



**AN EXTENSION OF THE THEORY OF JOB EMBEDDEDNESS:  
AN INVESTIGATION OF EFFECT ON INTENT TO TURNOVER OF  
UNITED STATES AIR FORCE MEMBERS**

THESIS

Charles E. Hassell, Captain, USAF

AFIT/GEM/ENV/05M-04

**DEPARTMENT OF THE AIR FORCE  
AIR UNIVERSITY**

***AIR FORCE INSTITUTE OF TECHNOLOGY***

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**Wright-Patterson Air Force Base, Ohio**

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Charles E. Hassell, B.S.

Captain, USAF

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Charles E. Hassell, BS  
Captain, USAF

Approved:

\_\_\_\_//SIGNED//\_\_\_\_\_  
Daniel T. Holt, Major, USAF (Chairman)

15 Mar 2005  
Date

\_\_\_\_//SIGNED//\_\_\_\_\_  
Sharon G. Heilmann, Major, USAF (Member)

15 Mar 2005  
Date

\_\_\_\_//SIGNED//\_\_\_\_\_  
Timothy S. Webb, Major, USAF (Member)

15 Mar 2005  
Date

**Abstract**

This study investigated the ability of Mitchell, Holtom, Lee, Sablinski, and Erze's (2001) job embeddedness construct to predict intent to turnover after considering the historical predictors of job satisfaction, organizational commitment, job search, and job alternatives. This study extended the research on job embeddedness by investigating the extent to which age, race, gender, and marital status would affect the relationship between job embeddedness and intent to turnover. Results indicated that job embeddedness was a significant predictor of intent to turnover. However, age, race, gender, and marital status were not found to be significant moderators of job embeddedness and intent to turnover.

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Charles E. Hassell

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CHAPTER 1

INTRODUCTION

*Overview*

Turnover has been extensively researched since March and Simon (1958) developed one of the first formal theories of turnover. Since that time, researchers have attempted to understand and predict turnover, and organizations have strived to reduce turnover and associated cost. Researchers are interested in gaining a greater understanding of predicting turnover, as research to date has been able to predict approximately 50% of the known variance of intent to turnover. Thus, 50% of the variance remains to be explained (Steel & Ovalle, 1984).

While researchers are concerned with predicting turnover, organizations are more focused with the costs associated with turnover (Price & Mueller, 1986). For example, the initial costs for training military and civilian employees varies, however all costs are high for the organizations. The initial training cost for an Air Force in-flight refueling operator is \$92,000 per person (Powers, 2001), and civilian recruiting firms typically charge one third of a new hire's starting salary to recruit employees (Maher, 2004). The costs due to turnover do not stop with the initial recruiting and training. For example the annual costs that civilian and military organizations experience are also significant.

Looking at the civilian sector, Rich (2002) stated a large hotel chain experienced an annual cost of \$350 million due to turnover. This expenditure included new employee hiring costs, training costs, and lower productivity costs. Military organizations have also experienced a high annual cost due to turnover. Powers (2001) stated the Air Force spent \$680 thousand per year to train one fighter or bomber pilot. This cost included instructor, school overhead, maintenance and flying costs. The Air Force turnover cost is composed of the cost spent training every new pilot that is commissioned to replace a pilot that has left the Air Force.

The impacts of turnover have prompted much of the interest in research (Price, 1977). High costs due to turnover and unexplained variance of intent to turnover are key reasons for the continued research of turnover. As part of the continued research of turnover, a recent proposal was developed by Hulin (2002), who presented that idea that there are multiple withdrawal routes for a person and that the traditional way of thinking, which assumes a relatively homogeneous workforce, inadequately explained the withdrawal process.

Mitchell, Holtom, Lee, Sablinski, and Erze's (2001) job embeddedness construct is an example of a recent non-traditional withdrawal route. The job embeddedness construct was developed in 2001 as a recent means to predict some of the unexplained variance in turnover (Mitchell & Lee, 2001). The job embeddedness construct focuses on organizational and community factors to predict why people leave their jobs. The leaders of both civilian and military organizations would benefit from an increased ability to predict turnover, and job embeddedness is the newest construct to attempt this.

### *Research Focus*

This study evaluates of the extent to which job embeddedness explains a significant amount of variation in intent to turnover. In the first study on job embeddedness, Mitchell et al. (2001) found job embeddedness to be a significant predictor of turnover over other common predictors; however, these finding need to be validated. The job embeddedness construct is fairly recent, and few studies have tested the validity of job embeddedness (Holtom & O'Neill, 2004; Lee, Mitchell, Sablinski, Burton, & Holtom, 2004; Mitchell et al., 2001). The predictive ability of job embeddedness on intent to turnover will be evaluated by surveying voluntary participants in a maintenance group at a United States Air Force Base with the intent of trying to explain more of the unexplained variance in intent to turnover. By increasing understanding about possible predictors of intent to turnover, organizational leaders may gain new insights as to how to address areas that may lead to employees considering departing the organization. The next chapter provides the necessary framework for understanding this research objective by developing the background on the history of the study of turnover, job embeddedness, and the research objectives.

## CHAPTER 2

### LITERATURE REVIEW

This literature review provides background regarding previous turnover studies, the development of the new construct of job embeddedness, and the research objectives of this study. The discussion of previous turnover studies will be presented in chronological order, to include previous turnover models as well as meta-analytic studies involving turnover. A discussion of the job embeddedness construct (Mitchell et al., 2001) will be presented to gain a better understanding of the development of the job embeddedness construct and of how job embeddedness improves upon the models that have been developed to predict intent to turnover. Finally, the research hypotheses will be presented and discussed.

#### *Turnover*

Turnover occurs when a person leaves a job for a voluntary or involuntary reason. Voluntary turnover is defined as the individual movement across the membership boundary of a social system which is initiated by the individual (Price, 1977). Involuntary turnover, in contrast, is defined as the individual movement across the membership boundary of a social system which is not initiated by the individual such as dismissals, layoffs, retirements, and deaths (Price, 1977).

March and Simon (1958) developed one of the first formal theories of turnover that laid out a conceptual framework that could be used to analyze the withdrawal process. March and Simon suggested that when organizations pay their workers at a level which keeps them motivated to continue working, the employees are more likely to

stay in the organization. They called the balance of organization and employee needs, organizational equilibrium. Inducements and contributions are the two main components that are involved in this equilibrium. Inducements are payments the organization gives to employees, while contributions are payments the workers provide to the company. An example of an inducement is the company paying a worker, while an example of a contribution is an employee's work level. March and Simon advanced the idea of inducements and contributions by stating that each has a utility value. They stated that an inducement utility is the reduction of several components of inducements into a common dimension. A contribution utility, conversely, is the value of the alternatives that an individual foregoes in order to make the contribution. March and Simon suggested that the level of inducements must equal the level of contributions or otherwise the worker may experience a desire to leave the company. For example, if a worker's pay is lower than his or her contributions, the worker will likely look to leave the company in order to return the balance between inducements and contributions (i.e., recreate an equilibrium). Conversely, if workers' inducements are greater than their contributions they will have a higher satisfaction level and less likely to leave the organization.

The motivational components of perceived desirability and perceived ease of leaving the organization are two factors affecting the balance between inducements and contributions (March & Simon, 1958). Changes in the inducement and contribution balance can then affect the propensity of a worker to leave the organization. A large difference between inducements and contribution creates an increased worker level of satisfaction. However, the zero point for a worker's satisfaction is different from the zero point on the inducement and contribution utility line (March & Simon, 1958). The zero

point on the satisfaction line represents the point a worker begins to feel dissatisfaction, which affects the perceived desirability of leaving the organization. However, the zero point on the inducement and contribution utility line represents the point where a worker is indifferent about leaving the organization. This line is affected by a worker's perceived desirability to move and perceived ease of movement. In addition, March and Simon suggested that job satisfaction and organizational size affected the perceived desirability of movement (see Appendix A, Figure A1), while the number of extraorganizational alternatives perceived affected perceived ease of movement (see Appendix A, Figure A2). March and Simon also stated that job satisfaction is the primary factor to influence perceived desirability of movement.

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Insert Figure A1 and A2 about here  
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Job satisfaction is composed of conformity of the job to self image, predictability of job relationships, and compatibility of job and other roles (March & Simon, 1958). March and Simon stated the greater the conformity of the job to self image, the higher the job satisfaction. For example, a low conformity of the job to self image would be a person that believes he or she should be president is actually working as a janitor. The perceived image is much higher than reality; therefore the person will have a lower job satisfaction level. As a result, the lower job satisfaction level leads to a higher perceived desirability of movement. The next component of job satisfaction is predictability of job relationships, and job satisfaction increases as the predictability of job relationships increases (March & Simon, 1958). For example, managing a hydroelectric power plant would demonstrate a high predictability of job relationship because the cost of increasing

production is predictable. The manager can predict the amount of energy the hydroelectric plant will generate based on the amount of water flowing through the generators. The manager's high predictability of the job relationship, which in this case is the amount of energy produced, would cause a higher level of job satisfaction because the manager can repeatedly predict with certainty the amount of energy produced. The final component is job compatibility and other roles. As this component decreases, the level of job satisfaction also decreases (March & Simon, 1958). This would be demonstrated by a manager that sets up primary goals for his or her workers that conflict with other workers' primary goal. For example, a shampoo corporation's advertising division might produce advertisements that make claims that the research and development division cannot live up to. The advertising division's primary goal of enhancing the shampoo's performance might conflict with the research and development's goal of developing a quality product.

Although March and Simon (1958) stated that job satisfaction is the main component that affects perceived desirability of movement, they introduced organizational size as a second significant component which affects perceived desirability of movement. Organizational size impacts the perceived desirability of movement through two paths. The first path is that organizational size impacts the perceived possibility of intraorganizational transfer, which in turn affects the level of perceived desirability of movement. In the first path, a larger organization increases the perceived possibility of intraorganizational transfer which leads to a lower perceived desirability of movement (March & Simon, 1958). Workers in larger organizations might experience a

lower desire to leave the organization because they have the option of transferring within the organization.

The second path where organizational size affects the level of perceived desirability of movement involves the compatibility of job and other roles. For example, organizational size affects the compatibility of job and other roles, which in turn affects job satisfaction and leads to perceived desirability of movement. March and Simon (1958) stated the smaller the size of the work group and the organization, the greater the compatibility of the job and other roles. For example, a worker in a small company is less likely to develop work conflicts because there is a lesser chance that the worker will be involved in overlapping and conflicting group membership. In single purpose groups with overlapping group membership, it is believed that workers find the work less pleasant than where a multipurpose group exists (March & Simon, 1958). The lower work conflict increases compatibility of job and other roles which leads to higher job satisfaction and a lower perceived desirability of movement.

Since March and Simon's (1958) model on perceived desirability of movement and perceived ease of movement was introduced, several researchers have extended it in efforts to understand the employee turnover and withdrawal process. Mobley (1977) further developed the turnover model by adding a set of intermediate steps between job satisfaction and turnover (see Appendix A, Figure A3). The intermediate steps between job satisfaction and turnover attempted to better explain the relationship between the two. The model suggests job dissatisfaction leads to thoughts of quitting, which leads to an evaluation of the cost of quitting. If the costs of quitting are low, the next step is intentions to seek alternatives, followed by search for alternatives, evaluate alternatives

and compare alternative to present job. If the alternatives are better than the current job the workers decides to quit, which leads to turnover.

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Insert Figure A3 about here  
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Mobley's (1977) model was tested in a study by Hom, Griffeth, and Sellaro (1984) where each of the seven steps between job dissatisfaction and turnover was evaluated. The only predictor that was statistically significant was search for alternative, which only explained 3% of the overall variance in turnover. Hom et al. (1984) did find that all model constructs except evaluation of the alternative and turnover were strongly predicted by combinations of their antecedents. Hom et al. also found that satisfaction directly influenced thoughts of quitting, and intent to quit was directly influenced by thoughts of quitting. Finally, satisfaction was found to influence turnover through the path of thoughts of quitting, to expected utility of search, and finally quitting. Therefore, this study demonstrated some validity for satisfaction and thoughts of quitting affecting turnover. The study also presented some support for the order of relationships leading to intent to leave.

At this point, researchers had introduced the ideas of job satisfaction (March & Simon, 1958), intent to leave, search for alternatives, and compare alternatives to present job (Mobley, 1977), to explain the variance in turnover. The turnover model was then further refined by Steers and Mowday (1981), who combined some of the concepts of the previous models and added the ideas of individual attributes and information about job and organization believed to affect turnover (see Appendix A, Figure A4). Steers and Mowday proposed that a worker's individual characteristics and information about job

and organization could affect their job expectations and values that Porter and Steers (1973) presented. They proposed that age, tenure, and family responsibilities could affect the level of expectations a person has. Steers and Mowday proposed job expectations and values then directly influence job affect, which is defined as affective responses to the job and is composed of job satisfaction, organizational commitment, and job involvement. These factors are then believed to be affected by nonwork factors, and all of the factors can lead to desire to stay or leave and finally turnover.

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The first comprehensive test of Steers and Mowday's (1981) model was performed by Lee and Mowday (1987). Lee and Mowday (1987) evaluated the concepts of job and organization, and individual attributes for the explained variance of turnover they provided. Lee and Mowday found that available information about job and organization explained 6% of the explained variance in met expectations, while individual characteristics were not significant. However, information about job and organization, and individual characteristics were both significant in explaining job values. Both job values and expectations were significant in explaining some of the missing variance for job satisfaction, organizational commitment. Expectations explained a significant portion of the variance of job satisfaction and organizational commitment, while job values explained a significant portion of variance of job satisfaction and of organizational commitment (Lee & Mowday, 1987). Therefore, job information and individual characteristics were both significant in explaining some variance of job values,

which in turn was significant in predicting some variance in job satisfaction and organizational commitment.

As Steers and Mowday (1981) added the concept of individual attributes, Price and Mueller (1981) developed the framework for the last significant addition to the turnover model. Price and Mueller presented a turnover model that predicted a positive relationship between job satisfaction and intent to stay (see Appendix A, Figure A5). For example, an increase of job satisfaction is predicted to lead to an increase in intent to stay. Price and Mueller then proposed intent to stay as being negatively related to turnover. Job satisfaction, intent to stay, and turnover were all directly affected by at least one of eleven determinants. Determinants are defined as factors that produce variation in turnover (Price & Mueller, 1981). They proposed that job satisfaction was affected by the determinants: promotional opportunity, pay, distributive justice, instrumental communication, participation, integration, and routine. They also proposed that job satisfaction was negatively affected by routinization, but was positively affected by the other six determinants. In their model, intent to stay was affected by the elements professionalism, kinship responsibility, and general training. Professionalism and generalized training negatively affected intent to stay, while kinship responsibility positively affected intent to stay. Finally, they proposed that turnover was positively affected by opportunity.

The only test of their model was conducted in their 1981 study. They tested 1,091 registered nurses in seven hospitals to estimate a causal model of turnover in organizations (Price & Mueller, 1981). The results of their 1981 study found an 18% explained variance in turnover with only intent to stay, opportunity, and general training

being significant (Price & Mueller, 1981). Price and Mueller's 1981 model has not been tested in any other studies. However, the low explained variance in turnover led Price and Mueller to revise their model and add the last significant predictor to the turnover model.

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Insert Figure A5 about here  
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Price and Mueller (1986) revised their 1981 model by adding the idea of commitment as a step between job satisfaction and turnover (see Appendix A, Figure A6). They predicted that commitment would have a positive relationship with job satisfaction, while intent to leave would have a negative relationship with commitment. They also predicted that intent to leave was positively related to turnover. Professionalism, general training, kinship responsibility, and company size affected the commitment determinant in their model. Price and Mueller predicted that the lower these factors were the lower the commitment and therefore the higher probability of turnover.

Similar to their 1981 model, Price and Mueller presented and tested their 1986 model in the same study. They surveyed 2,192 participants at five general hospitals. Price and Mueller found commitment to not be statistically significant in predicting turnover; however, the four determinants of satisfaction, distributive justice, promotional opportunity, and size were likely significant predictors of commitment. Price and Mueller's 1986 model has also not been tested in any other studies.

