satisfaction	-.01	.18	-.01			1.39+	
Organizational Commitment	-1.5	.15	-.40***			.43***	
Job Search	.45	.04	.41***			1.39***	
			*.42**	*Δ Adj R^2*			
Community Link	-.14	.08	-.07+		H1.6	.73*	H1.7
Community Satisfaction	.13	.17	.03			1.13	
			n.s.	*Δ Adj R^2*			
R^2	.42						
Adj. Model R^2	.42						
F	65.78***						
-2 log-likelihood						623.36	
Hosmer and Lemeshow Test (χ^2)						8.04 (.43)[b]	
Classification Percentage						70.6	

+p < .10; *p < .05; **p < .01; ***p < .001

B = unstandardized; β = Standardized

Simultaneous Entry

Data parameters = Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562)

[a]The entries are exponentiated **β**'s.

[b] significance level indicated in parentheses; a value greater than .05 indicates a well-fitting model

Appendix B, Table B10a – Moderator Regression Analysis
Model 1: Intent to Turnover (Dependent Variable)

Variables	H2[a]				H3[a]				H4[b]			
	B	SE B	B		B	SE B	β		B	SE B	β	
Control												
- Gender	.37	.21	.06^{+}		.39	.21	.06^{+}		.54	.31	.08	
- Race	.42	.22	.06*		.44	.22	.06*		.13	.39	.01	
- Age	-.08	.03	-.12**		-.08	.03	-.12**		-.04	.04	-.04	
- Education	.28	.08	.16***		.28	.08	.16***		.61	.29	.10*	
-# of Relocations	-.22	.08	-.10**		-.21	.08	-.10**		-.42	.11	-.21***	
- Income	.01	.05	.01		.01	.05	.01		.01	.08	.02	
			.03	*Δ Adj R^2*			.03	*Δ Adj R^2*			*n.s.*	*Δ Adj R^2*
Job Satisfaction	-.14	.17	-.03		-.14	.18	-.03		-.08	.27	-.01	
Organizational Commitment	-1.45	.15	-.39***		-1.5	.15	-.38***		-1.5	.23	-.37***	
Job Search	.43	.04	.39***		.43	.04	.39***		.53	.07	.46***	
			.41*	*Δ Adj R^2*			.41*	*Δ Adj R^2*			.48*	*Δ Adj R^2*
Community Embeddedness	.01	.19	-.01		-.28	.27	-.13		.05	.16	-.02	
			n.s.	*Δ Adj R^2*			*n.s.*	*Δ Adj R^2*			*n.s.*	*Δ Adj R^2*
Career Plateau	.36	.72	.11									
			n.s.	*Δ Adj R^2*								
Occupational Portability					-.42	.63	-.15					
							n.s.	*Δ Adj R^2*				
Occupational Commutability									-1.9	1.25	-.08	
											n.s.	*Δ Adj R^2*
CE x CP	-.04	.08	-.12	H2								
			n.s.	*Δ Adj R^2*								
CE x OP					.05	.07	.20	H3				
							n.s.	*Δ Adj R^2*				
CE x OC									.22	.27	.14	H4
Model R^2	.45				.45				.51		*n.s.*	*Δ Adj R^2*
Adj. Model R^2	.44				.44				.48			
F				36.7***				36.1***				18.1***

$^{+}$p < .10; *p < .05; **p < .01; ***p < .001; B = unstandardized; β = Standardized; [a] = (Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562); [b] = (Officers with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 224)

Appendix B, Table B10b – Moderator Regression Analysis

Model 2: Actual Turnover (Dependent Variable)

Variables	H2[a] Exp β[c]		H3[a] Exp β[c]		H4[b] Exp β[c]	
Control						
- Gender	1.86**		1.94**		1.74	
- Race	1.02		1.04		.96	
- Age	.99		.99		1.10*	
- Education	1.2+		1.17+		1.65	
-# of Relocations	.74***		.73***		.76*	
- Income	.95		.99		.99	
Job Satisfaction	1.4+		1.42+		1.71+	
Organizational Commitment	.43***		.43***		.34***	
Job Search	1.40***		1.41***		1.51***	
Community Embeddedness	.75		.55*		.92	
Career Plateau	1.0					
Occupational Portability			.49			
Occupational Commutability					.81	
CE x CP	1.02	H2.1				
CE x OP			1.09	H3.1		
CE x OC					.01+	H4.1
-2 log-likelihood	605.76		595.52		235.05	
Hosmer and Lemeshow Test (χ^2)	15.43 (.05)[d]		7.37 (.50)[d]		8.12 (.42)[d]	
Classification Percentage	70.1		71.5		74.8	

+p < .10; *p < .05; **p < .01; ***p < .001

B = unstandardized; β = Standardized; Simultaneous Entry

[a] = (Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562)

[b] = (Officers with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 224)

[c] The entries are exponentiated **β**'s.

