APPLYING THE UNFOLDING MODEL OF TURNOVER AND JOB EMBEDDEDNESS TO THE RETIREMENT DECISION PROCESS

by

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A Dissertation
Submitted to the
Graduate Faculty
of
George Mason University
in Partial Fulfillment of
The Requirements for the Degree
of
Doctor of Philosophy
Psychology

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Date: October 1, 2010

Fall Semester 2010
George Mason University
Fairfax, VA

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DEDICATION

This dissertation is dedicated to my family who has shared the graduate-school experience and dissertation process with me, including:

- My parents, Tony and Joyce Bludau, who have always encouraged me to go my own way and achieve my goals. Thank you for all of your love, kind words, and support.
- My brother, Chad, who has always provided me with welcome distractions from graduate school. Thank you for always reminding me that there is much more to life than school and work.
- My in-laws (Jim, Susan, Jimmy, and Marie), who have always been interested in hearing about my dissertation, even when there is often something much more interesting to do or discuss.
- And last, but not least, my husband and best friend, Robert, who is my biggest "cheerleader" and has shared in the challenge of completing this dissertation. Thank you for your love, patience, and support.

ACKNOWLEDGEMENTS

This dissertation could have not been completed without the support of the American Association of Retired Persons (AARP), faculty, and colleagues.

First, I would like to thank Kathi Brown and AARP for supporting this research and helping to program and host the survey and allowing access to their membership. Without this support, I would have not gained access to so many recent retirees and their responses.

I would also like to thank my committee members, Dr. Reeshad Dalal and Dr. Steven Rose. Your patience and feedback has been helpful in finalizing this dissertation and preparing it for publication.

A "thank you" also goes to my graduate school colleagues and co-workers who have sympathized with me throughout the dissertation process. You have always provided a helpful ear and provided me with opportunities to talk through my research. A special thanks also goes to Tracy McCausland and Ryan Ginter who helped me code survey data; I could have not have analyzed the data as quickly without you!

Finally, I would like to thank my advisor, Dr. Lois Tetrick, in guiding me along this process. Your thoughtfulness and patience has been much appreciated; I feel that this final product of my graduate career is a success thanks to your continuous guidance and questioning. Thank you.

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ABSTRACT

APPLYING THE UNFOLDING MODEL OF TURNOVER AND JOB EMBEDDEDNESS TO THE RETIREMENT DECISION PROCESS

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By 2016, over 23% of the workforce is expected to be 55 and older (Toossi, 2007), within the timeframe in which they will consider leaving the workforce, to retire, thus creating a potential crisis for employers. This creates an urgent need to understand how employees decide when to retire. By understanding the retirement decision-making process, organizations can help to retain employees for a longer period of time while planning their workforce accordingly. In this dissertation, I present a model outlining the retirement decision process. This model contributes to the retirement literature on how retirees follow different paths in the decision-making process leading to retirement. This new model, based on the unfolding model of turnover (T. W. Lee & Mitchell, 1994) accounts for more contextual factors that have proved more difficult to assess in traditional retirement research and includes a newer construct, job embeddedness, which plays a role in the retirement decision-making process.

INTRODUCTION

By 2016, over 23% of the workforce is expected to be 55 and older (Toossi, 2007), within the timeframe in which they will consider leaving the workforce, to retire, thus creating a potential crisis for employers. This creates an urgent need to understand how employees decide when to retire. By understanding the retirement decision-making process, organizations can help to retain employees for a longer period of time while planning their workforce accordingly.

In this dissertation, I present a model outlining the retirement decision process and discuss how various factors influence this process. This model contributes to the retirement literature on how retirees follow different paths in the decision-making process leading to retirement. Previous models of predicting the retirement decision are discussed and a new way of modeling the retirement decision, more appropriately as a decision process, is presented. This new model, based on the unfolding model of turnover (T. W. Lee & Mitchell, 1994) accounts for more contextual factors that have proved more difficult to assess in traditional retirement research.

Definition of Retirement and the Retirement Decision Process

Before discussing the retirement decision process and current trends in retirement, it is important to clearly define retirement. Previous research notes that the relation between retirement and other variables differ based on how retirement is conceptualized

(Palmore, George, & Fillenbaum, 1982). For example, individuals who retire before the age of 65 may be considered "early" retirees. These individuals differ from those employees who, at an age before 65, may begin working less than full-time even though both parties may consider themselves retired.

Given the changing nature of retirement, I use a modified definition of Feldman's (1994) definition of retirement. Feldman suggested that retirement is "the exit from an organizational position or career path of considerable duration, taken by individuals after middle age, and taken with the intention of reduced psychological commitment to work thereafter" (Feldman, 1994, p. 287). Feldman's original definition was chosen because most operational definitions in past research fit within this general conceptual definition (Beehr, Glazer, Nielson, & Farmer, 2000) and it differentiates retirement from general turnover such that it is focused on the intent to reduce psychological commitment to the workplace and paid employment.

I would further extend this definition to suggest that this occurs in the context of one organization as well. From an organization's perspective, it is a loss when a valued, senior employee begins cutting back his or her hours, but the final exit of that employee is what creates the greatest burden on the organization. When a more senior level employee leaves, he or she is leaving with a plethora of organizational knowledge, practical experience, and is gone from the organization. Therefore, I define retirement as *the exit from a position or career path of considerable duration from an organization, taken by individuals after middle age, and taken with the intention of reduced psychological commitment to work thereafter*. From an individual perspective,

"retirement," in fact, may encompass leaving an organization for a reduced workload (bridge employment), but for the organization's purpose, this individual is retired. I am interested in explaining the process from an individual decision-making context within an organization to consider organizational implications.

The retirement decision is the choice individuals make to engage in retirement as defined above. Most studies attempt to capture this decision by measuring the age at which one intends to retire (e.g., Adams, 1999; Beehr et al., 2000; Taylor & Shore, 1995). While this is a good prospective measure, it does not account for many factors that go into the decision-making process. Just as we know that much more goes into turnover decisions beyond job satisfaction, the retirement decision process is impacted by a variety of dynamic factors that are difficult to capture at one point in time. Therefore, researchers must take a step back and evaluate, holistically, what goes into the retirement decision process. Why do individuals decide to leave an organization, a career, and withdraw psychologically from the workforce and paid employment? To better understand the retirement decision process, the current workforce and the way retirement is changing is discussed.