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Insert Figure A6 about here  
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Generally, the models used to guide the study of turnover have revolved around the constructs of job satisfaction, organizational commitment, job alternatives, job search behaviors, intentions to leave, and final decisions to leave. Of these variables, job satisfaction and organizational commitment are two constructs that have predicted job turnover with the most success. Yet all of these constructs have been investigated, and they have all added to the explained variance of turnover with differing levels of success (Cotton & Tuttle, 1986; Griffeth, Hom, & Gaertner, 2000; Steel & Ovalle, 1984; Tett & Meyer, 1993)

#### *Analysis of Historical Predictors of Turnover*

From March and Simon's (1958) model to Price and Mueller's (1986), each of the researcher's models have been tested with varying frequencies (Hom et al., 1984; Lee & Mowday, 1987; Schwab & Dyer, 1974). However, the concepts they introduced have been widely tested and validated. Job satisfaction and organizational commitment have been the most widely tested concepts (Griffeth et al., 2000; Mitchell et al., 2001; Tett & Meyer, 1993). Several attempts have been made to explore the effectiveness of these concepts, using meta-analytic techniques that aggregated the results across studies. Although many of the meta-analysis have shown significant results, the findings are modest at best (Mitchell et al. 2001).

*Intent to Leave.* Intent to leave is defined as an individual's perception of the likelihood of discontinuing membership in an organization (Price & Mueller, 1986). Intent to leave has been tested in meta-analyses to determine the relationship between intent to leave and turnover. For example, Tett and Meyer (1993) performed a meta-analysis involving 178 independent samples from 155 studies on job satisfaction,

organizational commitment, turnover intention, and turnover. Turnover intention was found to be the strongest predictor of turnover. Steel and Ovalle (1984) performed a meta-analysis on 34 studies and found a weighted average correlation of 0.5 between behavioral intentions and employee turnover. They found that behavioral intentions were more predictive of turnover than job satisfaction and organizational commitment. As further evidence of intent to leave as the strongest predictor of turnover, Griffeth et al. (2000) performed a meta-analysis on 500 correlations from 42 studies on turnover antecedents and found intent to quit being the most significant in predicting turnover. Both of these meta-analyses have not only shown intent to be significant in predicting turnover, but also the strongest predictor of turnover.

Hom, Carnikas, Prussia, and Griffeth (1992) performed a meta-analysis across 17 studied. They found that intent to leave was significantly correlated to turnover, and that the correlation was positive. This was expected considering that the more a person wants to leave an organization, the higher his or her probability to leave.

*Job Satisfaction.* Job satisfaction is defined as the degree to which members of a social system have a positive affective orientation toward membership in the system (Price, 1977). Tett and Meyer (1993) also analyzed job satisfaction as a predictor of turnover. They found job satisfaction was a significant predictor of turnover; however, it was a weaker predictor than intent to leave and organizational commitment. Griffeth et al. (2000) found that although job satisfaction performed worse than intent to leave and organizational commitment in predicting turnover, job satisfaction was still a significant predictor turnover. Job satisfaction, however, was a stronger predictor turnover than job alternatives.

Hom et al. (1992) found job satisfaction had a significant, negative correlation to turnover. The job satisfaction correlation to turnover was again lower than intent to leave but higher than job alternatives. Steel and Ovalle (1984) performed analysis on 34 studies and again found job satisfaction to be negatively correlated with turnover. The researchers found job satisfaction to turnover correlations ranging from .09 to -.49 with an average of -.28. The sign difference was a result of how the investigation coded turnover; however, all the studies found a negative correlation between job satisfaction and turnover. Cotton and Tuttle (1986) also found that job satisfaction was strongly correlated to turnover and classified it in the strong confidence category. The results of these studies have shown that job satisfaction is significant in predicting turnover and negatively correlated with turnover; however, it has not been found to be the strongest predictor of turnover.

*Organizational Commitment.* Price and Mueller (1986) defined commitment as loyalty to the organization. Cohen and Hudecek (1993) performed a meta-analysis on 36 independent samples to determine the relationship between organizational commitment and turnover. They found that organizational commitment was significantly and negatively correlated with turnover. Tett and Meyer (1993) found organizational commitment to be a significant predictor of turnover, and they also found that it was only weaker to intent to leave in the ability to predict turnover. Further support was provided by Griffeth et al. (2000), who found organizational commitment to be a significant predictor of turnover. Steel and Ovalle (1984) found that organizational commitment was significantly negatively correlated to intent to leave and that it was a stronger predictor than job satisfaction. Finally, Cotton and Tuttle (1986) also found that

organizational commitment was strongly correlated to turnover and classified it in the strong confidence meaning that it is significant to the ( $p < .005$ ) level.

*Job Alternatives.* Lee and Mowday (1987) define job alternatives as the likelihood that an individual can find an acceptable job opportunity. Past meta-analyses have shown that job alternatives is the weakest of the common predictors of turnover. For example, Griffeth et al. (2000) grouped job alternative into the category of external environment, which included job alternatives and comparison of alternatives with present job. Job alternatives correlation with turnover was significant; however, the job alternatives correlation was only moderately correlated with turnover. In Tett and Meyer's (1993) study, job alternatives correlation was much lower than that of job satisfaction and organizational commitment. Hom et al. (1992) found that job alternative was not a significant predictor of turnover. These three analyses have shown differing degrees of strength to the job alternatives and turnover relationship. However, all the studies show that job alternatives is clearly weaker than job satisfaction, organizational commitment and intent to leave as a predictor of actual turnover.

*Job Search.* Job search is defined as the level of actions a person might take during a job search process (Kopleman, Rovenpor, & Milsap, 1992). Research has shown a strong relationship between job search and turnover. For example, the job search and turnover correlation was higher in this study than that of organizational commitment and job satisfaction (Griffeth et al., 2000). Hom et al. (1992) provided further support in their study where job search had a higher correlation with turnover than all other predictors with the exception of intent to leave.

Overall, meta-analysis studies on turnover have found intent to leave to be the strongest predictor of turnover, followed by job search, organizational commitment, and job satisfaction. These predictors were all found to be significant in predicting turnover; however, job alternative was the weakest predictor.

While these efforts have provided consistent significant relationships between predictor variables and turnover, their findings still do not account for 50% of the variance in intent to turnover (Steel & Ovalle, 1984). For example, Mitchell and Lee (2001) claimed the previous studies have led to knowledge on attitudes and alternatives but not much is known beyond this current understanding of turnover. Mitchell and Lee (2001) also stated that these attitudinal variables only control 5% of the variance in job turnover. The traditional models on turnover have had no overwhelming success in predicting turnover, and a new model is needed to provide a strong relationship to predicting turnover.

### *Job Embeddedness*

Job embeddedness is a construct that has been introduced to improve the models that have been developed to predict job turnover (Mitchell et al., 2001). The construct of job embeddedness was derived from two main concepts. The first of which was Lewin's (1951) field theory, which included the concept of embedded figures and fields. The second main concept included three non-traditional ideas, which are listed as follows: (a) Price and Mueller's (1981) nonwork factors, (b) Reicher's (1985) other organization-focused predictors, and (c) Lee and Mitchell's (1994) unfolding model of turnover.

Field theory presents the idea that people have a life space where parts of their lives are connected to other people (Lewin, 1951). In essence, the idea of embedded

figures and fields assumes that each individual within an organization is simultaneously a member of many groups (e.g., family, social organizations, and professional organizations) that shape his or her thoughts, activities, and choices. As individuals become attached to these organizations, they become figures that are embedded within this web of groups, which serves as a background that must be considered if their attitudes, beliefs, values, and decisions are to be understood. Job embeddedness applies field theory by stating people have many influences from other people that affect their life space and leads to become embedded in an organization or a community.

The second main concept that job embeddedness was derived from included three non-traditional ideas. The first non-traditional idea was Price and Mueller's (1981) nonwork factors, which included professionalism, generalized training, and kinship responsibility. They related these factors to intent to stay in their 1981 model and later related these to commitment in their 1986 model. The three factors are defined as follows: (a) professionalism is the degree to dedication to occupational standards, (b) generalized training is the degree to which the occupational socialization of a person results in increased productivity of other organizations, and (c) kinship responsibility is the degree of a persons obligations to relatives in the community (Price & Mueller, 1981). Reicher's (1985) other organization-focused predictors, the second non-traditional idea, focused on identification with the goals of an organization's multiple aspects such as top management, customers, unions, and the public at large as a sign of commitment. The third non-traditional idea was the unfolding model on turnover. The unfolding model of turnover is based on the idea that people leave who are satisfied with their jobs, do not search for other jobs before leaving, and leave because of a shocking

event. Embedded figures are immersed in their backgrounds, and while attached to their backgrounds, they become hard to separate and eventually become part of the surrounding (Mitchell et al., 2001).

Given this idea, job embeddedness was designed to take a number of additional concepts into account (e.g., nonwork factors, other organization-focused predictors, and new turnover theory; Mitchell et al., 2001). Nonwork factors such as community friendships, church, and family ties were considered to have an impact on voluntary turnover. Lee and Maurer (1999) found the nonwork factors of having children and a spouse to be a better predictor of voluntary turnover than organizational commitment. Other organization-focused predictors include unions, company perks, and projects. Finally, job embeddedness was formed from the new turnover theory that was researched by Lee and Mitchell (1994) and Lee, Mitchell, Holtom, McDaniel, and Hill (1999).

Job embeddedness considers the extent to which individuals are part of an intricate web that includes membership in a professional organization and larger community. Specifically, individuals are embedded in their job when: (a) they feel a close *link* to their organization and community, (b) they feel that their organization and community *fit* or compliment each other, and (c) they feel it would be a *sacrifice* to break the ties with their organization or community (see Appendix A, Figure A7). Individuals become completely embedded when they have felt a sense of link, fit, and sacrifice between the organization and community. Moreover, individuals may have a certain sense of link, fit, and sacrifice with the organization that is distinct from the sense of link, fit, and sacrifice that individuals have regarding their community.

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Further describing these elements, links represent how individuals are tied to other people and activities within their community and organization (Mitchell et al., 2001). For example, a person's friends, monetary investments, and church all represent unique links that an individual may have. A person's friends could create links with the community or organization. A person's friend at work helps build an organizational link, while a neighbor most likely provides a community link. A person's link to his or her community friends could be high, while his or her link to work friends is low. A monetary investment in a company 401K plan is an example of an organizational link. A person's church serves as his or her community link. An increase in the number and strength of people's link with their community and organization will increase their embeddedness with the community and organization.

Fit represents a person's perceived compatibility or comfort level with an organization or community (Mitchell et al., 2001). Weather, amenities, values, career goals, and plans for the future are additional factors impacting fit (Mitchell et al., 2001). For example, farmers who have lived in rural Arizona all of their life might have a lower sense of fit if they moved to New York City to work as stockbrokers on Wall Street. Assuming nothing is done to prepare them for their new roles as brokers; this might be expected to be an example of poor community and organizational fit. The farmers might experience low community fit because they would not experience the open spaces, warm weather, and slow life style that they are accustomed to in Arizona. The farmers might also experience a lower sense of organizational fit because they would not feel

comfortable working in these high-paced office jobs. This is because they might perceive themselves as being out of place with the fast paced life style.

Sacrifice reflects how much a person feels he or she will be giving up material or psychological benefits by leaving a job (Mitchell et al., 2001). An example of an organizational related sacrifice is giving up an interesting project or perks for a higher paying job. A person may desire a higher paying job but he or she would likely perceive a sacrifice by leaving a long term project or by giving up a designated parking spot. An example of community sacrifice is leaving the comforts of a known community for a new community. Moving children to new schools and moving away from community friends are also examples of sacrifice as a result of leaving an organization.

When link, fit, and sacrifice are considered, Mitchell et al. (2001) suggest that an individual's intentions to leave an organization voluntarily can be predicted more accurately. This is a departure from traditional models of turnover that have been centered on the idea that people consider leaving their jobs and begin searching for alternatives only when they are dissatisfied with their current jobs (Mobley, 1977; Spector, 1985). Mitchell et al. argue, however, that many satisfied employees voluntarily leave, suggesting that other factors may trigger an individual's decision to leave where some of these factors may be work related while others may not be.

Job embeddedness differs from traditional models that include variables such as job satisfaction and organizational commitment and their relation to turnover by addressing community factors, and by presenting the thought the people can become embedded within their jobs (Mitchell et al., 2001). The combined three elements of link, fit, and sacrifice each flow into organizational job embeddedness and community job

embeddedness (See Appendix A, Figure A8). The community and organizational job embeddedness then comprise the total job embeddedness element. The three community elements and the three organizational elements can be a possible key influence on being able to better predict turnover.

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The job embeddedness construct has been tested three times with similar results (Holtom & O’Neill, 2004; Lee et al., 2004; Mitchell et al., 2004). Mitchell et al. performed the first analysis of the job embeddedness construct. Mitchell et al. surveyed 232 grocery store respondents from eight stores, and they also surveyed 208 hospital respondents. The hospital respondents included nurses, administration, maintenance, admitting, cafeteria, and special services personnel. They found that job embeddedness was a significant predictor of turnover for the grocery and hospital workers. Mitchell et al. stated that job embeddedness increased the prediction of turnover above that of job satisfaction and organizational commitment for the grocery and hospital workers. They also found that job embeddedness increased the prediction of turnover above that of job search and job alternatives for both samples. Finally, Mitchell et al. reported that job embeddedness was negatively correlated with turnover. Holtom and O’Neill (2004) surveyed 208 hospital workers and reported similar findings. Job embeddedness was found to be a significant predictor of turnover above that of job satisfaction, organizational commitment, job search, and job alternatives.

The community and organizational sub-dimensions of job embeddedness have also been tested for their ability to predict turnover in two studies (Holtom & O’Neill,

2004; Lee et al., 2004). Community and organizational job embeddedness both include the sub-dimensions of link, fit, and sacrifice. The community and organizational job embeddedness sub-dimensions were first presented in 2001 (Mitchell & Lee, 2001). However in 2004, Holtom and O'Neill reported the first evidence that community job embeddedness was a significant factor in retention as compared to organizational job embeddedness. Lee et al. surveyed 829 workers at a large regional service center in 1998. The workers included telemarketing, data processing, customer service, and human resource personnel. Lee et al. segregated job embeddedness into two major components: (a) on the job embeddedness, that is organizational link, fit, and sacrifice, and (b) off the job embeddedness, that is community link, fit, and sacrifice. Lee et al. found that community job embeddedness was significant in predicting turnover, while organizational job embeddedness was not.

### *Research Objectives*

Individual factors such as age, race, gender, and marital status have been shown to have a significant affect on job satisfaction, organizational commitment, and turnover (Blau & Lunz, 1998; Cotton & Tuttle, 1986; Finegold, Mohrman, & Spreitzer, 2002; Greenhaus, Parasuraman, & Wormley, 1990; Martin, 1979; Miller & Wheeler, 1992; Viscusi, 1980; Wesolowski & Mossholder, 1997; Zatzick, Elvira, & Cohen, 2003). For example, the relationships presented in these studies found that age had an effect on predicting turnover; these studies also presented that older respondents had higher job satisfaction and organizational commitment than younger respondents. The researchers have found that race can affect turnover, and that blacks are less likely to be satisfied than whites at work. Research has shown many contrasting studies in the relationship between

gender and turnover, but the relationship between gender and job satisfaction has been shown that men have reported higher job satisfaction than women. Finally, the relationship between marital status and turnover found in these studies is that marital status is significant in predicting turnover and that married respondents have reported higher levels of job satisfaction than single respondents

Research has indicated that demographic variables have an effect on job satisfaction and organizational commitment, while researchers have proposed that job satisfaction and organizational commitment have some similar sub-dimensions with job embeddedness. For example, Mitchell et al. (2001) stated that job embeddedness has some similarities with job satisfaction and organizational commitment. However before going into the similarities, the job satisfaction and organizational commitment that Mitchell et al. refer to must first be defined. Job satisfaction is defined as how people feel about their jobs or different aspects of their jobs (Spector, 1997). Job satisfaction is composed of nine sub-dimensions which are pay, promotion, supervision, fringe benefits, contingent rewards, operating procedures, coworkers, nature of work, and communication. Job satisfaction is similar to job embeddedness in that both have some conceptual similarities between organizational sacrifice and pay satisfaction (Mitchell et al., 2001). For example, the job satisfaction pay item of “I feel I am being paid a fair amount for the work I do” (Spector, 1997, p. 75) is similar to the job embeddedness organizational sacrifice item of “I am well compensated for my level of performance” (Mitchell et al., p. 1121). Because of the similarities between job embeddedness, organizational commitment, and job satisfaction, it is believed that age, race, gender, and

marital status will have similar effects on job embeddedness as they do on organizational commitment and job satisfaction.