[d] significance level indicated in parentheses; a value greater than .05 indicates a well-fitting model

Appendix B, Table B11a – Moderator Regression Analysis (Gender Only)

Model 1: Intent to Turnover

Variables	H2[a]				H3[a]				H4[b]			
	B	**SE B**	**β**		**B**	**SE B**	**β**		**B**	**SE B**	**β**	
Control												
- Gender	.41	.21	.06^{+}		.43	.21	.07*		.54	.32	.09^{+}	
			n.s.	*Δ Adj R^2*			*n.s.*	*Δ Adj R^2*			*n.s.*	*Δ Adj R^2*
Job Satisfaction	.07	.18	.01		.04	.18	.01		.03	.28	.01	
Organizational Commitment	-1.5	.15	-.39***		-1.5	.15	-.39***		-1.5	.24	-.39***	
Job Search	.45	.04	.41***		.44	.04	.40***		.05	.13	.43***	
			.41	*Δ Adj R^2*			.41	*Δ Adj R^2*			.44	
Community Embeddedness	-.03	.19	-.01		-.29	.27	-.14		-2.8	.15	.02	
			n.s.	*Δ Adj R^2*			*n.s.*	*Δ Adj R^2*			*n.s.*	*Δ Adj R^2*
Career Plateau	.34	.74	.11									
			n.s.	*Δ Adj R^2*								
Occupational Portability					-.30	.64	-.11					
							n.s.	*Δ Adj R^2*				
Occupational Commutability									-2.8	2.42	-.43	
											n.s.	*Δ Adj R^2*
CE x CP	-.03	.08	-.10	H2.2								
			n.s.	*Δ Adj R^2*								
CE x OP					.05	.07	.19	H3.2				
							n.s.	*Δ Adj R^2*				
CE x OC									.28	.25	.42	H4.2
											n.s.	*Δ Adj R^2*
R^2	.42				.42				.46			
Adj. Model R^2	.41				.41				.44			
F				55.82***				55.19***				25.97***

$^{+}$p < .10; *p < .05; **p < .01; ***p < .001; B = unstandardized; β = Standardized

[a] Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562

[b] Officer-only members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 224

Appendix B, Table B11b – Moderator Regression Analysis (Gender Only)

Model 2: Actual Turnover (Dependent Variable)

Variables	H2 [a] Exp β[c]		H3 [a] Exp β[a]		H4[b] Exp β[c]	
Control						
- Gender	1.92**		2.02**		1.76	
Job Satisfaction	1.59*		1.57*		1.57	
Organizational Commitment	.44***		.44***		.35***	
Job Search	1.38***		1.38***		1.43***	
Community Embeddedness	.75		.54*		1.01	
Career Plateau	1.07					
Occupational Portability			.51			
Occupational Commutability					.83	
CE * CP	1.01	H2.3				
CE * OP			1.09	H3.3		
CE * OC					.93	H4.3
-2 log-likelihood	624.63		615.86		245.84	
Hosmer and Lemeshow Test (χ^2)	6.81 (.56)[b]		10.31 (.25)[d]		4.91 (.77)[d]	
Classification Percentage	71.7		70.6		73.9	

+p < .10; *p < .05; **p < .01; ***p < .001

Two-tailed tests.

B = unstandardized; β = Standardized

Simultaneous Entry

[a] Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562

[b] Officer-only members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 224

[c] The entries are exponentiated **β**'s.

[d] significance level indicated in parentheses; a value greater than .05 indicates a well-fitting model

Appendix B, Table B12 – Mediator Effects

Variables	Model 1			Model 2		
	Reduced Model (L_0) Exp β^a	Full Model (L_1) Exp β^a		Reduced Model (L_0) Exp β^a	Full Model (L_1) Exp β^a	
Control						
- Gender	1.85*	1.68+		1.93**	1.71*	
- Race	1.05	.78				
- Age	.99	1.05				
- Education	1.17+	1.01				
-# of Relocations	.74***	.78*				
- Income	.96+	.94				
Job Satisfaction	1.39	1.66*		1.56*	1.68*	
Organizational Commitment	.43***	.95		.44***	.97	
Job Search	1.41***	1.18***		1.38***	1.15**	
Community Embeddedness	.80***	.76***		.79***	.77***	
Intent to Turnover		1.73***	H5		1.72***	H5.1
-2 log-likelihood	609.02	491.90		628.24	501.42	
Hosmer and Lemeshow Test (χ^2)	8.87 (.35)[b]	12.5 (.13)[b]		6.63 (.58)[b]	5.09 (.75)[b]	
Classification Percentage	70.7	79.6		69.7	79.9	

[a] The entries are exponentiated **β**'s.