Current Workforce

Today, 12 percent of the population is 65 or older; by 2030, 20% of the population is projected to be 65 or older (U. S. Census Bureau, 2004). While the number or proportion of older workers will continue to increase, labor force predictions suggest that there will also be fewer younger workers entering the workforce (Warr, 1994), and

employers have not been taking the appropriate steps to account for these trends in workforce demographics (Velvet, 2004).

In the next few years, the first members of the baby-boom generation, those born in the two decades following World War II, will be eligible to retire (Aizenman, 2007). From 2006 to 2016, it is projected that the U.S. workforce age 55 and older is expected to grow by 47%; in 2006, this group constituted of 17% of the workforce. By 2016, it is expected to represent 23% of the workforce (Toossi, 2007). This conundrum is often referred to as the "human capital crisis" and affects both public and private sectors. While a large percentage of the workforce will be eligible to leave the workforce with retirement benefits, not all will leave once they are eligible or are financially stable (Velvet, 2004). Many workers will continue their careers in the workforce beyond the traditional age of retirement.

Retirement Trends

Knowing which employees will continue to work once their organizational retirement benefits are maximized is helpful to human resource professionals across the country, but what variables beyond age and finances go into the decision to retire? Due to expected labor shortages, it is important to understand how to best retain employees because the planning and decision-making going into retirement starts well before the end of one's working life and continues into retirement (e. g. Atchley, 1971; Minkler, 1981). Individuals begin thinking about retirement years before their actual workforce exit (Beehr, 1986; Taylor & Shore, 1995), even though they may or may not start planning

financially before then. Nonetheless, there are a variety of issues facing older workers today as they face retirement decisions.

It is important, first, to understand that the idea of "retirement" is drastically changing. The concept of leaving one's working life (i.e., retirement) was a product of the post-World War II economic boom. After working in blue-collar, physically demanding jobs for forty-plus years, many employees left under retirement plans built into their union contract and lived out their lives on a fixed income from their pension and Social Security. There has been a shift away from manufacturing-based organizations, which demand physical labor, to more knowledge-based organizations, where various services are provided (Morgeson & Campion, 2003). Knowledge-based organizations require less physical demands on their workers, thus, older workers have the luxury of staying in the workforce if they choose to do so. In fact, a recent press release by the U.S. Census Bureau showed that the number of people aged 65 to 74 who were still working went from one in five in 2000 to one in four in 2006 (U.S. Census Bureau, 2007).

The Census bureau results also reflect the increasing number of Americans who may be ready to retire once their own children have left the house, but who are now becoming caregivers to their elderly parents (Pew Research Center, 2005). It is not uncommon for individuals in their 60s to have one or both parents living, but who now need supervised care. The cost of caring for one's parents, possibly in addition to one's children, creates a financial strain on retirees, so many may remain working to fund their parent's care.

Housing and health care costs are also rising, requiring additional income. Many retirees will need additional coverage beyond Medicare which leads to a major source of uncertainty for older individuals. Since most organizations do not fund insurance for retirees (Buchmueller, Johnson, & Lo Sasso, 2006), many individuals continue working after the age of 65 for supplementary insurance in addition to Medicare. Beehr, Glazer, Nielson, and Farmer (2000) found that concern over the cost and availability of health insurance led individuals to intend to stay in the workforce longer.

Due to this, many employees who retire early (generally before the age of 65) and leave the workforce re-enter the workforce (Hansson, DeKoekkoek, Neece, & Patterson, 1997), thus, the retirement decision process today is much more complex. Older workers have a variety of options. They can choose to retire and leave the workforce, or many organizations allow their older workers to slowly cut back their hours and work part-time. Many organizations do this to keep employees with valuable organizational experience around to help train and mentor younger workers. If they decide to continue working after deciding to retire, many retirees stay in bridge employment similar to their previous jobs, i.e., career bridge employment (Hardy, 1991; Moen, Erickson, Agarwal, Fields, & Todd, 2000) or they may consider bridge employment in a different field. This variety of options makes the actual decision process difficult to capture, but similar to turnover, there are a variety of factors that may impact this process, and researchers have been trying to understand these factors.

The Retirement Literature

Research has generally shown that economic well-being is a consistent predictor in determining the expected age that an individual intends to retire (Adams, 1999; Bahrami, 2001; Beehr et al., 2000; Schmitt & McCune, 1981). Support for the impact of one's health on retirement, though, is mixed. Some researchers have found no effect for health (Adams & Beehr, 1998; Taylor & Shore, 1995), while others found that health and one's intended retirement age were positively correlated (Adams, 1999; Bahrami, 2001; Beehr et al., 2000; Schmitt & McCune, 1981; Shultz & Wang, 2007). These mixed findings may be due to how health is defined and measured. If health is defined as the lack of a major illness or physical impairment (as Feldman defined it), health generally impacts one's intent to retire (Shultz & Wang, 2007). In general, if individuals have poor health, they are more likely to leave the workforce, and if individuals are well off financially, they are more likely to retire than an individual who may have financial obligations or poor savings for retirement.

For work-related variables, Adams (1999) found that one's occupational goal attainment was negatively related to one's planned retirement age such that individuals who felt that they accomplished their goals in the workplace intended to retire at an earlier age. Similarly, Brougham and Walsh (2005, 2007) found that one's occupational goals and personal goals help to predict one's retirement intentions. When individuals perceived a misfit or incompatibility of personal goals with working, individuals were more likely to intend to retire at an earlier age; that is, they intended to retire earlier to fulfill their personal goals. Similarly, if individuals perceived a misfit or incompatibility

of work goals with retiring, they were more likely to intend to retire at a later age; that is, they intended to keep working to try to meet their goals (Brougham & Walsh, 2007).