Meyer and Allen (1997) defined organizational commitment as the view that commitment is a psychological state that characterizes the employee's relationship with the organization and has implications for the decision to continue membership with the organization. They further broke down organizational commitment by stating that it is comprised of affective, continuance and normative commitment (Meyer & Allen, 1997). Affective commitment refers to the employee's emotional attachment, identification with, and involvement in the organization. Continuance commitment is defined as an awareness of the costs associated with leaving the organization. Finally, normative commitment is defined as a feeling of obligation to continue employment. Mitchell et al also proposed that some sub-dimensions of job embeddedness are similar to organizational commitment. For example, the continuance commitment dimension of organizational commitment (Meyer & Allen, 1997) is similar, at a general level, to the organizational sacrifice dimension of job embeddedness (Mitchell et al., 2001). The continuance commitment item of "It would be very hard for me to leave my organization right now, even if I wanted" (Meyer & Allen, 1997, p. 118) is similar to the organizational sacrifice item of "I would sacrifice a lot if I left this job" (Mitchell et al. p. 1121).

The individual characteristics of age, race, gender, and marital status are of interest because the characteristics can be used to gain insight to who is more likely to become embedded. Because of the similar relationship between job embeddedness and job satisfaction and organizational commitment, the researcher proposes that job

embeddedness will have a similar relationship with the individual characteristics as job satisfaction and organizational commitment do. For example, because older respondents were found to have higher levels of job satisfaction, the researcher believes that job embeddedness will be higher in older respondents than younger respondents (Finegold et al., 2002). Carrying on with this thought, job embeddedness would likely be higher for white, males, and married respondents because similar findings were found with job satisfaction (Greenhaus et al., 1990; Martin, 1979; Miller & Wheeler, 1992).

This is important to organizations because this would allow them to focus their resources on keeping people who are less embedded. Companies might be able to tell from individual characteristics what worker is likely to be less embedded. The companies could spend more time and effort on developing a way to improve the worker's job embeddedness level. For example, Holtom and O'Neill (2004) found that community job embeddedness was a significant factor for nurses in predicting turnover while organizational job embeddedness was not. This information could be used by organizations to improve the nurse's community job embeddedness level. The areas this study will evaluate in relation to job embeddedness and turnover are: age, gender, race, and marital status (see Appendix A, Figure A9 for the hypothesized model). When considering the effects of individual characters on turnover, job embeddedness may be moderated by individual characteristics and job embeddedness may increase predictability of intent to turnover.

Job embeddedness was found to be statistically significant in predicting turnover above that of job satisfaction, organizational commitment, job alternatives, and job search (Mitchell et al., 2001). Job embeddedness was statically significant in predicting

turnover after the other predictors were considered. Other researches have extended the original study performed by Mitchell et al. For example, Holtom and O’Neill (2004) performed a study on 232 hospital employees in the northwest region of the United States. Their goal was to determine if job embeddedness improved the prediction of voluntary turnover above and beyond other predictors such as job satisfaction, organizational commitment, job alternatives, and job search. They found that job embeddedness was negatively correlated to intent to leave, job embeddedness improved the prediction of voluntary turnover above other common predictors, and that job embeddedness did not differ across nurses and other hospital employees. Because job embeddedness was found to be significant in the Mitchell et al.’s study and later in Holtom and O’Neill’s study, job embeddedness is expected to be valid during this research effort. It is believed that job embeddedness will decrease intent to leave. For example, workers who are embedded in their job will be less likely to leave.

*Hypothesis 1. After introducing appropriate control variable, gender, job embeddedness will account for variance in turnover intentions beyond the variance accounted for by job satisfaction, organizational commitment, job search, and job alternatives.*

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### *Age*

Age has also been studied in many studies on turnover and has been involved in multiple meta-analyses. Cotton and Tuttle (1986) performed a meta-analysis on 120 sets of data and found age to have a strong confidence in predicting turnover. They found

that age was significantly and negatively correlated to turnover. Age has been found to have a low significance in predicting turnover in Griffeth et al's. (2000) meta-analysis. Griffeth et al. suggested that the correlation is negative because as workers get older they are less likely to want to leave. Healy, Lehman, and McDaniel (1995) did a meta-analysis of 46 samples on 42,625 individuals from 1959 to 1993 and also found that age had little impact on predicting turnover. However, they did find that age was significantly and negatively correlated with turnover. These three studies support a negative relationship between age and turnover, which means that younger individuals are more prone to turnover than older individuals.

Age has also been studied in relation to job satisfaction and organizational commitment. Finegold et al. (2002) performed a study on 2,946 participants across six companies, and they found that higher levels of organizational commitment and job satisfaction were found for the older group than for the younger group, suggesting the effects of job satisfaction and commitment are expected to be greater for older respondents than for younger.

It is also hypothesized that older workers will also experience a higher level of job embeddedness because this has also been demonstrated in research related to job satisfaction and organizational commitment. Spector (1997) stated that job satisfaction increases with age, and this statement is supported by a positive correlation between age and job satisfaction (Brush, Moch, & Pooyan, 1987). Brush et al. (1987) sampled 6,485 personnel in the manufacturing, service, and government career fields. All three career fields were found to have a positive correlation between age and job satisfaction, but only the correlations with manufacturing and government were found to be significant.

Researchers have also found a positive correlation between organizational commitment and age (Angle & Perry 1981; Sheldon, 1971). Sheldon (1971) conducted the study on 102 engineers and found that people over 40 years old had a higher commitment level than people below 40. Angle and Perry (1981) surveyed 1,244 people working for 24 fixed route bus services in the western United States and found that commitment was positively correlated with age. Because of the positive correlations found in the studies and findings that suggest older employees have higher job satisfaction and organization commitment than younger employees, it is hypothesized that older workers will be affected by job embeddedness more than younger respondents

*Hypothesis 2. After introducing appropriate control variables, age will affect the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for older respondents compared to younger respondents*

### *Race*

Several studies have been performed on the relationship between race and turnover. These studies have found that race has mixed results in predicting turnover. For example, white respondents versus non-white respondents were found to have no significance in predicting turnover (Griffeth et al., 2000). However, Zatzick et al. (2003) found that among non-whites the proportion of a person's own race within a company can affect turnover. They found that increasing the proportions of one's own race was negatively and significantly related to turnover. Zatzick et al. stated that increasing the proportion of one's own race will also increase the likelihood that an employee will stay in the organization. They stated that this is likely because individuals of the same race

create a support environment. This effect is stronger for minority groups with smaller proportions.

Several studies have been conducted to analyze the relationship between race and job satisfaction. Wesolowski and Mossholder (1997) found race to be significantly correlated to job satisfaction for superiors and for subordinates. They surveyed 296 people working at two service-oriented companies. Greenhaus et al. (1990) surveyed 996 managers, and found that blacks were less likely to be satisfied with their jobs than whites. These negative correlations suggest that minority status affects job satisfaction such that minorities have a greater affect than their non-minority counterparts. As job embeddedness and job satisfaction are both believed to reduce one's intent to depart the organization, the effects of race on the relationship between job embeddedness and turnover is believed to be similar to the relationship race has on job satisfaction and intent to turnover. It is believed that race will correlate with lower levels of job embeddedness and higher levels of turnover for this study because the survey respondents are in a rural cold weather climate with very few minorities in the community. It is predicted that the rural location and cold environment will lower the community link and fit for minorities, and therefore make it more likely that minorities will leave the organization.

*Hypothesis 3. After introducing the appropriate control variables, racial background will affect the relationship between job embeddedness and turnover such that the affects of job embeddedness on turnover intentions will be greater for majority respondents compared to minority respondents.*

## *Gender*

Researchers have extensively studied the relationship between gender and turnover with no clear behavior pattern. Mobley (1982) stated that no simple pattern emerges when the relationship between gender and turnover is examined. However, other researchers have found some clear relations between gender and turnover. Cotton and Tuttle (1986) reported mixed results regarding gender intent to leave. For example, Cotton and Tuttle found 8 studies that demonstrated women were more likely to leave and 11 studies that found no difference between men and women. Miller and Wheeler (1992) also performed a study on the effect of gender on intent to leave. Their study found that gender was negatively correlated with job satisfaction and positively correlated with intent to leave. The results indicated that women were more likely to report an intent to leave than men. Although several studies have found differences between men and women in turnover behavior, there is no definitive answer on the relationship between gender and turnover.

Researchers have also analyzed gender effect on job satisfaction. Miller and Wheeler (1992) performed a study on the relationship between gender and job satisfaction. They found the relationship between gender and job satisfaction indicated that men were more likely to be more satisfied than women. This was in agreement with a previous study done by Brush et al. (1987) where they found gender was significantly and negatively correlated with job satisfaction. This indicated that males in the manufacturing and service career fields were more satisfied than females. There was no statistical significant relationship between males and females in the government career field.

The gender effect on organizational commitment has not been consistent as job satisfaction. For example, Vivien and Thompson (1998) found that among police officers, there was no significant relationship between gender and organizational commitment even though women reported a higher mean score of organization commitment than men. Bar-Hayim and Berman (1992) surveyed 1,299 workers at 14 major Israeli industrial enterprises, and found that women had higher levels of organizational commitment than men.

As the above research found, men are more satisfied than women in their job, and because job satisfaction is positively correlated with the organizational dimension of job embeddedness, job embeddedness is believed to have a similar relationship with gender as job satisfaction, which is that men are more satisfied with their jobs than women.

*Hypothesis 4. After introducing appropriate control variables, gender will affect the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for male respondents compared to female respondents.*

#### *Marital Status*

Marital status has also been analyzed in many studies on turnover. For example, Cotton and Tuttle (1986) performed a meta-analysis on the relationship between marital status and turnover. They found that a weak to modest relationship between marital status and turnover. Married respondents demonstrated a negative correlation to turnover. Viscusi (1980) also found support for married respondents being less likely to leave an organization, applying a self-developed probability equation. This equation measures the probability that a worker will quit his or her job. The equation uses the

independent variables of age, race, years of schooling, number of children, marital status, health impairments, years of experience at the organization, wage rate, and the difference between the actual and predicted wage to calculate the probability that a worker will quit. Using this equation, Viscusi (1980) indicated that that married participants demonstrated a lower quit probability for females and males.

Finally, Martin (1979) performed a study on marital status and its effect on job satisfaction. Martin found marital status to be moderately correlated to job satisfaction, and had almost no correlation with intent to leave. Waters, Roach, and Waters (1976) found a weak positive correlation between marital status and job satisfaction. This would suggest that married respondents are more satisfied than single respondents, and therefore marital status affects job satisfaction such that married couples are less likely to leave compared to single. It is hypothesized that this relationship will hold true between marital status and job embeddedness because of the similar relationship between job satisfaction and the organizational factors of job embeddedness.

*Hypothesis 5. After introducing appropriate control variables, marital status will affect the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for married respondents compared to single respondents.*

## CHAPTER 3

### METHOD

#### *Data Collection Procedures*

Data were collected via a 124-item survey to 250 members of a maintenance unit assigned to a northern-tier United States Air Force (USAF) installation. To ensure anonymity of all participants the survey packages were distributed to all voluntary participants and returned to a central collection point in a sealed envelope. The survey packages included the survey and a letter to the participants. The letter to participants provided information on how to fill out the survey and on how to properly return the survey to the central collection point. The letter to participants also ensured the individuals that their anonymity would be maintained. Participants were instructed to mail the survey back in the self addressed envelope if they missed the deadline to turn in the surveys to the central collection point.

The purpose and expectations of the survey were explained to participants via a letter included as part of the survey package as well as again on the first page of the survey. In the event that respondents had questions regarding survey purpose or instructions, contact information was provided on the letter to participants as well as on the survey. A total of 224 usable surveys were returned, resulting in a 89.6% response rate.

#### *Sample Characteristics*

Respondents ranged in age from 18 to 47, with an average age of 29. There were 188 men, 33 women, which resulted in 85.1% of the respondents being male while 14.9%

were female. A total of 182, or 81.3% of the respondents were white in race followed by 4.9% Black, 4.9% Hispanic, 1.8% Asian, 0.4% Native American, and 4% reported “other”. Married respondents comprised the majority of the participant with a 63.5% compared to 36.5% single participants. The majority of the respondents, 49.1%, had less than two years of college education, 21.6% had a high school education, 18.9% had greater than two years of college, 8.6% had a bachelor’s degree, and 1.8% had a graduate degree. The average rank of the respondents was a staff sergeant (see Appendix B, Table B1 for a chart of military ranks), and staff sergeants comprised the mode, the largest number of respondents, with 25.7%. The average salary range was from 20,000 to 30,000 dollars, with a 32% of the total respondents falling into this range.

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*Measures*

A 124-item questionnaire was used to collect all of the data used in this study (Appendix C presents a copy of the questionnaire). The specific measures included will be described next.

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*Job Embeddedness*

The Job Embeddedness Scale (Mitchell et al., 2001) measures the strength of a person’s link, fit, and sacrifices for the community and organization. The job embeddedness construct is composed of the organizational job embeddedness element and the community job embeddedness element. The organizational and community job

embeddedness each contain the three sub-dimensions of link, fit, and sacrifice. Job embeddedness was the mean of the six sub-dimensions. Participants indicated their level of agreement with the items on a seven-point Likert-type scale anchored by “Strongly Disagree” (1) and “Strongly Agree” (7). Participants also indicated their level of agreement by filling in numerical fill in questions, and yes or no questions. The internal reliability of this measure was .90. Refer to Appendix C, items 1 through 40 for the job embeddedness scale. The average scale response was 7.88 (*S.D.* = 3.90; *n* = 224).

*Fit to community.* The fit to community sub-dimension was measured with five items. A typical question on the scale was, “I really love the place where I live”. The internal reliability of this sub-scale was .89. Previous uses of this measure resulted in an internal reliability estimate of .78 (Mitchell et al., 2001). Refer to Appendix C, items 1, 3, 5, 8 and 9 for the fit to community sub-scale. The average scale response was 3.67 (*S.D.* = 1.59; *n* = 224).

*Fit to organization.* The fit to organization sub-dimension was measured with nine items. A typical question on the scale was, “I like the members of my work group”. The internal reliability of this sub-scale was .90. Previous uses of this measure resulted in an internal reliability estimate of .75 (Mitchell et al., 2001). Refer to Appendix C, items 2, 4, 6, 7, 10, 11, 12, 13 and 14 for the fit to organization sub-scale. The average scale response was 4.85 (*S.D.* = 1.27; *n* = 224).

*Link to community.* The link to community sub-dimension was measured with six items. A typical question on the scale was, “How many of your closest friends live nearby”. Items 29 and 31 were recoded in that responses of one or greater were recoded into one. Responses of zero were left as a zero response. The recoding was performed to

put all items in a dichotomous form. The internal reliability was calculated using the Kuder-Richardson formula 21 test. The Kuder-Richardson formula 21 is a statistical test allowing the calculation of reliability for dichotomous data, a yes or no set of data (Hastian, & Whalen, 1976). The internal reliability of this sub-scale was .47. Previous uses of this measure resulted in an internal reliability estimate of .77 (Mitchell et al., 2001). Refer to Appendix C, items 29, 31, 37, 38, 39 and 40 for the link to community sub-scale. The average scale response was 0.34 (*S.D.* = 0.24; *n* = 224).