[b] significance level indicated in parentheses; a value greater than .05 indicates a well-fitting model

+ p < .10

* p < .05

** p < .01

*** p < .001

Simultaneous Entry

Members with ≤ 10 years of service & ≤ 1 year remaining service obligation; n = 562

Appendix B, Table B13: Summary of Hypotheses and Exploratory Supplemental Analyses Results

		Dependent Variable		
H	**Research Hypotheses[a] and Exploratory Supplemental Analyses**	**Intent**	**Actual**	**Table Ref**
H1	After introducing appropriate control variables, community embeddedness will account for variance in turnover intentions beyond the variance accounted for by job satisfaction, organizational commitment, and job search activity.	*n.s.*		B6, Mod 1
H1.1	Test of H1 using Actual Turnover as the dependent variable		*Sig*	B6, Mod 2
H1.2	Test of H1 using Community Link and Community Satisfaction instead of community embeddedness	*n.s.*		B7, Mod 1
H1.3	Test of H1 using Community Link and Community Satisfaction; Actual Turnover as dependent variable		*Sig*	B7, Mod 2
H1.4	Test of H1 using only Gender as a control variable	*n.s.*		B8, Mod 1
H1.5	Test of H1 using only Gender as a control variable and Actual Turnover as dependent variable		*Sig*	B8, Mod 2
H1.6	Test of H1 using only Gender as a control variable and Community Link and Community Satisfaction	*n.s.*		B9, Mod 1
H1.7	Test of H1 using only Gender; Community Link and Community Satisfaction; and Actual Turnover		*Sig*	B9, Mod 2
H2	After introducing appropriate control variables, perceptions of being career plateaued will moderate the relationship between community embeddedness and intent to turnover such that increased perceptions of being career plateaued will result in an increased impact of community embeddedness on intent to turnover.	*n.s*		B10A
H2.1	Test of H2 using Actual Turnover as dependent variable		*n.s.*	B10B
H2.2	Test of H2 using only Gender as control variable	*n.s.*		B11A
H2.3	Test of H2 using only Gender as control variable and Actual Turnover as dependent variable		*n.s.*	B11B

Appendix B, Table B13 (Continued): Summary of Hypotheses and Exploratory Supplemental Analyses Results

H	Research Hypotheses[a] and Exploratory Supplemental Analyses	Dependent Variable		
		Intent	Actual	Table Ref
H3	After introducing appropriate control variables, perceptions of occupational portability will moderate the relationship between community embeddedness and intent to turnover such that increased perceptions of occupational portability will result in a decreased impact of community embeddedness on intent to turnover.	*n.s*		B10A
H3.1	Test of H3 using Actual Turnover as dependent variable		*n.s.*	B10B
H3.2	Test of H3 using only Gender as control variable	*n.s.*		B11A
H3.3	Test of H3 using only Gender as control variable and Actual Turnover as dependent variable		*n.s.*	B11B
H4	After introducing appropriate control variables, the relationship between community embeddedness and intent to turnover will differ for individuals based on occupational commutability such that the impact of community embeddedness on intent to turnover will be less for individuals in commutable occupations compared to individuals in non-occupationally commutable jobs.	*n.s*		B10A
H4.1	Test of H4 using Actual Turnover as dependent variable		*Sig*	B10B
H4.2	Test of H4 using only Gender as control variable	*n.s.*		B11A
H4.3	Test of H4 using only Gender as control variable and Actual Turnover as dependent variable		*n.s.*	B11B
H5	After introducing appropriate control variables, intent to turnover will directly mediate the relationship between community embeddedness and actual turnover, while also mediating the relationships between job satisfaction, organizational commitment, job search activity, and actual turnover.		*n.s*	B12, Mod 1
H5.1	Test of H5 using only Gender as control variable		*n.s.*	B12, Mod 2

[a] Research Hypothesis
n.s. = Not Significant
Sig = Significant

APPENDIX C: VALIDATION SURVEY #1

Job Embeddedness Survey (ver 1)

Mother's Maiden Name _____

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: I would greatly appreciate your participation in my 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: I 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, please contact me. You may take the cover sheet with the contact information for future reference.

Major Sharon Heilmann
AFIT/ENV BLDG 641 / Room 202C
2950 Hobson Way
Wright-Patterson AFB OH 45433-7765
Email: sharon.heilmann@afit.edu
Phone: DSN 785-3636x4553, commercial (937) 255-3636x4553
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 ⊗ ⃠ ⊙

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 organization.	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 organization.	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 organization's culture.	①	②	③	④	⑤	⑥	⑦
11. I like the authority and responsibility I have in this organization.	①	②	③	④	⑤	⑥	⑦
12. My values are compatible with the organization's values.	①	②	③	④	⑤	⑥	⑦
13. I can reach my professional goals working for this organization.	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
28. In general, I don't like my job.	①	②	③	④	⑤	⑥	⑦

Please fill in the appropriate information as requested for questions 28 through 43. 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 30 miles?	Number _____	
30. How long have you been assigned to this unit?	Years _____	Months _____
31. How many of your closest friends live nearby?	Number _____	
32. How long have you been in the military?	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. How many of your relatives reside in the local area?	Number _____	
38. How many of your spouse's relatives reside in the local area?	Number _____	
39. Are you currently married? *If not, skip to number 39.*	Yes ○	No ○

40. If you are married, does your spouse work outside the home?	Yes ○	No ○
41. Do you own the home you live in?	Yes ○	No ○
42. My family roots are in this community.	Yes ○	No ○
43. My spouse's family resides in the area.	Yes ○	No ○