While many researchers include job satisfaction in their studies (Hanisch & Hulin, 1991), most researchers have not found support for job satisfaction's (or similar variables) impact on one's retirement age (Adams, 1999; Adams, Prescher, Beehr, & Lepisto, 2002; Beehr et al., 2000; Taylor & Shore, 1995). Research on organizational commitment, though, has been more promising. Studies have found a positive relation between organizational commitment and one's intended retirement age (Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995).

One's involvement in leisure pursuits also contributes to the retirement decision (Bahrami, 2001; Beehr et al., 2000). If an individual has attractive non-work alternatives, he or she is more likely to retire in comparison to individuals who do not engage in leisure activities. Beehr's model also suggested that one's family life has an impact on the retirement decision. While he did not provide specific hypotheses, he suggested that the attractiveness of one's home life, the number of dependents (specifically, children), and one's spouse can affect the retirement decision serving as "pull" factors that would encourage the potential retiree to leave the workforce and pull him or her away from work (S. Kim & Feldman, 2000). Most studies consider one's marital status and whether or not one's spouse is working when evaluating this factor. The findings from these studies are mixed; some studies have found that one's spouse influences intended retirement ages (W. K. M. Lee, 2005; Pienta & Hayward, 2002), and others have not

found this effect (Adams, 1999; Bahrami, 2001). The question remains, how do these findings combine to create a more comprehensive model of the retirement decision?

Problems with Past Studies on Retirement

Researchers have begun to study factors that impact one's intention to retire, but they rarely focus on individuals who have followed through the retirement decision process and made the actual decision to leave the organization. Most researchers collect data from workers aged 50 or older and then measure their intended age of retirement to capture retirement intentions (Adams, 1999; Bahrami, 2001; Beehr et al., 2000; Taylor & Shore, 1995). Some researchers have gone further to develop retirement intention scales (Adams et al., 2002; Brougham & Walsh, 2005, 2007). While past studies on predictors of retirement are good first steps, it would be helpful to understand the larger decision process that goes into making a retirement decision. Therefore, by surveying individuals who have recently retired, we can review the decision-making process from another angle.

The decision to retire is similar to the decision to leave an organization, yet is different for everyone and highly contextualized (Feldman, 1994). Therefore, a retirement decision model must account for these contexts. The most appropriate model to capture these circumstances may be the unfolding model of turnover (T. W. Lee & Mitchell, 1994). Research on the unfolding model supports the many distinct decision paths that individuals could follow when leaving an organization (Holtom & Inderrieden, 2006; T. W. Lee, Mitchell, Holtom, McDaniel, & Hill, 1999; T. W. Lee, Mitchell, Wise, & Fireman, 1996).

The Unfolding Model

The unfolding model was developed by Lee and Mitchell (1994) to account for more of the complexity in the turnover process. It views turnover as a decision-making process based on image theory (Beach, 1990; Beach & Mitchell, 1987). While most turnover models typically focus on job dissatisfaction and affective measures, Lee and Mitchell argued that turnover was not necessarily due to poor attitudes. The unfolding model suggests that the decision-making process often begins with a *shock.* In turn, this model is driven by *scripts, image violations, job satisfaction*, and the *search and/or evaluation of alternatives*. Lee, Mitchell, and colleagues tested the unfolding model and found evidence supporting its components and four decision paths (T. W. Lee et al., 1999; T. W. Lee et al., 1996).

The unfolding model suggests that the decision-making process often, but not necessarily, begins with a shock. This event may or may not be personal, and it may be positive, negative, or neutral. For example, a large number of layoffs would be a negative organizational shock, whereas getting accepted into law school would be a positive personal shock.

Then, individuals may or may not engage in a predetermined plan of action when a shock occurs, also referred to as a *script* (Fiske & Taylor, 1991) or a type of schema for a particular situation. This script may be based on past experiences, social expectations, or the observation of others who are confronted with a similar shock.

If there is no pre-determined script to follow, individuals evaluate how the job fits with their images and decide whether an *image violation* occurs. An image violation

occurs if the job, organization, and/or shock conflicts with their value, trajectory, or strategic images as discussed by image theory (Beach, 1990; Beach & Mitchell, 1987).

Although previous studies suggested there was more to the turnover process than poor job satisfaction, Lee and Mitchell did not deny that job satisfaction plays a part in the turnover process. Depending on the path followed, job satisfaction plays different roles in the decision-making process. Additionally, the unfolding model also accounts for the search and evaluation of alternatives. An individual may or may not engage in these behaviors.

The combination of the components of the unfolding model yields four different paths that people leaving an organization follow (see Figure 1 and Lee et al., 1999). Studies have found that 47 to 93% of leavers can be categorized according to these four decision paths (Donnelly & Quirin, 2006; Holt, Rehg, Lin, & Miller, 2007; T. W. Lee et al., 1999).

Applying the Unfolding Model to Retirement

Research on the unfolding model supports the different decision paths that individuals follow when leaving an organization (Donnelly & Quirin, 2006; Holt et al., 2007; Holtom & Inderrieden, 2006; T. W. Lee et al., 1999; T. W. Lee et al., 1996). Although retirement and turnover are different, I argue this model appropriately applies to the retirement decision process since retirement is often a long-term decision-making process (Beehr, 1986; Taylor & Shore, 1995) and cannot easily be captured by organizational attitudes and demographics. Many of the factors that are expected to affect retirement in theory may be adequately captured as significant, jarring events (shocks).

Therefore, it is suggested that the unfolding model also applies to the modeling of the retirement decision-making process.

Job embeddedness. In addition to applying the unfolding model to the retirement decision, I suggest that job embeddedness plays a role in the decision-making process. Job embeddedness represents a number of factors contributing to how enmeshed one is in his or her job, organization, *and* the community (T. W. Lee, Mitchell, Sablynski, Burton, & Holtom, 2004; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001). As job embeddedness is still a relatively new concept, its applications are still being studied. On-the-job embeddedness and off-the-job embeddedness have explained variance in both turnover behavior and performance on the job independently (T. W. Lee et al., 2004). In the turnover literature, both on-the-job embeddedness and off-the-job embeddedness have been shown to prevent turnover behavior such that individuals high on both on-the-job embeddedness and off-the-job embeddedness are less likely to leave (Holtom & Inderrieden, 2006; T. W. Lee et al., 2004; Mitchell et al., 2001). For retirement though, I suggest these two types of embeddedness work against one another. That is, on-the-job embeddedness serves as a force to keep the individual in the workplace, whereas off-the-job embeddedness serves as a force to pull the individual away and out into retirement, the community, etc. Therefore, on-the-job embeddedness and off-the-job embeddedness may lead to conflicting values or *images* which may impact the retirement decision-making process.