*Link to organization.* The link to organization sub-dimension was measured with seven items. A typical question on the scale was, “How long have you been at your present position”. The internal reliability of this sub-scale was .47. Previous uses of this measure resulted in an internal reliability estimate of .65 (Mitchell et al., 2001). Refer to Appendix C, items 28, 30, 32, 33, 34, 35 and 36 for the link to organization sub-scale. The average scale response was 29.29 (*S.D.* = 21.36; *n* = 224).

*Community related sacrifice.* The community-related sacrifice sub-dimension was measured with three items. A typical question on the scale was, “Leaving this community would be very hard”. The internal reliability of this sub-scale was .61. Previous uses of this measure resulted in an internal reliability estimate of .64 (Mitchell et al., 2001). Refer to Appendix C, items 15, 17, and 19 for the community related sacrifice sub-scale. The average scale response was 4.46 (*S.D.* = 1.23; *n* = 224).

*Organizational related sacrifice.* The organizational-related sacrifice sub-dimension was measured with ten items. A typical question on the scale was, “I would sacrifice a lot if I left this job”. The internal reliability of this sub-scale was .85. Previous uses of this measure resulted in an internal reliability estimate of .82 (Mitchell

et al., 2001). Refer to Appendix C, items 16, 18, 20, 21, 22, 23, 24, 25, 26 and 27 for organizational related sacrifice sub-scale. The average scale response was 4.46 (*S.D.* = 1.10; *n* = 224).

### *Job Satisfaction*

Job satisfaction is intended to measure how people feel about their jobs or different aspects of their jobs (Spector, 1997). It is viewed as the extent to which people like or dislike their jobs. Several facets of job satisfaction were measured using Spector's (1985) 36 item job satisfaction survey. Items 41 through 76 on the survey represented the job satisfaction measure (see Appendix C). Job satisfaction was the average of these 36 items. Participants indicated their level of agreement with the items on a six-point Likert-type scale anchored by "Strongly Disagree" (1) and "Strongly Disagree" (7). The internal reliability of this measure was .90. Previous uses of this measure resulted in an internal reliability estimate of .92 (Mitchell et al., 2001). Refer to Appendix C, items 41 through 76 for the job satisfaction measure. The average scale response was 3.90 (*S.D.* = 0.63; *n* = 224).

### *Organizational Commitment*

Organizational commitment is intended to measure the view that commitment is a psychological state that characterizes the employee's relationship with the organization, and has implications for the decision to continue membership in the organization (Meyer & Allen, 1997). Items 87 through 109 on the survey represented the organizational commitment measure (see Appendix C). Organizational Commitment was the average of these 23 items. Participants indicated their level of agreement with the items on a seven-point Likert-type scale anchored by "Strongly Disagree" (1) and "Strongly Agree" (7).

The internal reliability of this measure was .84 for the grocery store population, and .87 for the hospital population. Previous uses of this measure resulted in an internal reliability estimate of .65 (Mitchell et al., 2001). The average scale response was 3.77 (*S.D.* = 1.02; *n* = 224).

### *Job Alternatives*

Job alternatives is intended to measure the extent to which respondents feel they have a job alternative other than their current job (Lee & Mowday, 1987). Lee and Mowday's (1987) two-item measure of job alternatives was used in this study. These items measure the extent to which participants feel they have a job alternative. Participants indicated their level of agreement with the items on a five-point Likert-type scale anchored by "Unlikely" (1) and "Very Likely" (5) as the extremes. A typical question on the scale was, "What is the probability that you can find an acceptable alternative to your job". Job alternative was the average of the responses on the two items. The internal reliability of this sub-scale was .79. Previous uses of this measure resulted in an internal reliability estimate of .93 (Lee & Mowday, 1987). Refer to Appendix C, items 110 and 111 for the job alternatives measure. The average scale response was 4.01 (*S.D.* = 0.93; *n* = 224).

### *Job Search Behavior*

Job search behavior is intended to measure the extent to which the respondents display actual search activity (Kopelman et al., 1992). Kopelman et al's. (1992) ten-item measure of job search behavior was used in this study. The job search behavior scale measures the extent to which participants demonstrate actual job search behavior. The job search behavior scale presented a series of behaviors that the participants selected yes

or no to indicate whether they had participated in that activity or not. A typical question on the scale was “During the past year have you revised your resume”. Job search was the average of the ten items. The internal reliability was calculated using the Kuder-Richardson formula 21. The internal reliability of this sub-scale was .66. Previous uses of this measure resulted in an internal reliability estimate of .80 (Mitchell et al., 2001). Refer to Appendix C, items 77 through 86 for the job search behavior measure. The average scale response was 0.26 (*S.D.* = 0.22; *n* = 223).

#### *Intent to Leave*

Intent to leave is intended to measure the extent to which respondents intend to leave an organization (Hom et al., 1984). Hom et al.’s three-item measure of intentions to leave was used to measure the extent that a person has feeling to leave an organization. Participants indicated their level of agreement with the items on a five-point Likert-type scale anchored by “Unlikely” (1) and “Certain” (5) as the extremes. A typical question on the scale was “Do you intend to leave the organization within the next 12 months”. Intent to leave was the average of three items. The internal reliability of this sub-scale was .97. Previous uses of this measure resulted in an internal reliability estimate of .95 (Hom et al., 1984). Refer to Appendix C, items 112 through 114 for the intent to leave measure. The average scale response was 2.13 (*S.D.* = 1.41; *n* = 224)

## CHAPTER 4

### RESULTS

#### *Overview*

This chapter provides a summary of the results from the analysis of the job embeddedness survey data which was administered to a maintenance unit assigned to a northern-tier USAF installation. The analyses included an examination of convergent and discriminant validity analysis, and results of hypotheses 1 through 5, and additional research related to furthering investigating hypotheses.

The first step in the researcher's analysis was to evaluate convergent and discriminant validity. Convergent validity implies that several different methods for obtaining the same information about a given trait or concept produce similar results (Litwin, 1995). A survey instrument is defined as not having discriminant validity if it is shown to not correlate too closely with similar but distinct concepts or traits (Litwin, 1995).

Job embeddedness was compared with the common predictors of job satisfaction, organizational commitment, job search, and job alternatives across several studies to assess convergent validity. Analyses indicated that job embeddedness correlated with job satisfaction and organizational commitment in a similar manner as found in previous studies (Holtom & O'Neill, 2004; Mitchell et al., 2001), convergent validity was demonstrated. For example, as shown in Appendix B, Table B2, job embeddedness produced a positive relationship with job satisfaction ( $r = .56, p < .01$ ), and organizational commitment ( $r = .49, p < .01$ ), which were similar to Mitchell et al's.

correlation results of job embeddedness to job satisfaction ( $r = .43, p < .01$ ) and organizational commitment ( $r = .44, p < .01$ ). Holtom and O’Neill (2004) also reported similar results with a high correlation to job satisfaction ( $r = .57, p < .01$ ) and organizational commitment ( $r = .54, p < .01$ ). The similar correlations among job embeddedness, job satisfaction, and organizational commitment demonstrate this study had convergent validity. Because similar correlations between job embeddedness and historical predictors in this study were the consistent with correlation relationships presented in previous studies, the researcher assessed convergent validity was demonstrated between job emeddedness, job satisfaction, and organizational commitment (Litwin, 1995).

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Insert Table B2 about here  
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Discriminant validity was assessed in this study by testing Fisher’s  $z'$  Transformation and Comparison between Independent  $r$ 's (Cohen & Cohen, 1975). The results of the variable organizational link correlation to job satisfaction ( $r = .07, p < .29$ ) and organizational commitment ( $r = .18, p < .01$ ) were compared with the correlations found between job embeddedness and these same two predictors ( $r = .56, p < .01$ ;  $r = .56, p < .01$ ), for job satisfaction and organizational commitment respectively. The null hypothesis that organizational link was the same as job satisfaction or organizational commitment was rejected. Therefore, organizational link was found to be significantly different than job satisfaction and organizational commitment. The data from the above example indicate evidence of discriminant validity. Because of the results that

organizational link was not significant to job satisfaction and organizational commitment, the researcher assessed the variables had discriminant validity (Litwin, 1995).

### *Hypothesis 1*

Hypothesis 1 predicted that job embeddedness would account for the variance in turnover intentions beyond the variance accounted for by job satisfaction, organizational commitment, job search, and job alternatives, after controlling for the appropriate control variable such as gender, indicating higher levels of job embeddedness would result in lower levels of intent to turnover. Gender was controlled in this study due to the sample population being predominately male and this is consistent with Mitchell et al's., (2001) study. For example, the sample population included 188 males as compared with 33 females. Linear regression was used to test Hypothesis 1. Bivariate correlations were computed between job embeddedness and intent to leave to first determine if linear relationships existed between the two variables. This would provide some evidence that there is some relationship between the two. The predictor variables consisted of job embeddedness, job satisfaction, organizational commitment, job search, and job alternatives. Correlation results presented in Table B2 represented relationships between intent to leave, control variables, and the predictor variables. As shown in Table B2, job embeddedness was negatively correlated with intent to leave at ( $r = -.13, p < .10$ ), supporting previous research reporting a negative relationship between job embeddedness and intent to leave (Holtom & O'Neill, 2004; Mitchell et al., 2001).

A linear regression was also used because it is a tool to measure the amount of unexplained variance the independent variable, job embeddedness, can predict of the dependent variable, intent to leave (McClave, Benson & Sincich, 2001). McClave et al.

(2001) stated that the coefficient of determination,  $R^2$ , in a linear regression represents the proportion of the total sample variability around the linear regression line that is explained by the linear relationship between the independent and dependent variable. This determines the amount of unexplained variance of the dependent variable, intent to leave in this study, which is predicted by the independent variable, job embeddedness in this study. If the coefficient of determination of job embeddedness was significant in predicting intent to leave after controlling for job satisfaction, organizational commitment, job search, job alternatives, and the control variables then this would lend support to hypothesis 1.

Linear regression analysis with the stepwise entry was used to test hypothesis 1. Intent to leave was the dependent variable and gender was the step one control variable entered into SPSS. The only demographic variable that was controlled for was gender. Gender was selected as the control variable because Mitchell et al. (2001) controlled for gender in their first test of the job embeddedness construct, and in order to determine the validity for Mitchell et al's. results, the researcher also controlled for gender in this study. The predictor variables consisted of job satisfaction, organizational commitment, job search, job alternatives, and job embeddedness. The predictor variables were controlled for in step two of the regression analysis. Finally, job embeddedness was entered into step three. As shown in Appendix B, Table B3, job embeddedness increased the amount of explained variance of intent to leave after controlling for gender with a change in  $R^2 = 0.01, p < .05$ . This result provides additional support for hypothesis 1. Table B4 presents the Beta ( $b$ ) coefficients for the linear regression when controlling for gender, job satisfaction, organizational commitment, job search and job alternatives.

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Insert Table B3 and B4 about here  
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The regression analysis, when controlling for gender, job satisfaction, organizational commitment, job search, and job alternatives showed no signs of multicollinearity. Organizational commitment had the highest variance inflation factor (1.84) of all the variables. Typically, a variable with a variance inflation factor greater than ten indicates a possible problem with multicollinearity (Neter, Wasserman, & Kutner, 1985). Further evidence was provided by Grapentine (1997), who stated that correlations greater than .70 would indicate multicollinearity between variables, and since the correlations for job embeddedness and organizational commitment were ( $r = .56, p < .01$ ) and ( $r = .49, p < .01$ ), problems due to multicollinearity were not anticipated.

#### *Hypothesis 2*

The intent of the second hypothesis was to evaluate the moderating effect of age on the relationship between job embeddedness and intent to leave. Age was predicted to influence job embeddedness such that turnover intentions would be greater for older respondents than younger respondents. For example, older respondents would have a higher level of job embeddedness than younger respondents, which would signify that since they are embedded they are less likely to leave the organization.

A linear regression of the cross product was computed to determine if age moderated job embeddedness's effect on turnover. In order to understand why a linear regression of the cross product was computed, cross product must first be defined. The cross product, also known as factor interaction component, is simply multiplying two factors, which in this case are age and job embeddedness (McClave et al., 2001). The

factor interaction component, age  $\times$  job embeddedness, was used to test whether factors combine to affect the response or not (McClave et al.). This factor interaction component was then entered into a regression with all the control variables, the two factors, and the factor interaction component. If the factor interaction component is significant then it means that the two factors interact to affect the mean response (McClave et al.). In this study, the mean response was intent to leave. Therefore, hypotheses 2 through 5 can be tested by computing a linear regression using cross product terms.

The linear regression using cross product term was performed with gender, job satisfaction, organizational commitment, job search, job alternatives, job embeddedness, age, and the job embeddedness  $\times$  age cross product using simultaneously entry in step one (see Appendix B, Table B5). The cross product term consisting of job embeddedness  $\times$  age failed to produce a significant result ( $b = .02, p < .90$ ); thus, hypothesis two was not supported.

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Insert Table B5 about here  
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### *Hypothesis 3*

The intent of the third hypothesis was to evaluate the moderating effect of race on the relationship between job embeddedness and intent to leave. Race was predicted to influence job embeddedness such that turnover intentions would be greater for majority respondents than minority respondents. For example, majority respondents would have a higher level of job embeddedness than minority respondents, which would signify that since they are embedded they are less likely to leave the organization.

The linear regression using cross product term was computed with gender, job satisfaction, organizational commitment, job search, job alternatives, job embeddedness, race, and the job embeddedness  $\times$  race cross product using simultaneous entry (see Appendix B, Table B6). The cross-product term consisting of job embeddedness  $\times$  race failed to produce a significant result ( $b = .12, p < .40$ ); thus, hypothesis three was not supported.

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Insert Table B6 about here  
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#### *Hypothesis 4*

The intent of the fourth hypothesis was to evaluate the moderating effect of gender on the relationship between job embeddedness and intent to leave. Gender was predicted to influence job embeddedness such that turnover intentions would be greater for male respondents than female respondents. For example, male respondents would have a higher level of job embeddedness than female respondents, which would signify that since they are embedded they are less likely to leave the organization.

The linear regression using cross product term was computed with gender, job satisfaction, organizational commitment, job search, job alternatives, job embeddedness, and the job embeddedness  $\times$  gender cross product using simultaneous entry (see Appendix B, Table B7). The cross-product term consisting of job embeddedness  $\times$  gender failed to produce a significant result ( $b = .13, p < .11$ ); thus, hypothesis four was not supported.

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Insert Table B7 about here  
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### *Hypothesis 5*

The intent of the fifth hypothesis was to evaluate the moderating effect of marital status on the relationship between job embeddedness and intent to leave. Marital status was predicted to influence job embeddedness such that turnover intentions would be greater for married respondents than single respondents. For example, married respondents would have a higher level of job embeddedness than single respondents, which would signify that since they are embedded they are less likely to leave the organization.

The linear regression using cross product term was performed with gender, job satisfaction, organizational commitment, job search, job alternatives, job embeddedness, marital status, and the job embeddedness  $\times$  marital status cross product using simultaneous entry (see Appendix B, Table B8). The cross-product term consisting of job embeddedness  $\times$  marital status failed to produce a significant result ( $b = .03, p < .81$ ); thus, hypothesis five was not supported.

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Insert Table B8 about here  
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### *Additional Research for Job Embeddedness*

Two different additional analyses were computed on job embeddedness. First, a usefulness analysis was performed between each predictor variable in order to test which variable was the strongest predictor of turnover. Second, a linear regression of the cross product was computed between the individual characteristics  $\times$  with the community, and organizational job embeddedness variables.

Darlington (1968) developed the usefulness analysis as a means of determining the importance of a predictor variable. Darlington defined the usefulness of a predictor variable as the amount that the squared multiple correlation would drop if the variable were removed. Folger and Konovsky (1989) stated that a usefulness analysis examines a predictor's contribution to unique variance in a criterion beyond another predictor's contribution. Darlington stated that it is possible to measure the size of the effect which each of the independent variables has on the dependent variable. The size of the effects can then be ranked by the independent variables usefulness. However, Darlington also stated that the sum of  $R^2$  across multiple variables has little practical value.