I 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

44. I feel I am being paid a fair amount for the work I do.	①	②	③	④	⑤	⑥
45. There is really too little chance for promotion on my job.	①	②	③	④	⑤	⑥
46. My supervisor is quite competent in doing his/her job.	①	②	③	④	⑤	⑥
47. I am not satisfied with the benefits I receive.	①	②	③	④	⑤	⑥
48. When I do a good job, I receive the recognition for it that I should receive.	①	②	③	④	⑤	⑥
49. Many of our rules and procedures make doing a good job difficult.	①	②	③	④	⑤	⑥
50. I like the people I work with.	①	②	③	④	⑤	⑥
51. I sometimes feel my job is meaningless.	①	②	③	④	⑤	⑥
52. Communications seem good within this squadron.	①	②	③	④	⑤	⑥
53. Raises are too few and far between.	①	②	③	④	⑤	⑥
54. Those who do well on the job stand a fair chance of being promoted.	①	②	③	④	⑤	⑥
55. My supervisor is unfair to me.	①	②	③	④	⑤	⑥
56. The benefits we receive are as good as what civilian organizations offer.	①	②	③	④	⑤	⑥
57. I do not feel that the work I do is appreciated.	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

58. My efforts to do a good job are seldom blocked by red tape.	①	②	③	④	⑤	⑥
59. 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
60. I like doing the things I do at work.	①	②	③	④	⑤	⑥
61. The goals of this squadron are not clear to me.	①	②	③	④	⑤	⑥
62. I feel unappreciated by the military when I think about what they pay me.	①	②	③	④	⑤	⑥
63. People get ahead as fast here as they do in other places.	①	②	③	④	⑤	⑥
64. My supervisor shows too little interest in the feelings of subordinates.	①	②	③	④	⑤	⑥
65. The benefit package (e.g. BAS, BAH, medical, dental, etc.) the military offers is equitable.	①	②	③	④	⑤	⑥
66. There are few rewards for those who work here.	①	②	③	④	⑤	⑥
67. I have too much to do at work.	①	②	③	④	⑤	⑥
68. I enjoy my coworkers.	①	②	③	④	⑤	⑥
69. I often feel that I do not know what is going on with the unit.	①	②	③	④	⑤	⑥
70. I feel a sense of pride in doing my job.	①	②	③	④	⑤	⑥
71. I feel satisfied with my chances for salary increases.	①	②	③	④	⑤	⑥
72. There are benefits we do not have which we should have.	①	②	③	④	⑤	⑥
73. I like my supervisor.	①	②	③	④	⑤	⑥
74. I have too much paperwork.	①	②	③	④	⑤	⑥
75. I don't feel my efforts are rewarded the way they should be.	①	②	③	④	⑤	⑥
76. I am satisfied with my chances for promotion.	①	②	③	④	⑤	⑥
77. There is too much bickering and fighting at work.	①	②	③	④	⑤	⑥
78. My job is enjoyable.	①	②	③	④	⑤	⑥
79. Work assignments are not fully explained.	①	②	③	④	⑤	⑥

	① Strongly Agree	② Agree	③ Neither Agree nor Disagree	④ Disagree	⑤ Slightly Disagree
80. Very little of my experience and training can be directly transferred to a civilian job.	①	②	③	④	⑤
81. It would be easy for me to get a good civilian job if I left the military now.	①	②	③	④	⑤
82. I have a pretty good idea of the kinds of jobs I could get as a civilian.	①	②	③	④	⑤
83. I have a pretty good idea of what pay I could get as a civilian.	①	②	③	④	⑤

	① Great Extent	② Some Extent	③ No Effect	④ Slight Extent	⑤ No Extent
84. If you left the military and pursued a civilian job similar to your military occupational area, to what extent do you believe you would be able to reside in a community geographically separated from your place of employment (e.g., as a commercial pilot, you could live in Dayton, OH and fly for American Airlines headquartered in Chicago, IL)?	①	②	③	④	⑤
85. Assuming you were in an occupation that allowed you to be geographically separated from your potential civilian employer (as discussed in the previous question), to what extent would you consider being geographically separated from your employer in order to live in the community of your choice?	①	②	③	④	⑤
86. Assuming you were in an occupation that would allow you to be geographically separated from a potential civilian employer (as discussed in the previous two questions), to what extent do you think this would affect your decision to remain in the military?	①	②	③	④	⑤

The next questions involve the different activities people engage in when they start to look for a new job. For Questions 87 through 96, please mark any items that apply when completing the phrase:

During the *past year* have you …

○ 87. Read a book about getting a job?
○ 88. Revised your resume?
○ 89. Sent copies of your resume to a prospective employer?

○ 90. Contacted an employment agency or executive search firm to obtain a job outside of the military?
○ 91. Read the classified/help-wanted advertisements in the newspaper?
○ 92. Gone on a job interview?
○ 93. Talked to friends or relatives about getting a new job?
○ 94. Sought to transfer to a new job within your unit?
○ 95. Talked to co-workers about getting a job in another unit or at another base for reasons other than required PCS (e.g. special duty, short tour, etc.)
○ 96. Made any telephone inquiries to prospective employers?