Shocks. For the retirement process, shocks may occur and provoke the retirement decision-process. Previous studies of retirement decisions have tried to study how life

events affect the retirement decision process, but most have failed to capture these occurrences as life events. For example, researchers have tried to measure how the retirement of a spouse or coworkers could prompt others to retire, but most research fails to adequately capture the relevant concept. For example, "Is your spouse retired?" does not capture the "shock" value of this state of being, so it is important to capture shocks in the retirement decision. By accounting for shocks in studying the retirement decision process, life events such as the retirement of a spouse, children graduating from college, health-related changes, and the reaching of particular financial goals (i.e., debts repaid, Social Security benefits beginning) can be measured as potential events that may hasten the retirement decision process.

Image violations. Image violations occur when "an individual's values, goals, and strategies for goal attainment do not fit with those of the…organization or those implied by the shock" (T. W. Lee et al., 1999, p. 451). For retirement, this image violation may occur for a variety of reasons. In turnover, image violations are more likely to be related with low job satisfaction and deal with organizational values and goals that may conflict (T. W. Lee et al., 1999), whereas for individuals contemplating retirement, there are often conflicting goals between one's work life and one's leisure (off-the-job) life (Brougham & Walsh, 2005, 2007).

Job satisfaction. While job satisfaction has not been found to necessarily predict the age at which one expects to retire (Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995), it still may be an important factor to consider through the lens of the

unfolding model. For some paths, job satisfaction may not play a role; these contingencies are discussed.

Search for and/or evaluation of alternatives. Individuals may also vary in their search behaviors. For individuals that may be hesitant to retire or have not experienced a shock, a search for other opportunities such as career bridge employment or bridge employment in a different field may be conducted.

THE PRESENT STUDY

The present study applies the unfolding model, previously applied to turnover, to the retirement decision-making literature. While turnover and retirement are distinct forms of organizational withdrawal (Adams & Beehr, 1998), this turnover decision-making model, as applied to retirement, is proposed to capture some of the intricacies that other retirement models have failed to consider. The unfolding model of retirement takes contextual factors into consideration as well as a new construct, job embeddedness, with its on-the-job and off-the-job components. Past studies looking at the retirement decision process have tended to focus on the intended age of retirement, not actual retirement, and while this design helps predict what factors facilitate or inhibit one's exit from the workplace, it does not consider what actually happens during the retirement decision process or why one ultimately decides to begin to withdraw from the workplace.

Table 1 presents a general overview of the paths of the unfolding model adapted to the retirement decision more specifically. These paths are similar to the original model developed for turnover decisions regarding the occurrence of shocks, whether one engages in a script or not, whether an image violation occurs, and also accounts for variations in job satisfaction. The greatest difference between these two models is the inclusion of both on-the-job embeddedness and off-the-job embeddedness and the

possibility of alternative withdrawal outcomes. The five main paths in this unfolding model of retirement are outlined more specifically below.

Decision Paths and Hypotheses

The following paths are hypothesized paths that individuals are expected to follow on the road to retirement. Similar to Lee and Mitchell's (1994) original model, this unfolding model of retirement serves as a possible decision-making process that retirees follow. Additionally, the relation of other variables are examined and additional research questions are posed regarding the employment behaviors of individuals once retired from an organization.

Decision path 1. Similar to the turnover model, an individual on decision path 1 experiences a shock, automatically engages in a script, and retires from the organization without searching for or evaluating alternatives. For example, an individual may have always imagined retiring with his or her significant other, so when one's significant-other retires, this shock may lead that individual to quickly proceed through the retirement decision process. The shock and automatic engagement of a script makes the image violation evaluation unnecessary. The shock and script are the two essential factors driving this path.

Hypothesis 1: Individuals follow decision path 1, where a shock occurs and a matching script is followed. The individuals do not evaluate alternatives.

Decision paths 2a and 2b. On paths 2a and 2b, individuals experience a shock, but do not automatically engage in a script. In this case, individuals do not have a pre-existing plan on what to do if a particular shock occurred (as in decision path 1). This

shock sufficiently triggers an image violation for the individual. That is, the shock's effects are incongruent with that individual's value, trajectory, or strategic images. One's level of job satisfaction does not play a role at this point. The violation in and of itself may be strong enough to harbor thoughts of retirement, regardless of levels of job satisfaction. For example, poor health, or an organizational restructuring where the potential retiree's job drastically changes may serve as a shock. Unlike decision paths 3a and 3b, discussed below, individuals following this path are expected to be high on on-the-job embeddedness. Levels of off-the-job embeddedness, for these decision paths (2a and 2b) serve as a moderator. For decision path 2a, a high level of off-the-job embeddedness is pulling the individual to leave. He or she may evaluate alternatives (bridge employment, part-time work) due to financial constraints or other reasons but eventually decides to retire. For decision path 2b, individuals are *not* highly embedded off-the-job. Therefore, these individuals are likely to search for alternatives to retirement such as bridge employments rather than fully retire. This final part of the path may be influenced by the type of shock and image violation that occurs. Implications of the type of shock/image violation experienced are discussed below, after the full model is discussed.

> *Hypothesis 2: Individuals follow decision path 2a, where a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives occurs, and individuals are high in both on-the-job and off-the job embeddedness.*
>
> *Hypothesis 3: Individuals follow decision path 2b, where a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives*

occurs, and individuals are high in on-the-job embeddedness and low in off-the job embeddedness.