A regression analysis was computed first with the predictor variables, organizational commitment, job satisfaction, job search, and job alternatives in step one with intent to leave as the independent variable. Job embeddedness was entered into step two and a regression analysis was computed. This regression was computed for each predictor variable in step two and the remaining predictor variables in step one. The results of the usefulness analysis are as follows, job embeddedness ( $R^2 = .01$ ,  $F = 4.07$ ,  $p = <.05$ ), organizational commitment ( $R^2 = .12$ ,  $F = 41.51$ ,  $p = <.01$ ), job satisfaction ( $R^2 = .00$ ,  $F = .065$ ,  $p = < .80$ ), job search ( $R^2 = .092$ ,  $F = 31.78$ ,  $p = <.01$ ), and job alternatives ( $R^2 = .000$ ,  $F = 0.00$ ,  $p = < .98$ ). The usefulness analysis results demonstrated that job search was the strongest predictor, followed by organizational commitment, then job embeddedness, job satisfaction, and finally job alternatives.

A linear regression of cross product was computed between individual characteristics, and community and organizational job embeddedness. This test was

computed to determine if the individual characteristics moderated the relationship between organizational and community job embeddedness to intent to leave.

The linear regression using the community cross product term was performed four times with gender, job satisfaction, organizational commitment, job search, job alternatives, and community job embeddedness entered in step one. For each of the four linear regressions, one individual characteristic and the cross product between the individual characteristic and community job embeddedness were also entered in step one using simultaneous entry (see Appendix B, Tables B9, B10, B11 and B12). For example, the first test included gender, job satisfaction, organizational commitment, job search, job alternatives, community job embeddedness, age, and community job embeddedness  $\times$  age using simultaneous entry. The other three tests were similar except race, gender, marital status were entered into the linear regression along with their respective cross product terms comprised of age, race, gender, and marital status with community job embeddedness. All four of the cross-product terms consisting of job embeddedness  $\times$  age, race, gender, or marital status failed to produce a significant result.

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Insert Table B9, B10, B11 and B12 about here  
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The linear regression using the organizational cross product term was performed four times with gender, job satisfaction, organizational commitment, job search, job alternatives, and organizational job embeddedness were entered in step one. For each of the four linear regressions one individual characteristic and the cross product between the individual characteristic and organizational job embeddedness were also entered in step one using simultaneous entry (see Appendix B, Tables B13, B14, B15 and B16). For

example, the first test included gender, job satisfaction, organizational commitment, job search, job alternatives, organizational job embeddedness, age, and organizational job embeddedness  $\times$  age using simultaneous entry. The other three tests were similar except race, gender, marital status were entered into the linear regression along with their cross product with organizational job embeddedness. All the cross-product terms consisting of job embeddedness  $\times$  age, race, and gender failed to produce a significant result. However, marital status  $\times$  organizational job embeddedness was significant. Therefore, marital status is believed to be a significant moderator of organizational job embeddedness on intent to leave.

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Insert Table B13, B14, B15 and B16 about here  
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### *Summary*

This study found four key findings, which are listed as follows: (a) hypothesis 1 was supported, (b) hypothesis 2 through 5 were not supported, (c) job embeddedness was a stronger predictor of intent to leave than job satisfaction and job alternatives, and (c) support was found for marital status being a significant moderator of organizational job embeddedness on intent to leave. Support for hypothesis 1 indicated that job embeddedness accounted for additional variability in intent to turnover beyond that of the historical predictors. No support was found for hypotheses 2 through 5. Age, race, gender, and marital status were not significant moderators of job embeddedness to intent to leave. Support for job embeddedness being a stronger predictor of intent to leave than job satisfaction and job alternatives was found using a usefulness analysis. Finally,

marital status was demonstrated as a significant moderator of organizational job embeddedness to intent to leave.

## CHAPTER 5

### ANALYSIS

#### *Analysis of Hypothesis*

Hypothesis one predicted that job embeddedness would account for variance in intent to leave beyond the variance accounted for by the historical predictors job satisfaction, organizational commitment, job search, and job alternatives. Results of the linear regression supported this hypothesis such that job embeddedness was a significant predictor of intent to leave after the historical predictors, job satisfaction, organizational commitment, job search, and job alternatives were considered. Holtom and O’Neill (2004) reported similar results in their study. Further support was demonstrated in Mitchell et al’s. (2001) study, which found job embeddedness was a significant predictor of turnover in their study of retail grocery workers and hospital workers. All three studies reported a significant, negative relationship between job embeddedness and intent to leave.

This lends support to the idea that people do get embedded within their job and community, and this may cause them to stay in their jobs. Darlington’s (1968) usefulness analysis result provided support for job embeddedness being a stronger predictor than job satisfaction and job alternatives for this study. Even though job embeddedness was a weaker predictor of intent to leave than organizational commitment and job search in the usefulness analysis, the explained variance is significant to take note that embeddedness is involved in the decision process of people deciding to leave an organization.

Hypothesis 2 through 5 predicted that the variables of age, race, gender, and marital status would be significant moderators of job embeddedness to intent to leave. For example hypothesis 2 predicted that age would affect the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions would be greater for older respondents compared to younger respondents, was not supported. Hypothesis 3 predicted that racial background would affect the relationship between job embeddedness and turnover such that the affects of job embeddedness on turnover intentions would be greater for non-minority respondents compared to minority respondents was not supported. Hypothesis 4 presented that gender would affect the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for male respondents compared to female respondents was not supported in this study. Hypothesis 5 which presented that marital status would affect the relationship between job embeddedness and turnover such that the effects of job embeddedness on turnover intentions will be greater for married respondents compared to single respondents was not supported in this study. There was no support found for hypotheses 2 through 5. Therefore, there was no significant relationship between job embeddedness and turnover with age, race, gender, or marital status as a moderator.

A possible explanation for why the individual characteristics were not significant moderators of job embeddedness to turnover is that people's attitudes about the importance of work today has more influence over decisions than individual characteristics. For example, the ages at which people get married has increased from 22.5 years for males and 20.6 years for females in 1970, to 26 years for males and 24

years for females in 1990 (Hulin, 2002). The most frequent reasons for the delayed marriage is the interference with working careers of potential mothers, and when marriage is viewed as limiting a career typically the career wins out (Hulin, 2002). It is possible that just being older, married, or female today are not significant enough to moderate job embeddedness to turnover because people today do not view marriage as being more important than their jobs.

The individual characteristics were not significant moderators of community job embeddedness. However, marital status was a significant moderator of organizational job embeddedness. Married respondents reported higher levels of organizational link, fit, and sacrifice than single respondents in this study. Researchers have also found marital status to have a moderate correlation with turnover and job satisfaction (Cotton & Tuttle, 1986; Martin, 1979; Viscusi, 1980).

A possible explanation for these higher levels of job embeddedness is that married respondents might develop more organizational links than a single respondent. For example, 62.1% of respondents were married, and the married respondents might feel more comfortable in the work environment because the majority of the people are married. This could help married respondents develop stronger links with coworkers because they could talk about their common interest such as their marriage, children, or spouse with other married respondents at work. This in turn could lead to a stronger organizational sacrifice because the married respondents might be less likely to break ties with their coworkers. The higher link, fit, and sacrifice in married respondents could then explain why marital status is a significant moderator of job embeddedness to turnover.

### *Limitations*

The limitations of this study include generalizability, common method variance, no performance measure, and finally the wording of the intent to leave questions. The limitations of the study included the areas to where the findings are generalizable to, self reporting errors, and wording of the job embeddedness survey.

The first limitation of this study is that of generalizability. The respondents were from a maintenance squadron in North Dakota. This may not be a true representation of the entire Air Force. Multiple bases in different areas of the country and different commands may have been chosen to get a true representation of the Air Force. This study also may not provide a representative sample of the entire United States population because there are differences between military and civilian turnover thought processes. Hulin (2002) stated that National Guard reenlistments are different from civilian turnover, and Steel and Ovalle (1984) found that military and civilian workers have different withdrawal patterns.

Another limitation is associated with potential issues of common method variance. The data were collected from single participants on the same survey in a single seating. Podsakoff and Organ defined common method variance as the variance that is attributable to the measurement method rather than the construct of interest. Podsakoff and Organ (1986) stated that severe problems with common method variance can occur when data is collected about a respondent's personality, past behavior, job attitudes, and perception of an external environmental variable and an attempt is made to interpret a correlation between them. This study gathered data in all four areas. Podsakoff and Organ (1986) stated that correlation from two of these measures, when obtained from the

same source, may not include any variance common to both domains. For example, Kline, Sulsky, and Moriyama (2000) stated that because respondents may answer that they have high levels of stress on a survey, the respondents may answer that they have low levels of job satisfaction.

The researcher attempted to mediate common method variance by providing letters on how to properly fill out the survey and by providing a contact number to answer any questions. The researcher also maintained the anonymity of the participants as a means to control common method variance. The researcher also used scale reordering in the survey to mediate common method variance. Scale reordering is to reorder the questionnaire such that the dependent variable follows the independent variables (Podsakoff & Organ, 1986). The common method variance in this study might not be a problem because the standard deviation of the intent to leave measure was ( $M = 1.41$ ), which indicates that the respondents were answering the question without any reservations.

Another limitation of the study was that no performance measure was collected for this study which may limit it by not allowing any comparison between to determine if the respondent intent to leave and performance. For example, a respondent who does not believe he or she will earn future promotions might have feelings of dissatisfaction, and therefore want to leave the Air Force due to poor performance instead of an actual dislike of the Air Force.

Finally, the last limitation is that the intent to leave questions ask the respondents of the feelings on leaving within the next 12 months. Many military participants might

have feelings to leave but view their service commitment as a barrier to leaving and therefore answer that they do not want to leave.

### *Contributions*

This study offers value to the United States Air Force as that it can help leaders create environments that strengthen the link, feelings of fit, and sacrifice to promote retention within their organizations. Leaders might increase link in their company by developing friendships within the company. The friendships will strengthen the link a person has with a company because he or she will not want to leave close coworker friends. Managers can increase the feelings of fit of their workers by understanding and relating to the workers that best fits them. For example, a worker that does not like to be micromanaged would increase his or her link with the company if the manager had a hands off management style. Managers can increase fit to community by developing cultural activities in the communities. This can help those employees develop a sense of belonging to the community and therefore increase the community fit. Managers can improve community sacrifice by developing reward systems for community involvement. For example, an employee of the month award could be based on the community activities the employee has. Civilian organizations can also inform the employees that half of the annual bonus will be dependent on the amount of community activity the person is involved with. These new community sacrifices will increase the embeddedness of employees and therefore make them less likely to leave an organization. The military can implement each of these suggestions to help retain mid-level managers, and job embeddedness may be the tool that will lay the framework to develop these programs.

### *Future Research*

This study provides a couple of different paths for future research. First, the study needs further examination among military personnel in different areas of the country. The climate and population demographics could have affected the community job embeddedness for this study. Second, the performance data could be compared with job embeddedness and turnover. It would be interesting to see if job performance would influence job embeddedness levels, and if job performance would be a significant moderator in job embeddedness predicting turnover. Third, a study could be performed to further test the effect age, race, gender, and marital status has on job embeddedness and job embeddedness's sub-dimensions. This would allow companies to know who is more likely to be embedded in their company. Finally, this study could be conducted in different military populations such as Army, Navy, or Marine personnel to test if there are any differences in the job embeddedness levels of Air Force members and its sister services.

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## Appendix A: Turnover Models

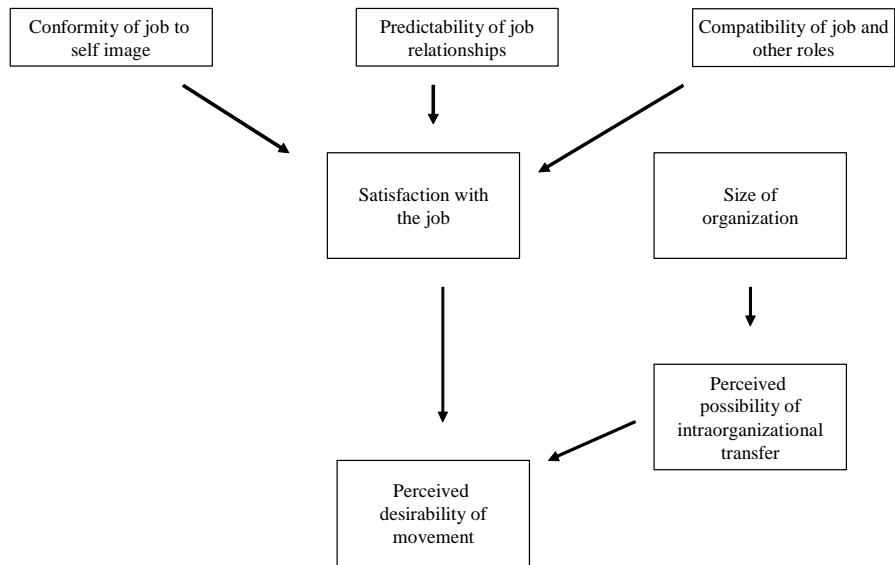
## Figure Caption

*Figure A1.* March and Simon's (1958) Major Factors affecting Perceived Desirability of Movement.

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From "Organizations," by J. March, and H. Simon, 1958, p. 99. Copyright 1989 by John Wiley & Sons, Inc. Reprinted with permission of the author.

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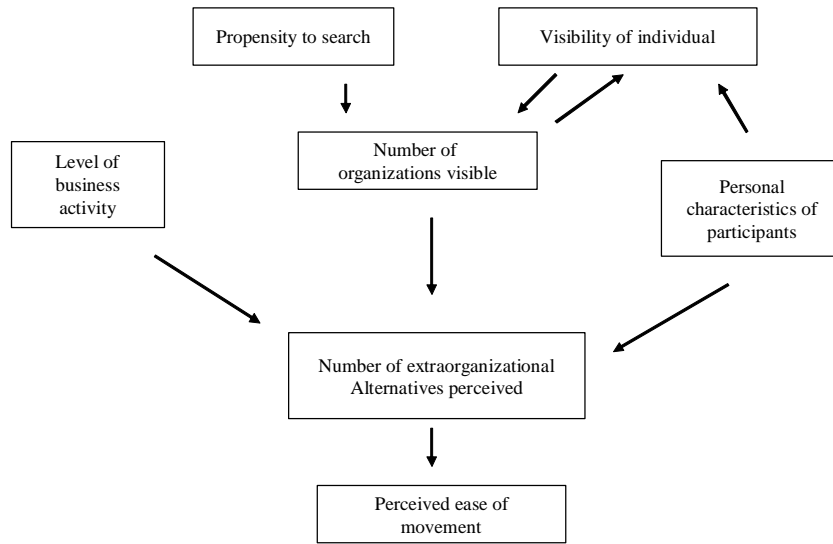
## Figure Caption

*Figure A2.* March and Simon's (1958) Major Factors affecting Perceived Ease of Movement.

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From "Organizations," by J. March, and H. Simon, 1958, p. 106. Copyright 1989 by John Wiley & Sons, Inc. Reprinted with permission of the author.

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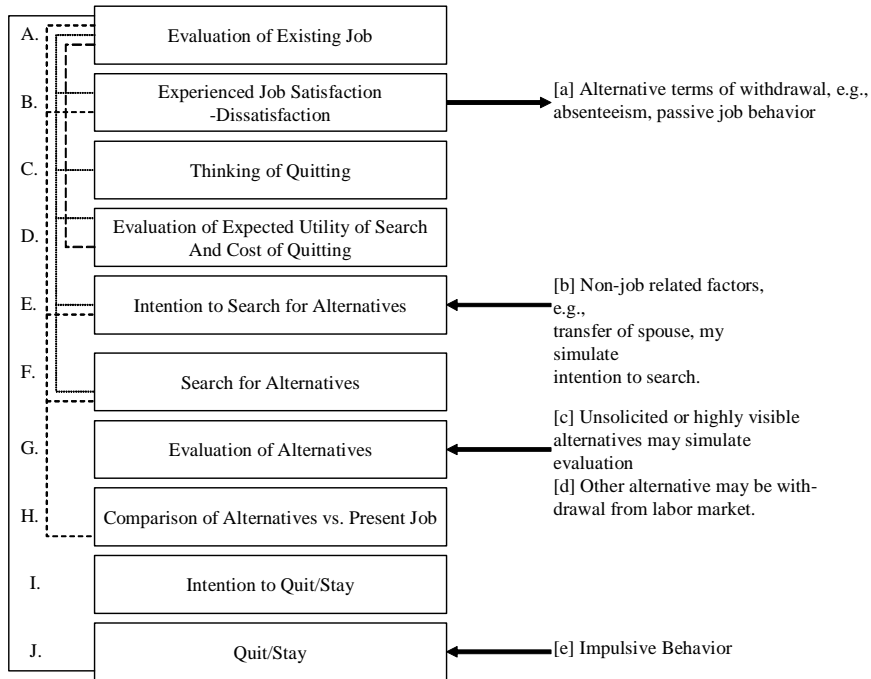
## Figure Caption

*Figure A3.* The Mobley Intermediate Linkages Model (1977).