I 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

97. In general, I like working here.	①	②	③	④	⑤	⑥	⑦
98. I would be very happy to spend the rest of my career in the military.	①	②	③	④	⑤	⑥	⑦
99. I enjoy discussing the military with people outside it.	①	②	③	④	⑤	⑥	⑦
100. I really feel as if the military's problems are my own.	①	②	③	④	⑤	⑥	⑦
101. I think I could easily become as attached to another organization as I am to this one.	①	②	③	④	⑤	⑥	⑦
102. I do not feel like "part of the family" in the military.	①	②	③	④	⑤	⑥	⑦
103. I do not feel "emotionally attached" to the military.	①	②	③	④	⑤	⑥	⑦
104. The military has a great deal of personal meaning for me.	①	②	③	④	⑤	⑥	⑦
105. I do not feel a strong sense of belonging to the military.	①	②	③	④	⑤	⑥	⑦
106. 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
107. 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
108. 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
109. It wouldn't be too costly for me to leave the military in the near future.	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

110. Right now, staying with the military is a matter of necessity as much as desire.	①	②	③	④	⑤	⑥	⑦
111. I believe that I have too few options to consider leaving the military.	①	②	③	④	⑤	⑥	⑦
112. One of the few negative consequences of leaving the military would be the scarcity of available alternatives.	①	②	③	④	⑤	⑥	⑦
113. 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
114. 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
115. I do not feel any obligation to remain with the military.	①	②	③	④	⑤	⑥	⑦
116. 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
117. I would feel guilty if I left the military now.	①	②	③	④	⑤	⑥	⑦
118. The military deserves my loyalty.	①	②	③	④	⑤	⑥	⑦
119. 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
120. I owe a great deal to the military.	①	②	③	④	⑤	⑥	⑦
121. All in all, I am satisfied with my job.	①	②	③	④	⑤	⑥	⑦

I 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

122. What is the probability that you can find an acceptable civilian alternative to your job in the military?	①	②	③	④	⑤
123. 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

I 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

124. Do you intend to leave the military at the end of your service commitment?	①	②	③	④	⑤
125. How strongly do you feel about leaving the military at the end of your service commitment?	①	②	③	④	⑤
126. How likely is it that you will leave the military at the end of your service commitment?	①	②	③	④	⑤

This final section contains 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.

127. What is your age? _____

128. What is your gender?
- ○ Male
- ○ Female

129. What is your race?
- ○ White
- ○ Black
- ○ Hispanic
- ○ Asian
- ○ Native American
- ○ Other _____

130. What is your highest education level?
- ○ High School
- ○ Some College
- ○ Associates Degree
- ○ Bachelor Degree
- ○ Graduate Degree
- ○ Doctorate
- ○ Post Doctorate
- ○ Professional

131. What is your current rank?
- ○ E-1
- ○ E-2
- ○ E-3
- ○ E-4
- ○ E-5
- ○ E-6
- ○ E-7
- ○ E-8
- ○ E-9
- ○ O-1E
- ○ O-1
- ○ O-2E
- ○ O-2
- ○ O-3E
- ○ O-4
- ○ O-5

132. What is your AFSC/MOS/Rate? _____

133. What would you consider the civilian equivalent of your military job?

134. What is your <u>total monthly gross</u> (before tax) household income from all sources? (Please include your military earnings, your earnings from a second job, your spouse's earnings, and income or financial support from any other source).
○ $1-$1000 ○ $1001-$2000○ $2001 - $3000 ○ $3001 - $4000○ $4001 - $5000
○$5001 - $6000○ $6001-$7000○ $7001-$8000 ○ $8001-$9000 ○ $9001-$10,000
○ $10,000 +

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

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

137. How much time remains in your Active Duty Service Commitment (when are you able to separate**?)**
Years _____ Months _____

138. What branch of Service are you in?
○ USA
○ USAF
○ USCG
○ USMC
○ USN

139. What department are you in (e.g. ENV, ENG, ENC, etc.)? _____

140. During your active duty career, how many permanent changes of station (PCS) have you made? (INCLUDE PCS FOR A REMOTE OR UNACCOMPANIED TOUR).
○ 1 ○ 3 ○ 5 ○ 7 ○ 9
○ 2 ○ 4 ○ 6 ○ 8 ○ 10 or more

141. If you stay on active duty, when would you expect your next promotion to a higher grade?
○ less than 3 months
○ 3 months to less than 7 months
○ 7 months to less than 1 year
○ 1 year to less than 2 years
○ Does not apply, I do not expect a promotion
○ Does not apply, I have no opportunities for promotion