Decision paths 3a and 3b. Similar to decision path 2, for decision path 3, individuals experience a shock, but do not automatically engage in a script. Although an image violation occurs, this individual is *not* highly embedded in his or her job/organization and job satisfaction is likely low. For path 3a retirees, the high levels of off-the-job embeddedness will pull them towards retirement without considering alternatives. Similarly, path 3b retirees will retire without considering alternatives, but may return to the workforce later due to a lack of embeddedness within the community. The major difference between these two paths is the difference in levels of off-the-job embeddedness. Again, off-the-job embeddedness is expected to serve as a moderator. Levels of job embeddedness consequently may shape one's values and goals (images), hence the level and type of image violation that occurs will result in slightly different decision paths. Individuals on decision path 3a, in this case, will consider leaving their organization once an image violation occurs knowing there are strong linkages and good fit within the community whereas there are fewer factors keeping that individual from leaving the workforce (low on-the-job embeddedness and low job satisfaction). For 3b individuals, since there are no ties and job satisfaction is low, that individual may retire, or choose to engage in bridge employment, so a search is likely to occur.

Hypothesis 4: Individuals follow decision path 3a, where a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives

does not occur, and individuals are low in job satisfaction, low in on-the-job embeddedness, and high in off-the job embeddedness.

Hypothesis 5: Individuals follow decision path 3b, where a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives occurs, and individuals are low in job satisfaction and both on-the-job and off-the job embeddedness.

Decision path 4. Individuals on decision path 4 do not experience a shock, so there is no engagement of a script. This process likely occurs over a longer period of time since there is no critical event facilitating the decision-making process. As in the unfolding model of turnover, the paths without shocks are mainly driven by dissatisfaction within the job, so for paths 4 and 5, it is expected that the model will be driven mainly by low levels of job satisfaction. It is expected that an image violation occurs in this decision path, and it is likely that the image violation comes about because personal goals are interfering with work goals (Brougham & Walsh, 2005, 2007) or because of low levels of job satisfaction. Decision path 4 retirees are high in on-the-job embeddedness, and similar to those in decision path 2a, the high level of off-the-job embeddedness pull employees away from work and into retirement. But, unlike decision path 2a, since a jarring shock does not occur but job satisfaction is low, it is expected that the individuals will consider bridge employment opportunities before retiring fully, thus a search will likely occur.

Hypothesis 6: Individuals follow decision path 4, where shocks and scripts do not occur in the decision-making process. An image violation occurs as well as a

search and/or evaluation of alternatives. Individuals are low in job satisfaction and high in both on-the-job and off-the job embeddedness.

Decision paths 5a and 5b. The final two decision paths of the unfolding model occur without a shock or script to follow as well. On these paths, individuals experience an image violation and low job satisfaction, but they are low in on-the-job embeddedness compared to path 4 retirees. On decision path 5a, since individuals are highly embedded in the community though, they are likely to end up fully retiring without a search whereas for decision path 5b, these individuals are likely to go into bridge employment since they are not heavily embedded in the community. In the case of decision path 5a, the lack of on-the-job embeddedness and low job satisfaction drives the employee to leave since embeddedness within the community is much stronger whereas the lack of on-the-job embeddedness and low job satisfaction drives the employee to retire in decision path 5b, but not necessarily quit working since levels of off-the-job embeddedness are low as well. The consideration of alternatives is likely for individuals on path 5b (since they may engage in bridge employment), but not likely for path 5a followers.

Hypothesis 7: Individuals follow decision path 5a, where shocks and scripts do not occur in the decision-making process. An image violation occurs, but a search and/or evaluation of alternatives does not. Individuals are low in job satisfaction and on-the-job embeddedness and high in off-the job embeddedness.

Hypothesis 8: Individuals follow decision path 5b, where shocks and scripts do not occur in the decision-making process. An image violation occurs as well as a

search for and/or evaluation of alternatives. Individuals are low in job satisfaction and on-the-job embeddedness and off-the job embeddedness.

It should be noted that individuals are not expected to leave without a shock if they are high in on-the-job embeddedness and are not heavily embedded in the community since there are no factors pulling the individual to leave besides low job satisfaction. Beyond testing the overall fit of the unfolding model as it applies to retirement, some specific hypotheses regarding the components of the models are raised. Additionally, this study incorporates some research questions regarding more individual factors related to retirement.

Shocks. Shocks for decision path 1 within the turnover model often involve larger, evolving processes within a person's life (T. W. Lee et al., 1999). Similar to the first path of the turnover model, individuals on decision path 1 for retirement will engage in a script once a shock occurs. It is expected that these retirement shocks, similarly, will be more personal in nature (T. W. Lee et al., 1999) and that they may be expected such that there was a script in place for individuals to follow once this shock occurred. The emphasis on shocks in the retirement model is expected, based on the life course perspective (Crosnoe & Elder, 2002; Elder, 1995). This theory suggests that life transitions occur under specific circumstances and the social context is one of these key factors (Wang, 2007). Since many of these circumstance (i.e., a spouse's retirement, an age milestone passed, eligibility for retirement income) are expected, it is expected that retirees may have had a script in place that would facilitate their retirement after the occurrence of one of these or similar circumstances. This would affect the duration of the

decision-making process. For individuals who experience a shock and follow a script, it is expected that these individuals will move more quickly through the decision-making process than individuals who do not have a script to follow because individuals who do not have a schema with which to interpret the shock will require more mental deliberations (T. W. Lee & Mitchell, 1994). By definition, a shock is sufficiently jarring to get the individual to think about retiring and making a judgment about their job (T. W. Lee & Mitchell, 1994). Therefore, it is expected that individuals who experience a shock (paths 1-3) will move more quickly through the decision-making process than individuals who follow a non-shock path (path 4 and 5).

Hypothesis 9: Decision path 1 shocks that retirees experienced are more likely to be categorized as personal shocks.

Hypothesis 10a: The time between the first thoughts of retiring and the decision to retire as well as the duration between the decision to retire and actual retirement are shortest for decision path 1.

Hypothesis 10b: The time between the first thoughts of retiring and the decision to retire as well as the duration between the decision to retire and actual retirement are shorter for decision paths 1, 2, and 3 than decision paths 4 and 5.