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From “Intermediate linkages in the relationship between job satisfaction and employee turnover,” by W. H. Mobley, 1977, *Journal of Applied Psychology*, 62, p. 238. Copyright 1977 by American Psychological Association. Reprinted with permission of the author.

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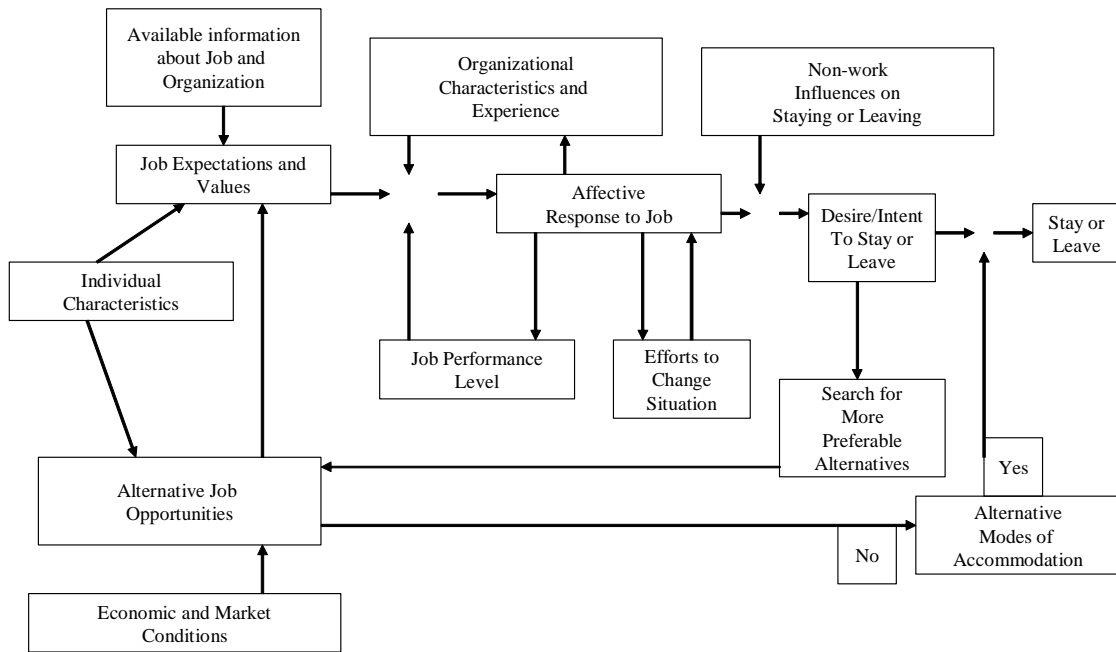
## Figure Caption

*Figure A4.* Steers and Mowday's (1981) Multi-Route Model of Turnover.

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From "Employee turnover and post decision accommodation processes," by R. M. Steers, and R. T. Mowday, *Research in Organizational Behavior*, 3, p. 242. Copyright 1981 by JAI Press. Reprinted with permission of the author.

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## Figure Caption

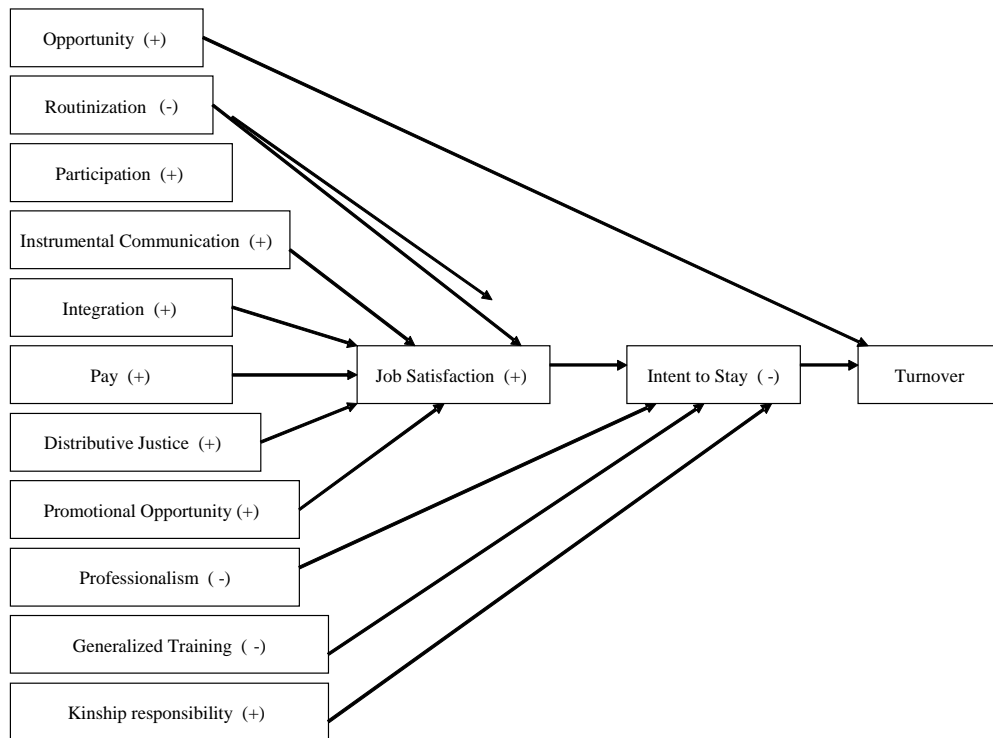
*Figure A5.* Price and Mueller's (1981) Causal Model of Turnover.

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From "A causal model of turnover for nurses," by J. P. Price, and C. W. Mueller, 1981, *Academy of Management Journal*, 24, p. 547. Copyright 1981 by Briarcliff Manor.

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## Figure Caption

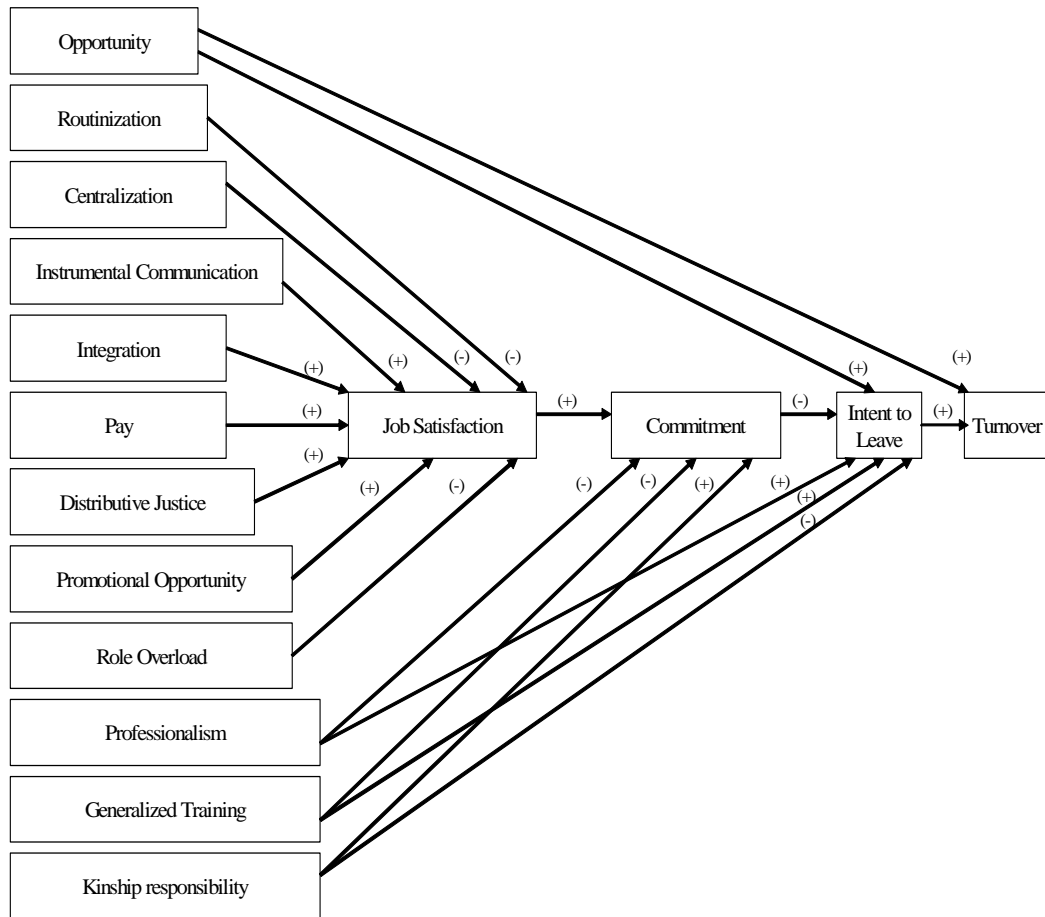
*Figure A6.* Price and Mueller's (1986) Revised Causal Model of Turnover.

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From "Absenteeism and turnover of hospital employees," by J. P. Price, and C. W.

Mueller, 1986, p. 10. Copyright 1981 by JAI Press. Reprinted with permission of the author.

TOP



## Figure Caption

*Figure A7.* Mitchell et al.'s Job Embeddedness Model.

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From "Why people stay: Using job embeddedness to predict voluntary turnover, by T. R.

Mitchell, B. C. Holtom, T. W. Lee, C. J. Sablinski, M. Erze, 2001, *Academy of*

*Management Journal*, 44, p. 1104. Copyright 1981 by Briarcliff Manor. Reprinted with permission of the author.

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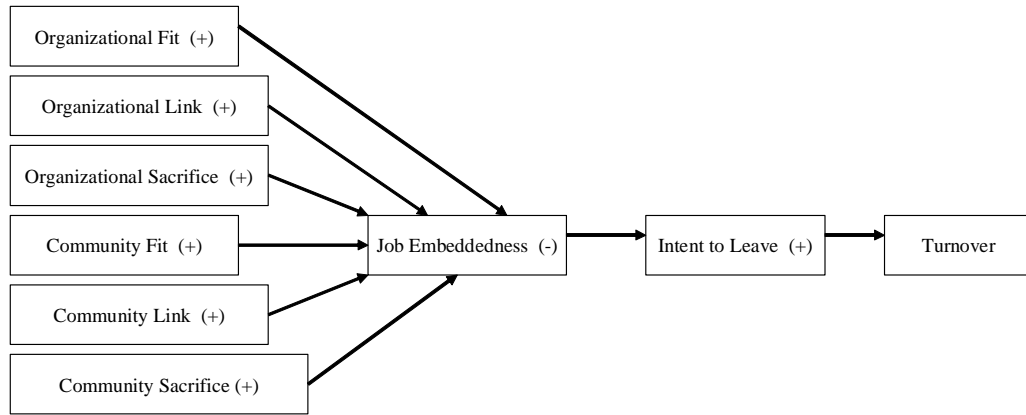


Figure Caption

*Figure A8.* Element Relationship of Link, Fit, and Sacrifice to Job Embeddedness

TOP

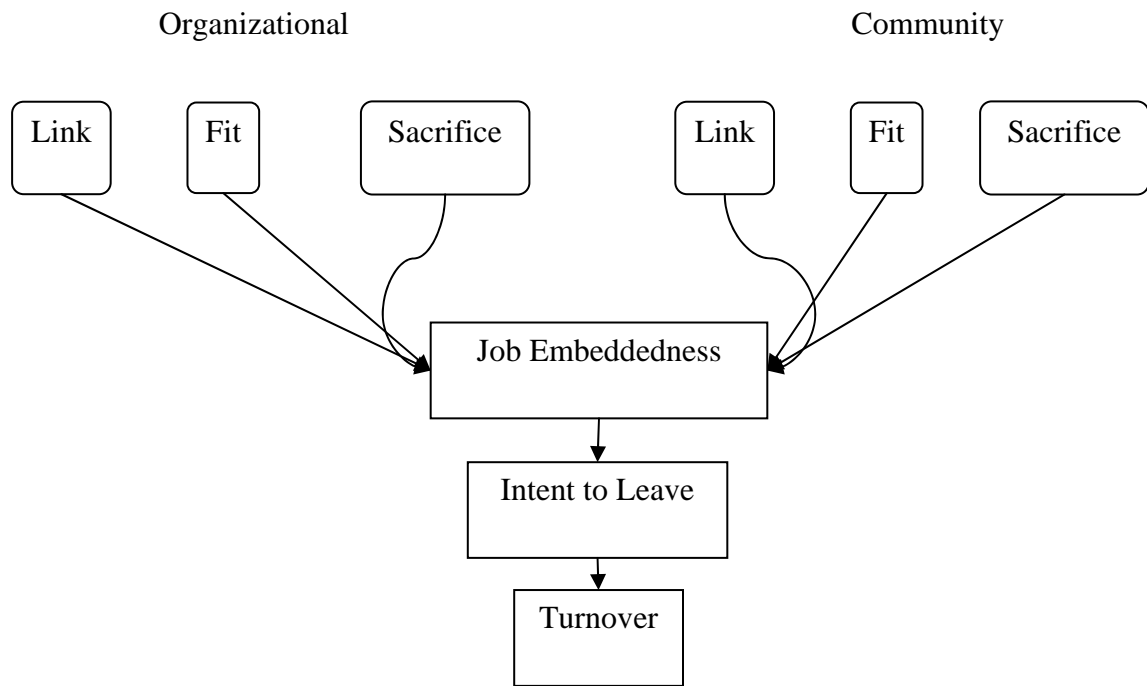
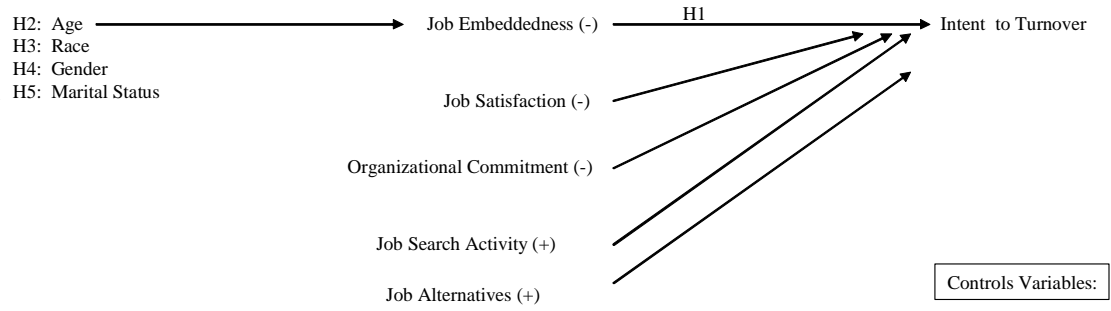


Figure Caption

*Figure A9.* Hypothesized Model of Job Embeddedness and Intent to Turnover

TOP



## Appendix B: Tables

Table B1

Appendix B, Table B1

Air Force Rank Chart

| Enlisted Rank Chart Decreasing<br>from Top to Bottom |
|--|
| Chief Master Sergeant, E9                            |
| Senior Master Sergeant, E8                           |
| Master Sergeant, E7                                  |
| Technical Sergeant, E6                               |
| Staff Sergeant, E5                                   |
| Senior Airman, E4                                    |
| Airman First Class, E3                               |
| Airman, E2   |
| Airman Basic, E1                                     |

| Officer Rank Chart Decreasing<br>from Top to Bottom |
|---|
| General, O10  |
| Lieutenant General, O9                              |
| Major General, O8                                   |
| Brigadier General, O7                               |
| Colonel, O6   |
| Lieutenant Colonel, O5                              |
| Major, O4   |
| Captain, O3   |
| First Lieutenant, O2                                |
| Second Lieutenant, O1                               |