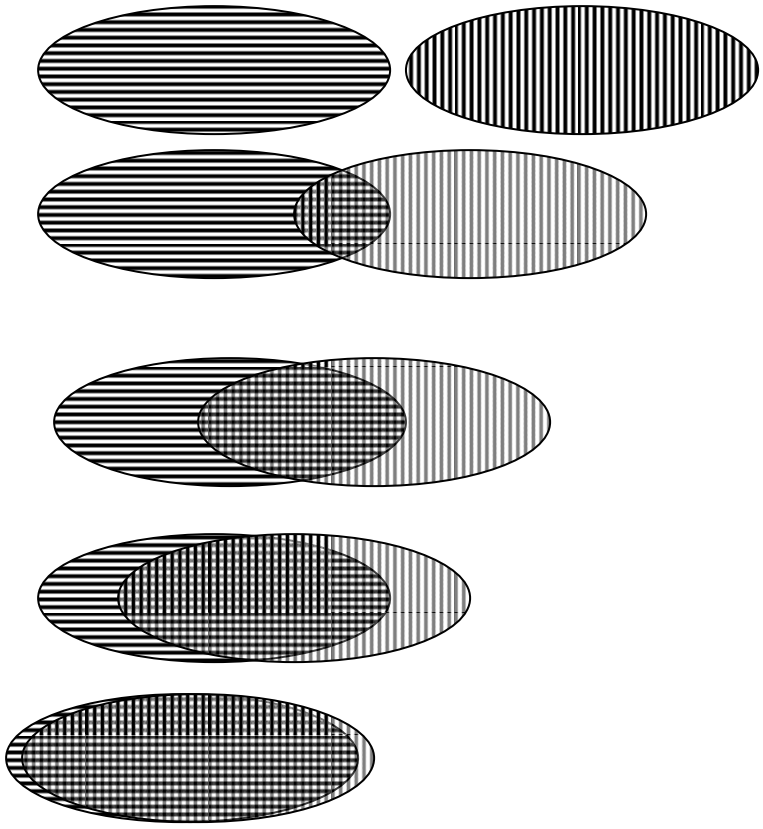
142. Where do you live at your permanent duty station?

- ○ Military family housing, on-base
- ○ Military family housing, off-base
- ○ Civilian housing that I own or pay mortgage on
- ○ Military or civilian housing that I rent, off base
- ○ Other _____

143. When you answered questions referencing “community” in this survey, please describe the working definition of “community” that you used.

144.Using the following descriptions of military and civilian community, please circle which venn diagram represents the degree to which the military and civilian communities overlap for you personally.

MILITARY **CIVIILIAN**



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. I 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 me using the information listed on the front page of the questionnaire. I appreciate your participation and would be happy to address any questions you may have regarding the questionnaire or my research in general.

Feedback

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

Name: _____

Email: _____

APPENDIX D: VALIDATION SURVEY #2

Job Embeddedness Survey (ver 2)

Mother's Maiden Name _____

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: I would greatly appreciate your participation in my 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: I 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, please contact me. You may take the cover sheet with the contact information for future reference.

Major Sharon Heilmann
AFIT/ENV BLDG 641 / Room 202o
2950 Hobson Way
Wright-Patterson AFB OH 45433-7765
Email: sharon.heilmann@afit.edu
Phone: DSN 785-3636x4553, commercial (937) 255-3636x4553
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 ⊗ ⊘ ⊙

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 Agree	② Agree	③ Neither Agree Nor Disagree	④ Disagree	⑤ Strongly Disagree
1. I talk up my Service to my friends as a great organization to be a part of.	①	②	③	④	⑤
2. There is not much to be gained for me by sticking with a military career.	①	②	③	④	⑤
3. I am proud to be a member of my Service.	①	②	③	④	⑤
4. I find that my values and the values of my Service are very similar.	①	②	③	④	⑤
5. Being a member of my Service inspires me to do the best job I can.	①	②	③	④	⑤
6. I would turn down another job for more pay in order to remain in my Service.	①	②	③	④	⑤
7. The military community is there for me when I need it.	①	②	③	④	⑤
8. The members of the military community sometimes turn to me for help or support.	①	②	③	④	⑤

For each statement, please fill in the circle for the number that indicates your level of satisfaction for each item. Use the scale below for your responses.

	① Very Satisfied	② Satisfied	③ Neither Satisfied nor Dissatisfied	④ Dissatisfied	⑤ Very Dissatisfied
9. Cost of residence	①	②	③	④	⑤
10. Quality and condition of residence	①	②	③	④	⑤
11. Amount of livable space in residence	①	②	③	④	⑤
12. Privacy of residence	①	②	③	④	⑤
13. Quality of housing in the area where you live	①	②	③	④	⑤
14. Safety of the area where you live	①	②	③	④	⑤
15. Distance to workplace	①	②	③	④	⑤
16. Distance to shopping areas	①	②	③	④	⑤
17. Distance to recreation areas	①	②	③	④	⑤

How satisfied are you with each of the following?

① Very Satisfied	② Satisfied	③ Neither Satisfied nor Dissatisfied	④ Dissatisfied	⑤ Very Dissatisfied

18. Basic pay	①	②	③	④	⑤	
19. Retirement pay you would get	①	②	③	④	⑤	
20. Cost of Living Adjustment (COLA) to retirement pay	①	②	③	④	⑤	
21. Other retirement benefits such as medical care and use of base services	①	②	③	④	⑤	
22. Pace of your promotions	①	②	③	④	⑤	
23. Chances for future advancement	①	②	③	④	⑤	
24. Your personal workload	①	②	③	④	⑤	
25. Amount of enjoyment from your job	①	②	③	④	⑤	
26. Job security	①	②	③	④	⑤	

Please fill in the appropriate information as requested for questions 29 through 35. Please respond with a specific number and not a range.