Lee et al. (1999) also considered the positivity or negativity of shocks. Lee and colleagues presented some original hypotheses regarding levels of expectation or the occurrence of positive or negative shocks in their replication study, but the unfolding model as it applies to retirement, as discussed below, varies in both context and structure, so for the purposes of this study, only exploratory questions are advanced. Since decision

path 1 retirees enact a script, I would expect that they had planned for a positive event to unfold, but individuals may also plan for negative events. For leavers on decision paths 2 and 3, the nature of the shock is not as clear. The shock, positive or negative, gets the individual to start thinking about retiring, but it does not necessarily have to be positive or negative.

Research Question 1: Are retirement shocks more positive or negative in nature for leavers in decision path 1?

Research Question 2: Are retirement shocks more positive or negative in nature for leavers in decision paths 2 and 3?

Image violations. Brougham and Walsh, using a list of both leisure goals and work goals, asked individuals to rank personal goals and then evaluate the utility both in continued work or retirement as a means to achieve those goals (2005). They found that these goal evaluations helped to predict retirement intentions such that when working interfered with personal life goals, individuals were more likely to express the desire to retire sooner. Recently, they applied image theory to similar data and found that the incompatibility of goals predicted twenty-five percent of variance in their measure of retirement intent (Brougham & Walsh, 2007). Similar to the nature of shocks, it is expected that image violations for retirement will deal with the lack of fit between personal life goals and working. Thus:

Hypothesis 11: Image violations that retirees experienced are more likely to be categorized as personal image violations.

Job embeddedness. Mitchell and Lee (2001) suggest that the unfolding model could benefit from being combined with the job embeddedness construct. No formal model has yet incorporated job embeddedness into the unfolding model. Holtom and Inderrieden (2006) have evaluated aspects of both, but they did not fully discuss how job embeddedness could be integrated into the unfolding model. For their research integrating job embeddedness into the unfolding model, they did not model levels of job embeddedness within the decision paths, per se. Instead, they compared levels of job embeddedness and whether a shock occurred (and the individual left), a shock did not occur (and the individual left), or the individual stayed. This study integrated the unfolding model by using shocks and the job embeddedness literature on turnover, but it did not fully integrate job embeddedness into the unfolding model of turnover.

The turnover literature has only used the global composite of the embeddedness construct since it is expected that both on and off-the-job embeddedness presents factors that encourage employees to stay (Holtom & Inderrieden, 2006; T. W. Lee et al., 2004; Mitchell et al., 2001), but for retirement, I suggest that these two types of embeddedness work against one another. That is, on-the-job embeddedness serves as a force to keep the individual in the workplace, whereas off-the-job embeddedness serves as a force to pull the individual away and out into retirement, the community, etc. To be able to retire and spend more time in your community would be more attractive to those who fit well in their community, are high on links in the community, and who make sacrifices to spend time away from their community (and work).

Job embeddedness accounts for unique variance in withdrawal decisions over measures of job satisfaction (Mitchell et al., 2001), and researchers have not found much support for job satisfaction's (or similar variables) impact on one's intended retirement age (Adams, 1999; Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995) although job satisfaction is predictive in determining whether one engages in bridge employment (Wang, Zhan, Liu, & Shultz, 2008). More importantly, retirement research has failed to account for community-related variables that may affect the retirement-decision beyond marital status (Adams, 1999; Bahrami, 2001; W. K. M. Lee, 2005; Pienta & Hayward, 2002). For the unfolding model applied to retirement, various levels of job embeddedness are expected to steer individuals towards different decision paths. This is especially true for decision paths 4 and 5. As noted, a shock is not expected to occur for individuals following these decision paths; rather, an image violation triggers the retirement decision process which may be driven by low levels of job satisfaction. As suggested by their own application of image theory, Brougham and Walsh (2005; 2007) found that perceptions of incompatibility (or an image violation) with personal goals and working were positively related to the intent to retire. Similarly, for the current study, if an individual is high in off-the-job embeddedness, regardless of levels of on-the-job embeddedness, it would be expected that an image violation would occur since individuals who are highly embedded in their community will have more forces pulling them towards retirement and this image violation would likely be the source of dissatisfaction and thinking about leaving (rather than a shock).

Hypothesis 12: Off-the-job embeddedness is positively correlated with image violations.

Other Research Questions

Similar to the unfolding model for turnover, this model has distinct paths one may follow. It is important to keep in mind that this decision-making model accounts for paths of *leaving* the organization, not staying. Hence, all paths lead to retirement from the organization, and paths that would not lead to retirement, but rather staying, are not accounted for in this model. For the individual, decision paths may temporarily lead to related behaviors such as career bridge employment or bridge employment in a different field, but ultimately they lead to retirement as the model is conceptualized now.

Beyond this original development of an unfolding model for turnover, there are some expectations in how this model may be followed. First, individuals who retire on decision path 1 may be more likely to return to the workforce in bridge employment. This would be expected since these individuals did not consider alternatives to retirement in their decision-making process. Similarly, individuals who do not consider alternatives in this unfolding model of retirement and retire are also likely to return to the workforce in some form of bridge employment. This is especially true for individuals who are high in on-the-job embeddedness. Job embeddedness, for those who originally retire, may serve as a moderator in evaluating whether or not an individual will return to work either in career bridge employment or bridge employment in a different field. This would apply to both forms of off-the-job embeddedness and on-the-job embeddedness such that individuals low on off-the-job embeddedness may not fit within their community and

yearn to be back in the workplace, and individuals high in on-the-job embeddedness may miss those links and their fit within the organizational context so much that they want to return. These expected future outcomes are denoted in Table 1.

While it is the intent of this study to model the retirement decision-making process from the employee's perspective in an organization, it is still important to understand the final outcome of former employees once they leave the organization. While no studies to my knowledge have predicted actual retirement from an organization with these variables, Wang et al. (2008) found that age, finances, health, education, work stress, and marital satisfaction were predictive of various bridge employment behaviors and made comparisons across full retirement, career bridge employment, and bridge employment in a different field. Select variables, as well as the occurrence of the decision paths, will be examined to see which factors lead to various retirement behaviors.

Research Question 3: Are age, finances, education level, and marital satisfaction predictive of bridge employment behaviors?

Research Question 4: Are job satisfaction and job embeddedness predictive of bridge employment behaviors?