Table B2

## Factors Influencing Intent to Leave

| Factors                                   | <i>M</i> | <i>SD</i> | <i>N</i> | 1      | 2      | 3     | 4      | 5      | 6     | 7      | 8     |
|---|----------|-----------|----------|--------|--------|-------|--------|--------|-------|--------|-------|
| 1. Intent to Leave                        | 2.13     | 1.41      | 224      | 1      |        |       |        |        |       |        |       |
| 2. Job Embeddedness <sup>a,m</sup>        | 7.88     | 3.90      | 224      | -.13   | 1      |       |        |        |       |        |       |
| 3. Job Satisfaction <sup>b</sup>          | 3.9      | 0.63      | 224      | -.21   | .56**  | 1     |        |        |       |        |       |
| 4. Organizational Commitment <sup>c</sup> | 3.77     | 1.02      | 224      | -.51** | .49**  | .46** | 1      |        |       |        |       |
| 5. Job Search <sup>d,e</sup>              | 0.27     | 0.22      | 223      | .46**  | -.09   | -.17* | -.31** | 1      |       |        |       |
| 6. Job Alternatives <sup>f</sup>          | 4.01     | 0.94      | 224      | .24**  | -.02   | -.01  | -.37** | .19**  | 1     |        |       |
| 7. Age                                    | 2.82     | 1.57      | 222      | .11    | .51**  | .17** | .18**  | .14*   | .04   | 1      |       |
| 8. Race <sup>g</sup>                      | 1.17     | 0.37      | 218      | .05    | -.10*  | .07   | -.10   | .03    | .03   | -.03   | 1     |
| 9. Gender <sup>h</sup>                    | 1.15     | 0.36      | 221      | .03    | -.18** | .05   | -.07   | -.05   | .06   | -.29** | .15*  |
| 10. Marital Status <sup>i</sup>           | 1.63     | 0.48      | 219      | -.03   | .39**  | .13   | .09    | .13    | .17** | .44**  | -.01  |
| 11. Rank                                  | 1.18     | 0.39      | 222      | .06    | .43**  | .20** | .08    | .10    | .10   | .75**  | -.04  |
| 12. Education Level                       | 1.29     | 0.46      | 222      | .06    | .25**  | .14   | -.02   | .19**  | .10   | .40**  | .05   |
| 13. Salary                                | 1.4      | 0.49      | 219      | .05    | .48**  | .27** | .13    | .07    | .08   | .76**  | -.05  |
| 14. Fit to Com                            | 3.67     | 1.59      | 224      | -.03   | .78**  | .24** | .29**  | -.04   | -.07  | .46**  | -.13* |
| 15. Fit to Organization                   | 4.85     | 1.27      | 224      | -.16*  | .71**  | .68** | .46**  | -.17*  | .05   | .23**  | -.07  |
| 16. Link to Community                     | 0.34     | 0.24      | 224      | .06    | .60**  | .18** | .13**  | .07    | .12   | .49**  | -.10  |
| 17. Link to Organization                  | 29.29    | 21.36     | 224      | .04    | .52**  | .07   | .18**  | .16*   | .11   | .49**  | -.06  |
| 18. Community Sacrifice                   | 4.46     | 1.23      | 224      | -.04   | .85**  | .37** | .31**  | -.06   | .08   | .43**  | -.02  |
| 19. Organizational Sacrifice              | 4.46     | 1.10      | 224      | -.37** | .68**  | .72** | .63**  | -.28** | -.15* | .11    | -.04  |
| 20. Community JE <sup>j</sup>             | 2.82     | 0.92      | 224      | -.01   | .90**  | .32** | .30**  | -.02   | .04   | .54**  | -.10  |
| 21. Organizational JE <sup>k</sup>        | 12.85    | 7.26      | 224      | -.24** | .84**  | .69** | .58**  | -.16*  | -.01  | .33**  | -.08  |
| 22. JE x Age <sup>l</sup>                 | 251.79   | 178.02    | 222      | .07    | .64**  | .20** | .25**  | .14*   | .08   | .88**  | -.08  |
| 23. JE x Race <sup>l</sup>                | 10.93    | 10.09     | 218      | .07    | .22**  | .16*  | .02    | .12    | .11   | .32**  | .86** |
| 24. JE x Gender <sup>l</sup>              | 8.69     | 4.31      | 221      | .08    | .60**  | .24** | .23**  | .11    | .13*  | .60**  | .03   |
| 25. JE x Marital Status <sup>l</sup>      | 5.76     | 5.46      | 219      | .00    | .59**  | .14*  | .19**  | .17*   | .16*  | .64**  | -.05  |

\*\* p &lt; 0.01 (2-tailed test)

\* p &lt; 0.05 (2-tailed test)

<sup>a</sup> Mean of the mean of the six sub-dimensions of job embeddedness.<sup>b</sup> Mean of thirty six job satisfaction related items (Items 41 – 76 on JE survey)<sup>c</sup> Mean of twenty three organizational commitment related items (Items 87 – 109 on JE survey)<sup>d</sup> Mean of ten job search related items (Items 77 – 86 on JE survey)<sup>e</sup> 0 = No, 1 = Yes<sup>f</sup> Mean of two job alternative related items (Items 110 – 111 on JE survey)<sup>g</sup> 0 = White, 1 = Non White<sup>h</sup> 0 = Male, 1 = Female<sup>i</sup> 0 = Single, 1 = Married<sup>j</sup> Community Job Embeddedness<sup>k</sup> Organizational Job Embeddedness<sup>l</sup> JE = Job Embeddedness<sup>m</sup> Significant to the p < 0.10 (2-tailed)

|   | 9      | 10     | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    |
|---|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 |        |        |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | -.19** | 1      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | -.28** | .35**  | 1     |       |       |       |       |       |       |       |       |       |       |       |       |       |
|   | -.09   | .26**  | .58** | 1     |       |       |       |       |       |       |       |       |       |       |       |       |
|   | -.29** | .35**  | .83** | .47** | 1     |       |       |       |       |       |       |       |       |       |       |       |
|   | -.17*  | .26**  | .35** | .18** | .40** | 1     |       |       |       |       |       |       |       |       |       |       |
|   | -.05   | .15*   | .21** | .16*  | .26** | .33** | 1     |       |       |       |       |       |       |       |       |       |
|   | -.20** | .60**  | .38** | .15*  | .43** | .47** | .20** | 1     |       |       |       |       |       |       |       |       |
|   | -.17** | .24**  | .36** | .21** | .39** | .38** | .17** | .33** | 1     |       |       |       |       |       |       |       |
|   | -.10   | .34**  | .39** | .26*  | .39** | .68** | .45** | .50** | .37** | 1     |       |       |       |       |       |       |
|   | -.10   | .11    | .14*  | .09   | .18** | .30** | .71** | .15*  | .14** | .47** | 1     |       |       |       |       |       |
|   | -.18** | -.44** | .44** | .24** | .48** | .89** | .40** | .73** | .43** | .89** | .38** | 1     |       |       |       |       |
|   | -.13   | -.21** | .29** | .19** | .35** | .43** | .89** | .27** | .48** | .57** | .86** | .52** | 1     |       |       |       |
|   | -.26** | .40**  | .66** | .32** | .70** | .54** | .29** | .49** | .77** | .51** | .18** | .62** | .49** | 1     |       |       |
|   | -.01   | .20**  | .24** | .20** | .24** | .15*  | .08   | .17*  | .32** | .22** | .05   | .21** | .17*  | .36** | 1     |       |
|   | .22**  | .31**  | .44** | .24** | .45** | .47** | .29** | .40** | .76** | .49** | .18** | .55** | .49** | .82** | .40** | 1     |
|   | -.22   | .80**  | .50** | .29** | .53** | .45** | .23** | .64** | .65** | .48** | .13   | .61** | .40** | .79** | .34** | .69** |

Table B3

*Linear Regression Analysis for Job Embeddedness Predicting Intent to Leave (N = 220, controlling for gender)*

| Dependant Variable | Step 1<br>Gender | Step 2<br>Job Satisfaction<br>Org Commitment<br>Job Search<br>Job Alternatives | Step 3<br>Job Embeddedness |
|--------------------|------------------|--|----------------------------|
| Intent to Leave    | .00              | .35**  | .01*                       |

\*\* Change in  $R^2$  is significant at  $p < 0.01$  (2-tailed)

\* Change in  $R^2$  is significant at  $p < 0.05$  (2-tailed)

Table B4

*Summary for Linear Regression Analysis for Job Embeddedness Predicting Intent to*

*Leave (N = 220, controlling for gender)*

| Variable                  | <i>B</i> | <i>SE B</i> | $\beta$ |
|---------------------------|----------|-------------|---------|
| <b>Step 1</b>             |          |             |         |
| Gender                    | .03      | .07         | .03     |
| <b>Step 2</b>             |          |             |         |
| Gender                    | .02      | .05         |         |
| Job Satisfaction          | .08      | .13         | .03     |
| Organizational Commitment | -.73     | .12         | -.37**  |
| Job Search                | .59      | .11         | .33**   |
| Job Alternative           | .02      | .06         | .05     |
| <b>Step 3</b>             |          |             |         |
| Gender                    | .04      | .06         | .05     |
| Job Satisfaction          | -.05     | .15         | -.03    |
| Organizational Commitment | -.83     | .13         | -.47**  |
| Job Search                | .58      | .11         | .32**   |
| Job Alternative           | -.01     | .07         | -.01    |
| Job Embeddedness          | .32      | .13         | .15*    |

Note.  $R^2 = .353$  ( $p < .01$ ) for Step 1;  $\Delta R^2 = .013$  ( $p < .01$ ) for Step 2. Total  $R^2 = 0.348$ . The  $\Delta R^2$  values reported are with standardized variables in the regression.

\*\*  $p < 0.01$

\* $p < 0.05$

Table B5

*Linear Regression of the Job Embeddedness × Age Cross Product*

*in Step 1 (N = 220)*

| Variable                  | <i>B</i> | <i>SE B</i> | $\beta$ |
|---------------------------|----------|-------------|---------|
| Step 1                    |          |             |         |
| Gender                    | .07      | .06         | .07     |
| Job Satisfaction          | -.03     | .15         | -.01    |
| Organizational Commitment | -.83     | .13         | -.47*** |
| Job Search                | .54      | .11         | .30***  |
| Job Alternatives          | -.01     | .07         | -.01    |
| Job Embeddedness          | .16      | .19         | .08     |
| Age                       | .11      | .11         | .12     |
| Job Embeddedness × Age    | .00      | .00         | .02     |

\*\*\* p < 0.01

\*\* p < 0.05

\* p < 0.10

Table B6

*Linear Regression of the Job Embeddedness × Race Cross Product*

*in Step 1 (N = 220)*

| Variable                  | <i>B</i> | <i>SE B</i> | $\beta$ |
|---------------------------|----------|-------------|---------|
| Step 1                    |          |             |         |
| Gender                    | .05      | .06         | .05     |
| Job Satisfaction          | -.01     | .15         | -.00    |
| Organizational Commitment | -.84     | .13         | -.47*** |
| Job Search                | .57      | .11         | .31***  |
| Job Alternatives          | .00      | .07         | .00     |
| Job Embeddedness          | .17      | .19         | .08     |
| Race                      | -.11     | .14         | -.11    |
| Job Embeddedness × Race   | .16      | .14         | .12     |

\*\*\* p < 0.01

\*\* p < 0.05

\* p < 0.10

Table B7

*Linear Regression of the Job Embeddedness × Gender Cross Product*

*in Step 1 (N = 220)*

| Variable                  | <i>B</i> | <i>SE B</i> | $\beta$ |
|---------------------------|----------|-------------|---------|
| Step 1                    |          |             |         |
| Gender                    | -.00     | .06         | .00     |
| Job Satisfaction          | .00      | .15         | .00     |
| Organizational Commitment | -.84     | .13         | -.48*** |
| Job Search                | .54      | .10         | .30***  |
| Job Alternatives          | .02      | .07         | -.02    |
| Job Embeddedness          | .11      | .20         | .05     |
| Job Embeddedness × Gender | .13      | .08         | .13     |

\*\*\*  $p < 0.01$

\*\*  $p < 0.05$

\*  $p < 0.10$

Table B8

*Linear Regression of the Job Embeddedness × Marital Status Cross Product*

*in Step 1 (N = 220)*

| Variable                          | <i>B</i> | <i>SE B</i> | $\beta$ |
|-----------------------------------|----------|-------------|---------|
| Step 1                            |          |             |         |
| Gender                            | .04      | .06         | .04     |
| Job Satisfaction                  | -.06     | .16         | -.03    |
| Organizational Commitment         | -.85     | .13         | -.48*** |
| Job Search                        | .60      | .11         | .33***  |
| Job Alternatives                  | -.01     | .07         | -.01    |
| Job Embeddedness                  | .38      | .19         | .18     |
| Marital Status                    | -.22     | .19         | -.11    |
| Job Embeddedness × Marital Status | .03      | .11         | -.03    |

\*\*\* p < 0.01

\*\* p < 0.05

\* p < 0.10

Table B9

*Linear Regression of the Community Job Embeddedness × Age Cross Product*

*in Step 1 (N = 220)*

| Variable                         | <i>B</i> | <i>SE B</i> | $\beta$ |
|----------------------------------|----------|-------------|---------|
| Step 1                           |          |             |         |
| Gender                           | .06      | .06         | .06     |
| Job Satisfaction                 | .01      | .14         | .01     |
| Organizational Commitment        | -.81     | .12         | -.46*** |
| Job Search                       | .54      | .11         | .30***  |
| Job Alternatives                 | .00      | .06         | .00     |
| Community Job Embeddedness       | .13      | .18         | .08     |
| Age                              | .12      | .07         | .12*    |
| Community Job Embeddedness × Age | .00      | .00         | -.01    |

\*\*\* p < 0.01

\*\* p < 0.05

\* p < 0.10

Table B10

*Linear Regression of the Community Job Embeddedness × Race Cross Product*

*in Step 1 (N = 220)*

| Variable                          | <i>B</i> | <i>SE B</i> | $\beta$ |
|-----------------------------------|----------|-------------|---------|
| Step 1                            |          |             |         |
| Gender                            | .04      | .05         | .04     |
| Job Satisfaction                  | .03      | .14         | .01     |
| Organizational Commitment         | -.80     | .13         | -.45*** |
| Job Search                        | .59      | .11         | .33***  |
| Job Alternatives                  | .01      | .07         | .01     |
| Community Job Embeddedness        | .18      | .10         | .11*    |
| Race                              | -.01     | .06         | -.01    |
| Community Job Embeddedness × Race | -.03     | .11         | -.02    |

\*\*\* p < 0.01

\*\* p < 0.05

\* p < 0.10

Table B11

*Linear Regression of the Community Job Embeddedness × Gender Cross Product*

*in Step 1 (N = 220)*

| Variable                            | <i>B</i> | <i>SE B</i> | $\beta$ |
|-------------------------------------|----------|-------------|---------|
| Step 1                              |          |             |         |
| Gender                              | .07      | .06         | .08     |
| Job Satisfaction                    | .00      | .14         | .00     |
| Organizational Commitment           | -.79     | .12         | -.45*** |
| Job Search                          | .57      | .11         | .32***  |
| Job Alternatives                    | .00      | .07         | .00     |
| Community Job Embeddedness          | .24      | .10         | .15**   |
| Community Job Embeddedness × Gender | .14      | .11         | .08     |

\*\*\* p < 0.01

\*\* p < 0.05

\* p < 0.10

Table B12

*Linear Regression of the Community Job Embeddedness × Marital Status Cross Product*