27. Are you currently married?	Yes ○	No ○	N/A ○
28. How many of your spouse's relatives reside in the local area?	Number _____		N/A ○
29. If you are married, does your spouse work outside the home?	Yes ○	No ○	N/A ○
30. Do you own the home you live in?	Yes ○	No ○	
31. How many of your legal dependents live in your household?	Number ____	N/A ○	
32. How many of your closest friends live nearby?	Number ____	N/A ○	
33. How many of your relatives reside in the local area?	Number _____		

Please use the following scale to answer the following 4 questions.

	① Strongly Agree	② Agree	③ Neither Agree nor Disagree	④ Disagree	⑤ Strongly Disagree
34 Very little of my experience and training can be directly transferred to a civilian job.	①	②	③	④	⑤
35. It would be easy for me to get a good civilian job if I left the military now.	①	②	③	④	⑤
36. I have a pretty good idea of the kinds of jobs I could get as a civilian.	①	②	③	④	⑤
37. I have a pretty good idea of what pay I could get as a civilian.	①	②	③	④	⑤

Please use the following scale to answer the following 3 questions.

	① Great Extent	② Some Extent	③ No Effect	④ Slight Extent	⑤ No Extent
38. If you left the military and pursued a civilian job similar to your military occupational area, to what extent do you believe you would be able to reside in a community geographically separated from your place of employment (e.g., as a commercial pilot, you could live in Dayton, OH and fly for American Airlines headquartered in Chicago, IL)?	①	②	③	④	⑤
39. Assuming you were in an occupation that allowed you to be geographically separated from your potential civilian employer (as discussed in the previous question), to what extent would you consider being geographically separated from your employer in order to live in the community of your choice?	①	②	③	④	⑤
40. Assuming you were in an occupation that would allow you to be geographically separated from a potential civilian employer (as discussed in the previous two questions), to what extent do you think this would affect your decision to remain in the military?	①	②	③	④	⑤

The next questions involve the different activities people engage in when they start to look for a new job. For Questions 42 through 51, please mark any items that apply when completing the phrase:
During the *past year* have you …

○ 41. Thought seriously about leaving the military?
○ 42. Wondered what life might be like as a civilian?
○ 43. Discussed leaving and/or civilian opportunities with family members or friends?
○ 44. Talked about leaving with my immediate supervisor?
○ 45. Gathered information on education programs or college?
○ 46. Gathered information about civilian job options (e.g., read newspaper ads, attended a job fair)?
○ 47. Attended a program that helps people prepare for civilian employment?
○ 48. Prepared a resume?
○ 49. Applied for a job?
○ 50. Interviewed for a job?

I 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

51	Suppose you have to decide whether to stay on active duty. Assuming you could stay, how likely is it that you would choose to do so?	①	②	③	④	⑤
52	If you could stay on active duty as long as you want, how likely is it that you would choose to serve in the military for at least 20 years?	①	②	③	④	⑤

This final section contains 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.

53. What is your age? _____

54. What is your gender?
- ○ Male
- ○ Female

55. What is your race?
- ○ White ○ Hispanic ○ Native American
- ○ Black ○ Asian ○ Other _____

56. What is your highest education level?
- ○ High School
- ○ Some College
- ○ Associates Degree
- ○ Bachelor Degree
- ○ Graduate Degree
- ○ Doctorate
- ○ Post Doctorate
- ○ Professional

57. What is your current rank?

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

58. What is your AFSC/MOS/Rate? _____

59. What would you consider the civilian equivalent (position name) of your military job? _____

60. What is your <u>total monthly gross</u> (before tax) household income from all sources? (Please include your military earnings, your earnings from a second job, your spouse's earnings, and income or financial support from any other source).
○ $1-$1000 ○ $2001 - $3000 ○ $3001 - $4000 ○ $4001 - $5000 ○ $5001 - $6000 ○ $6001-$7000 ○ $7001-$8000 ○ $8001-$9000 ○ $9001-$10,000 ○ $1001-$2000 ○ $10,000 +

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

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

63. How much time remains in your Active Duty Service Commitment (when are you able to separate**?)**

Years _____ Months _____

64. What branch of Service are you in?

- ○ USA
- ○ USAF
- ○ USCG
- ○ USMC
- ○ USN

65. What department are you in (e.g. ENV, ENG, ENC, etc.)? _____

66. During your active duty career, how many permanent changes of station (PCS) have you made? (INCLUDE PCS FOR A REMOTE OR UNACCOMPANIED TOUR).