Research Question 5: Are the decision paths predictive of bridge employment behaviors?

METHOD

To test the unfolding model as it is related to retirement, a multiple case study design, as described by Yin (1994) was used. Yin suggests that this approach is appropriate to testing theoretical propositions with qualitative data (1994). This approach was chosen because the unfolding model, as it applies to the retirement decision process, has never been tested, and it was the intent of this study to deduce the essential features of each decision path and more closely examine the retirement decision-making process. This approach has also been used when studying the unfolding model of turnover (Donnelly & Quirin, 2006; T. W. Lee et al., 1999; T. W. Lee et al., 1996).

Participants

Data were collected from retired members of the American Association of Retired Persons (AARP). Members who opted-in to receive electronic correspondence from AARP were given the opportunity to participate through the weekly online newsletter AARP distributes. Individuals were eligible to participate in the survey if they had retired from a job or organization in the past year.

The AARP newsletter goes out to approximately 1.5 million individuals and approximately 500,000 members open the newsletter each week. Of these members, it is unknown how many individuals are retired. Membership to AARP is open to individuals 50 years of age or older; being retired is not required. Of the 1,486 members who clicked

on the link to participate, 900 were retired, but only 161 of these individuals retired in the last year and were eligible to participate in the survey. Ten of these individuals dropped out of the survey before responding to critical items, thus were dropped from the dataset. Furthermore, 13 individuals in the sample made the decision to retire after involuntarily leaving their job (e.g., being laid off, company went bankrupt). For the purposes of this study, these individuals were excluded from analyses to assess voluntary retirement, resulting in a final sample of 138.

Power analyses were calculated using G*Power3 (Faul, Erdfelder, Lang, & Buchner, 2007) and entering in power (0.80), the statistical test, and expected effect size. A medium effect size was used for the intended quantitative analyses based on previous unfolding model research. The software yielded suggested sample sizes of 64 participants to test the overall path structure (using correlations) and samples of 105 and 63 to test the proposed chi-square goodness of fit tests and MANOVA tests, respectively, therefore an adequate sample size was obtained to test all hypotheses and research questions with a power of 0.80.

The sample consisted of 77 males (56%) and 61 females (44%). Their ages ranged from 52 to 77 years of age, with an average age of 63. The median age also was 63. On average, these individuals retired at the age of approximately 61 years. Of those that completed the survey, the majority of respondents self-categorized as white or Caucasian (91%). The remaining respondents identified themselves as Black (4%), Asian (2%), or Other (3%). The majority (63%) of the respondents had a household income of $100,000 or less in 2008, and a slight majority (58%) held a bachelor's degree or higher.

Survey and Measures

Individuals were surveyed through the AARP web server, and the survey was entirely web-based. Individuals filled out a short survey on the decision-making process that went into their decision to retire (see Appendix B). They were also given a modified version of a job embeddedness measure along with questions on demographic variables.

Individuals were asked a number of questions regarding the decision process. These items were based on previous research on the unfolding model (T. W. Lee et al., 1999; T. W. Lee et al., 1996; Morrell, Loan-Clarke, & Wilkinson, 2004). For most items, modified measures from Lee et al. (1999) were used.

Shocks. To account for shocks, individuals were asked about the circumstances and events that may have occurred before they decided to retire. This measure was modified from the Lee et al. (1999) study. An appropriate answer to at least one of the questions (see Appendix C) indicated that a shock occurred. Individuals were asked to describe the event/circumstances surrounding their retirement, and if appropriate, completed items developed by Morrell et al. (2004) to evaluate different characteristics of the shocks.

Scripts. To evaluate whether or not the individual engaged in a script, questions were asked regarding pre-existing plans regarding certain events. These items were modified from the Lee et al. (1999) study for the purposes of retirement. An example item includes, "At the time I retired, I had already determined that I would leave the organization if a certain event were to occur (e.g., my spouse retired) or I reached a

certain milestone." An answer of yes to any of these items indicated an engaged script. "No" responses indicated that no script was activated.

Image violations. To evaluate whether or not an image violation occurred, measures from Lee et al. (1999) were modified to be applicable to the retirement decision. Items referenced the compatibility of values and goals with the former organization and perceptions of being able to achieve those goals if one would have remained working. Example items include, "How compatible were your personal goals with those of your former employer," and "At my organization, my career was progressing as I expected." Participants responded on a scale of 1 (Not compatible or Strongly disagree) to 5 (Compatible or Strongly agree). A response of 1 or 2 to at least one of the items indicated that an image violation occurred.

Job satisfaction. For job satisfaction, the same measure used by Lee et al. (1999) was used. This measure asks how satisfied individuals were with a number of factors such as financial rewards, coworkers, the nature of the work, etc. Participants responded on a scale of 1 (Very dissatisfied) to 5 (Very satisfied). As in the Lee et al. (1999) study, a rating of 1 or 2 to any of the following indicated dissatisfaction.

Job embeddedness. To evaluate levels of job embeddedness, the Mitchell et al. (2001) measure was modified to fit with retirement research and a retrospective approach by changing relevant organizational items from present to past tense (i.e., "I liked the members of my work group." versus "I like the members of my work group.") and referring to the participant's previous organization as necessary. The original job embeddedness measure (Mitchell et al., 2001) contained 42 items across the six

dimensions of on-the-job fit, links, and sacrifice and off-the-job fit, links, and sacrifice. Items from the measure were deleted if they had low factor loadings in previous studies or if they were only used in one study and two additional items to assess community links were developed to elaborate on the links dimension, resulting in a final measure of 28 items (see Appendix C). Responses ranged from 1(Strongly disagree) to 5(Strongly agree) for scaled items.

Job embeddedness, according to the taxonomy developed by Law, Wong, and Mobley (1998), is best captured as a composite. For the fit, sacrifice, and links to community dimensions, the mean score was taken. For the links to organization dimension, items were standardized before being analyzed or included in composites (e.g., How long did you work for your organization?) since these items yielded numerical responses on varying scales. These items are noted in Appendix C with an asterisk (*). Standardized items were then transformed to have a mean of 2.50 (mid-point value of the scale), and then a mean was computed for all link items. All dimension means were averaged to form an overall measure of job embeddedness providing weight to each distinct dimension. Aggregate measures of on-the-job and off-the-job embeddedness were calculated by averaging the three dimensions of fit, links, and sacrifice for each respective group. Individuals were classified as being "low" on job embeddedness if their embeddedness level was below 3, the mid-point of the job embeddedness scale; conversely, they were classified as being "high" on off-the-job or on-the-job embeddedness if their embeddedness level was above 3.