*in Step 1 (N = 220)*

| Variable                      | <i>B</i> | <i>SE B</i> | $\beta$ |
|-------------------------------|----------|-------------|---------|
| Step 1                        |          |             |         |
| Gender                        | .03      | .06         | .03     |
| Job Satisfaction              | .00      | .14         | .00     |
| Organizational Commitment     | -.81     | .13         | -.45*** |
| Job Search                    | .60      | .11         | .33***  |
| Job Alternatives              | .00      | .07         | .00     |
| Community Job Embeddedness    | .31      | .11         | .19***  |
| Marital Status                | -.13     | .07         | -.13**  |
| Community JE × Marital Status | -.12     | .11         | -.07    |

\*\*\*  $p < 0.01$

\*\*  $p < 0.05$

\*  $p < 0.10$

Table B13

*Linear Regression of the Organizational Job Embeddedness × Age Cross Product*

*in Step 1 (N = 220)*

| Variable                              | <i>B</i> | <i>SE B</i> | $\beta$ |
|---------------------------------------|----------|-------------|---------|
| Step 1                                |          |             |         |
| Gender                                | .06      | .06         | .07     |
| Job Satisfaction                      | .00      | .17         | .00     |
| Organizational Commitment             | -.81     | .14         | -.46*** |
| Job Search                            | .54      | .11         | .30***  |
| Job Alternatives                      | .00      | .07         | .00     |
| Organizational Job Embeddedness       | .08      | .18         | .04     |
| Age                                   | .15      | .06         | .15**   |
| Organizational Job Embeddedness × Age | -.03     | .11         | -.01    |

\*\*\*  $p < 0.01$

\*\*  $p < 0.05$

\*  $p < 0.10$

Table B14

*Linear Regression of the Organizational Job Embeddedness × Race Cross Product*

*in Step 1 (N = 220)*

| Variable                               | <i>B</i> | <i>SE B</i> | $\beta$ |
|--|----------|-------------|---------|
| Step 1                                 |          |             |         |
| Gender                                 | .03      | .06         | .03     |
| Job Satisfaction                       | .02      | .17         | .01     |
| Organizational Commitment              | -.79     | .14         | -.44*** |
| Job Search                             | .61      | .11         | .33***  |
| Job Alternatives                       | .02      | .07         | .02     |
| Organizational Job Embeddedness        | .10      | .18         | .05*    |
| Race                                   | -.01     | .06         | -.02    |
| Organizational Job Embeddedness × Race | -.12     | .16         | -.04    |

\*\*\*  $p < 0.01$

\*\*  $p < 0.05$

\*  $p < 0.10$

Table B15

*Linear Regression of the Organizational Job Embeddedness × Gender Cross Product*

*in Step 1 (N = 220)*

| Variable                                 | <i>B</i> | <i>SE B</i> | $\beta$ |
|--|----------|-------------|---------|
| Step 1                                   |          |             |         |
| Gender                                   | .04      | .06         | .04     |
| Job Satisfaction                         | -.03     | .17         | -.01    |
| Organizational Commitment                | -.80     | .14         | -.45*** |
| Job Search                               | .58      | .11         | .32***  |
| Job Alternatives                         | .01      | .07         | .01     |
| Organizational Job Embeddedness          | .19      | .18         | .09     |
| Organizational Job Embeddedness × Gender | .12      | .12         | .06     |

\*\*\*  $p < 0.01$

\*\*  $p < 0.05$

\*  $p < 0.10$

Table B16

*Linear Regression of the Organizational Job Embeddedness × Marital Status Cross*

*Product in Step 1 (N = 220)*

| Variable                           | <i>B</i> | <i>SE B</i> | $\beta$ |
|------------------------------------|----------|-------------|---------|
| Step 1                             |          |             |         |
| Gender                             | .03      | .06         | .03     |
| Job Satisfaction                   | -.02     | .16         | -.01    |
| Organizational Commitment          | -.81     | .14         | -.45*** |
| Job Search                         | .56      | .11         | .31***  |
| Job Alternatives                   | .01      | .07         | .01     |
| Organizational Job Embeddedness    | .18      | .18         | .09     |
| Marital Status                     | -.05     | .06         | -.06    |
| Organizational JE × Marital Status | -.30     | .12         | -.14**  |

\*\*\*  $p < 0.01$

\*\*  $p < 0.05$

\*  $p < 0.10$

## Appendix C: Job Embeddedness Survey

## Job Embeddedness Survey

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

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

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

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

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1st Lt Charles Hassell & 1st Lt Richard Fletcher  
AFIT/ENV BLDG 641 Box 4344 & 4338  
2950 Hobson Way  
Wright-Patterson AFB OH 45433-7765  
Email: charles.hassell@afit.edu  
richard.fletcher@afit.edu  
Advisors: daniel.holt@afit.edu  
sharon.heilmann@afit.edu  
Phone: DSN 785-3636x4800, commercial (937) 255-3636x4800  
Fax: DSN 986-4699; commercial (937) 656-4699

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### INSTRUCTIONS

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

### MARKING EXAMPLES

Right



Wrong



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

|   | ①                 | ②        | ③                 | ④                          | ⑤              | ⑥     | ⑦              |   |   |   |   |
|---|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|---|---|---|---|
|   | Strongly Disagree | Disagree | Slightly Disagree | Neither Agree Nor Disagree | Slightly Agree | Agree | Strongly Agree |   |   |   |   |
| 1. I really love the place where I live.                                  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 2. I like the members of my squadron.                                     |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 3. The weather where I live is suitable to me.                            |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 4. My coworkers are similar to me.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 5. This community is a good match for me.                                 |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 6. My job utilizes my skills and talents well.                            |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 7. I feel like I am a good match for this squadron.                       |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 8. I think of the community where I live as home.                         |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 9. The area where I live offers the leisure activities that I like.       |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 10. I fit with the squadron's culture.                                    |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 11. I like the authority and responsibility I have at this squadron.      |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 12. My values are compatible with the squadron's values.                  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 13. I can reach my professional goals working for this squadron.          |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 14. I feel good about my professional growth and development.             |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 15. Leaving this community would be very hard.                            |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 16. I have a lot of freedom on this job to decide how to pursue my goals. |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 17. People respect me a lot in my community.                              |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 18. The perks on this job are outstanding.                                |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 19. My neighborhood is safe.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 20. I feel that people at work respect me a great deal.                   |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 21. I would sacrifice a lot if I left the military.                       |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 22. My promotional opportunities are excellent here.                      |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |

| ①<br>Strongly<br>Disagree  | ②<br>Disagree | ③<br>Slightly<br>Disagree | ④<br>Neither Agree Nor<br>Disagree | ⑤<br>Slightly<br>Agree | ⑥<br>Agree | ⑦<br>Strongly<br>Agree |   |   |   |   |
|--|---------------|---------------------------|------------------------------------|------------------------|------------|------------------------|---|---|---|---|
| 23. I am well compensated for my level of performance.                       |               |                           |                                    | ①                      | ②          | ③                      | ④ | ⑤ | ⑥ | ⑦ |
| 24. The benefits are good on this job.                                       |               |                           |                                    | ①                      | ②          | ③                      | ④ | ⑤ | ⑥ | ⑦ |
| 25. The health-care benefits provided by the military are excellent.         |               |                           |                                    | ①                      | ②          | ③                      | ④ | ⑤ | ⑥ | ⑦ |
| 26. The retirement benefits provided by the military are excellent.          |               |                           |                                    | ①                      | ②          | ③                      | ④ | ⑤ | ⑥ | ⑦ |
| 27. The prospects for continuing employment with the military are excellent. |               |                           |                                    | ①                      | ②          | ③                      | ④ | ⑤ | ⑥ | ⑦ |

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

|   |                              |                             |
|---|------------------------------|-----------------------------|
| 28. How long have you been in your present position?                          | Years _____                  | Months _____                |
| 29. How many immediate family members live within 60 miles?                   | Number _____                 |                             |
| 30. How long have you been assigned to this squadron?                         | Years _____                  | Months _____                |
| 31. How many of your closest friends live nearby?                             | Number _____                 |                             |
| 32. How long have you been in the Air Force?                                  | Years _____                  | Months _____                |
| 33. How many coworkers do you interact with regularly?                        | Number _____                 |                             |
| 34. How many coworkers are highly dependent on you?                           | Number _____                 |                             |
| 35. How many work teams (e.g. work crews, production teams, etc.) are you on? | Number _____                 |                             |
| 36. How many work committees (e.g. tiger teams, etc.) are you on?             | Number _____                 |                             |
| 37. Are you currently married?<br><i>If not, skip to number 39.</i>           | Yes<br><input type="radio"/> | No<br><input type="radio"/> |
| 38. If you are married, does your spouse work outside the home?               | Yes<br><input type="radio"/> | No<br><input type="radio"/> |
| 39. Do you own the home you live in?  | Yes<br><input type="radio"/> | No<br><input type="radio"/> |
| 40. My family roots are in this community.                                    | Yes<br><input type="radio"/> | No<br><input type="radio"/> |

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

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

| ①<br>Disagree<br>Very Much  | ②<br>Disagree<br>Moderately | ③<br>Disagree<br>Slightly | ④<br>Agree<br>Slightly | ⑤<br>Agree<br>Moderately | ⑥<br>Agree<br>Very Much |   |
|---|-----------------------------|---------------------------|------------------------|--------------------------|-------------------------|---|
| 62. The benefit package (e.g. BAS, BAH, medical, dental, etc.) the Air Force offers is equitable. | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 63. There are few rewards for those who work here.  | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 64. I have too much to do at work.  | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 65. I enjoy my coworkers.   | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 66. I often feel that I do not know what is going on with the squadron.                           | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 67. I feel a sense of pride in doing my job.  | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 68. I feel satisfied with my chances for salary increases.  | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 69. There are benefits we do not have which we should have.                                       | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 70. I like my supervisor.   | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 71. I have too much paperwork.  | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 72. I don't feel my efforts are rewarded the way they should be.                                  | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 73. I am satisfied with my chances for promotion.   | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 74. There is too much bickering and fighting at work.   | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 75. My job is enjoyable.  | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |
| 76. Work assignments are not fully explained.   | ①                           | ②                         | ③                      | ④                        | ⑤                       | ⑥ |

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

**During the *past year* have you ...**

- 77. Read a book about getting a job?
- 78. Revised your resume?
- 79. Sent copies of your resume to a prospective employer?
- 80. Contacted an employment agency or executive search firm to obtain a job outside of the military?
- 81. Read the classified/help-wanted advertisements in the newspaper?
- 82. Gone on a job interview?
- 83. Talked to friends or relatives about getting a new job?
- 84. Sought to transfer to a new job within your wing?

85. Talked to co-workers about getting a job in another squadron or at another base for reasons other than required PCS (e.g. special duty, short tour, etc.)?
86. Made any telephone inquiries to prospective employers?

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

|   | ①                 | ②        | ③                 | ④                          | ⑤              | ⑥     | ⑦              |   |   |   |   |
|---|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|---|---|---|---|
|   | Strongly Disagree | Disagree | Slightly Disagree | Neither Agree Nor Disagree | Slightly Agree | Agree | Strongly Agree |   |   |   |   |
| 87. I would be very happy to spend the rest of my career in this squadron.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 88. I enjoy discussing my squadron with people outside it.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 89. I really feel as if this squadron's problems are my own.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 90. I think I could easily become as attached to another squadron as I am to this one.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 91. I do not feel like "part of the family" at my squadron.   |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 92. I do not feel "emotionally attached" to this squadron.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 93. This squadron has a great deal of personal meaning for me.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 94. I do not feel a strong sense of belonging to my squadron.   |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 95. I am not afraid of what might happen if I left the military without having another job lined up.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 96. It would be very hard for me to leave the military right now, even if I wanted to.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 97. Too much of my life would be disrupted if I decided I wanted to leave the military right now.   |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 98. It wouldn't be too costly for me to leave the military in the near future.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 99. Right now, staying with the military is a matter of necessity as much as desire.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 100. I believe that I have too few options to consider leaving the military.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 101. One of the few negative consequences of leaving the military would be the scarcity of available alternatives.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 102. One of the major reasons I continue to work for the military is that leaving would require considerable personal sacrifice; a civilian job may not match the overall benefits I have here. |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 103. If I had not already put so much of myself into the military, I might consider working elsewhere.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |
| 104. I do not feel any obligation to remain with the military.  |                   |          |                   |                            | ①              | ②     | ③              | ④ | ⑤ | ⑥ | ⑦ |

|   | ①<br>Strongly<br>Disagree | ②<br>Disagree | ③<br>Slightly<br>Disagree | ④<br>Neither Agree<br>Nor Disagree | ⑤<br>Slightly<br>Agree | ⑥<br>Agree | ⑦<br>Strongly<br>Agree |
|---|---------------------------|---------------|---------------------------|------------------------------------|------------------------|------------|------------------------|
| 105. Even if it were to my advantage, I do not feel it would be right to leave the military now.        | ①                         | ②             | ③                         | ④                                  | ⑤                      | ⑥          | ⑦                      |
| 106. I would feel guilty if I left the military now.  |                           |               |                           |                                    | ①                      | ②          | ③                      |
| 107. This squadron deserves my loyalty.   |                           |               |                           |                                    | ①                      | ②          | ③                      |
| 108. I would not leave the military right now because I have a sense of obligation to the people in it. | ①                         | ②             | ③                         | ④                                  | ⑤                      | ⑥          | ⑦                      |
| 109. I owe a great deal to the military.  |                           |               |                           |                                    | ①                      | ②          | ③                      |

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

|   | ①<br>Very Unlikely | ②<br>Unlikely | ③<br>Neither Unlikely<br>Nor likely | ④<br>Likely | ⑤<br>Very Likely |
|---|--------------------|---------------|-------------------------------------|-------------|------------------|
| 110. What is the probability that you can find an acceptable civilian alternative to your job in the military?        | ①                  | ②             | ③                                   | ④           | ⑤                |
| 111. If you search for an alternative civilian job within a year what are the chances you can find an acceptable job? | ①                  | ②             | ③                                   | ④           | ⑤                |

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

|   | ①<br>Very Unlikely | ②<br>Unlikely | ③<br>Neither Unlikely<br>Nor likely | ④<br>Likely | ⑤<br>Very Likely |
|---|--------------------|---------------|-------------------------------------|-------------|------------------|
| 112. Do you intend to leave the military in the next 12 months?                     | ①                  | ②             | ③                                   | ④           | ⑤                |
| 113. How strongly do you feel about leaving the military within the next 12 months? | ①                  | ②             | ③                                   | ④           | ⑤                |
| 114. How likely is it that you will leave the military within the next 12 months?   | ①                  | ②             | ③                                   | ④           | ⑤                |

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

115. What is your age? \_\_\_\_\_

116. What is your gender?

- Male
- Female

117. What is your race?

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

118. What is your highest education level?

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

119. What is your current rank?

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

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

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

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

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

123. How many subordinates do you currently supervise? \_\_\_\_\_

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

### **Reassurance of Anonymity**

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

### **Questions/Concerns**

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

### **Feedback**

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

Name: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

\*\*\* If you provided your name, address and phone number, please detach this sheet from the original survey and turn it in separately to maintain anonymity .

## Vita

Captain Charles Hassell hails from O'Fallon IL, where he graduated from O'Fallon Township High School and earned a partial academic scholarship to attend the University of Oklahoma. Upon graduation, he earned a Bachelor of Science Degree in Civil Engineering. He then worked for Schlumberger Wireline and Testing as a field engineer. After two years with Schlumberger, he left the company and earned his commission through the Air Force's Officer Training School.

His first assignment after Officer Training School was at Travis AFB CA, as a Maintenance Engineer in the 60th Civil Engineer Squadron. While at Travis AFB, he then became a Programming Officer, and finally Chief of Simplified Acquisitions of Base Engineer Requirements.

He was selected to attend the Air Force Institute of Technology and will receive a Master of Science Degree in Engineering Management upon graduation. Following graduation, he will complete an assignment at Nellis AFB, NV.

Permanent Address: 2672 Paddock Cir  
Crestview FL 32536

## REPORT DOCUMENTATION PAGE

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