○ 1 ○ 3 ○ 5 ○ 7 ○ 9
○ 2 ○ 4 ○ 6 ○ 8 ○ 10 or more

67. If you stay on active duty, when would you expect your next promotion to a higher grade?

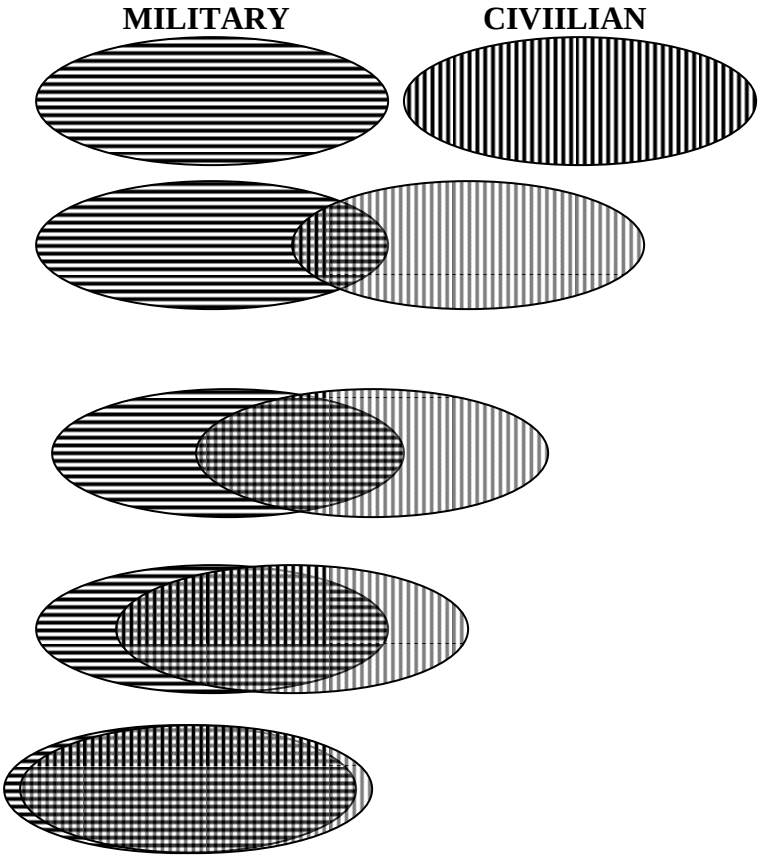
- ○ less than 3 months
- ○ 3 months to less than 7 months
- ○ 7 months to less than 1 year
- ○ 1 year to less than 2 years
- ○ Does not apply, I do not expect a promotion
- ○ Does not apply, I have no opportunities for promotion

68. Where do you live at your permanent duty station?

- ○ Military family housing, on-base
- ○ Military family housing, off-base
- ○ Civilian housing that I own or pay mortgage on
- ○ Military or civilian housing that I rent, off base
- ○ Other _____

69. When you answered questions referencing "community" in this survey, please describe the working definition of "community" that you used.

70.. Using the following descriptions of military and civilian community, please circle which venn diagram represents the degree to which the military and civilian communities overlap for you personally.



This section pertains to your usage of on-base and off-base facilities, programs, or services in your community. Mark all items that you use on a <u>monthly</u> basis.

- ○ 71. Fitness center/gym
- ○ 72. Library services
- ○ 73. Outdoor recreation areas (e.g. campgrounds, picnic areas, beach, stables)
- ○ 74. Outdoor recreation equipment rental
- ○ 75. Recreation center (e.g. recreation room, music/TV, game room, amusement machines)
- ○ 76. Golf course
- ○ 77. Bowling center
- ○ 78. Recreation lodging/hotels or resorts
- ○ 79. Clubs/dance/night clubs
- ○ 80. Commissary/supermarket/grocery store
- ○ 81. Main exchange/department store
- ○ 82. Social activities for service members (e.g., trips, special events, tournaments)
- ○ 83. Auto, crafts, and hobby shops

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. I 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 me using the information listed on the front page of the questionnaire. I appreciate your participation and would be happy to address any questions you may have regarding the questionnaire or my research in general.

Feedback

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

Name: _____

Email: _____

VITA

NAME:	Sharon Gibson Heilmann	
BORN:	Fort Wayne, Indiana	
DEGREES:	B.S.	Eastern Michigan University, 1988
	M.A.	Ohio University, 1989
	M.S.	Air Force Institute of Technology, 1998
	M.Bus.	Indiana University, 2003
	Ph.D.	Indiana University, 2005

PROFESSIONAL SERVICES AND MEMBERSHIPS

2001-2003	Student Representative, Kelley School of Business Doctoral Programs Committee
2004-2005	Curriculum Committee, Intermediate Developmental Education, Air Force Institute of Technology
Professional Organizations:	Academy of Management Sigma Iota Epsilon

PUBLICATIONS

2004	Lee, J., Heilmann, S. G., & Near, J. P. (2004). Blowing the Whistle on Sexual Harassment: Test of a model of predictors and outcomes. Human Relations (57)3, 297-322

PRESENTED PAPERS

2002	Lee, J., (Heilmann) Gibson, S., & Near, J. P. (2002). Sexual harassment reporting as whistle-blowing: Test of a model of predictors and outcomes. Paper presented at the 2002 Annual Academy of Management Conference, Denver, CO.
2002	(Heilmann) Gibson, S., Lee, J., & Near, J. P. (2002). Sexual Harassment Reporting and Whistle-blowing: A Proposed Model of Predictors and Outcomes. Paper presented at the International Whistle-blowing Conference, Bloomington, IN.