Search and evaluation. Search and evaluation behaviors were measured with items from Lee et al. (1999) modified to apply to the retirement, rather than turnover, decision such that "alternatives" rather than other job offers were discussed and "leaving" was changed to "retiring." An answer to at least one of the questions regarding the respective behaviors (search and/or evaluation) indicated that those behaviors occurred. These items assessed how much the retirees searched for or considered other alternatives before deciding to retire.

Alternatives and bridge employment. To account for individuals who left the organization and then engaged in bridge employment or other alternative forms of work, individuals were asked about their current work behaviors. If working, they were asked to elaborate on their job. If they were not working, they were asked about their daily activities. These items were developed for the purpose of this study.

Other measures. Individuals were asked basic demographic items regarding gender, race, age, retirement income/savings, and dependents. Two items were included to assess the timing of the retirement decision process (length of decision-making process; length from retirement decision to leaving) based on the *speed of decision* items from Lee et al. (1999). Individuals were asked to report the number of years, months, days, and hours related to these time periods, and these data were recalculated to reflect decision and leaving times in number of days.

Scoring

Classification of decision paths. Once the data were collected, the lead author and two IO psychology graduate students categorized each individual respondent into

decision paths using decision rules created by Lee et al. (1999) in Appendix C. To classify individuals into the paths, raters were given the data with a brief description of the unfolding model as it relates to retirement and then given criteria in addition to the decision rules (Appendix D) to judge whether: 1) a shock occurred and if so, what type, 2) a script was followed, and 3) what type of bridge employment behaviors, if any, were exhibited.

After the initial coding of the data, inter-rater reliability for the raters (lead author vs. IO psychology graduate student) was calculated using Cohen's Kappa to determine consistency among raters rating categorical data. Inter-rater reliability was found to be Kappa = 0.73 ($p < .01$) for the occurrence of a shock, Kappa = 0.72 ($p < .01$) for the type of shock, Kappa = 0.80 ($p < .01$) for whether a script was followed, and Kappa = 0.82 ($p < .01$) for what type of bridge employment behavior occurred. Values of 0.70 or higher for Kappa are considered a good level of agreement; as a rule of thumb, 0.60 to 0.79 is considered substantial and a Kappa of 0.80 or higher is considered outstanding (Landis & Koch, 1977).

Once all cases were reviewed, the lead author and individual raters discussed each discrepancy until they arrived at consensus. The coded data were then combined with survey responses to classify individuals into the retirement decision paths. Of the 160 cases reviewed, coded shock data from the raters were in agreement 87% of the time with the item asking respondents "Was there a particular event(s) or milestone(s) reached that caused you to think about retiring?" Eighty percent of the coded data for scripts was in agreement on the item "At the time you retired, had you already determined that you

would leave the organization if the event discussed above were to occur (e.g., your spouse retired) or you reached a certain milestone?" Upon further review of the data, it was determined that the coded responses should be used in lieu of the participant "yes/no" responses because open-ended responses indicated that a shock or script in fact did occur, although the individual may have not interpreted as such (family member becoming ill [shock]; retiring if spouse retires [script]).

To finalize measures for analysis, participant responses to image violation items, job satisfaction items, and on-the-job and off-the-job embeddedness items were recoded and transformed as discussed above to test the model and hypotheses.

Analysis

To test the hypotheses, a variety of analyses and methodologies were conducted, including: pattern matching, correlations, tests of chi-square, logistic regression, and analysis of variance (ANOVA). The classification of paths was completed by applying a pattern matching technique, as discussed by Yin (1994). To test Hypotheses 1-8, regarding the components of the different decision paths, each case (participant) was coded for decision path. A hypothesis was supported when the theorized essential features for that respective decision path (for that hypothesis) was judged to occur across multiple cases, lending support for the existence of that path. According to Yin (1994), a successful "theoretical replication" is achieved when the pattern of essential features (as discussed in Hypotheses 1-8) result in the unique classification of cases (i.e., each case follows one decision path). This pattern-matching technique was used to test the original unfolding model of turnover (T. W. Lee et al., 1996).

RESULTS

In reviewing the data, mostly all retirees (99%) experienced some sort of search and/or evaluation of alternatives; therefore for the purposes of model identification, this variable was excluded to focus on the core variables of the model.

Means, standard deviations, and intercorrelations of the key model components are included in Table 2. These variables were used to code individuals into their respective decision paths. The initial coding of the paths without accounting for search and evaluation behaviors resulted in 41% (n = 57) of the respondents not fitting any paths, 19% (n = 26) of retirees following path 1, 16% (n = 22) following path 2a, 3% (n = 4) following path 2b, 9% (n = 13) following path 3a, 7% (n = 9) following path 3b, 3% (n = 4) following path 4, 2% (n = 3) following path 5a, and no individuals following path 5b.

Further examination of the combined qualitative and quantitative data indicated that the majority of individuals who did not "fit" the model did so because no image violation was indicated. A closer review of the qualitative data though, helped clarify this phenomenon. Many individuals did not indicate that they experienced an image violation when their qualitative responses indicated they did. Table 3 displays qualitative data regarding the experiences surrounding the retirement decision for all 57 cases of individuals who did not experience an image violation according to the Lee et al. (1999)

measure. Review of the data suggests that although individuals did not indicate that their value, trajectory, or strategic images were violated within the image violation items, major life events were occurring that may in fact interfered with their personal values and goals. Therefore, the lead author and the two IO psychology graduate students who coded other model components reviewed each case to determine whether or not an image violation occurred with additional criteria contained in Appendix D. For all 57 cases, it was determined that either a value, trajectory, or strategic image violation occurred, therefore, paths were recoded to include the coded image violations.

This second review of the path structure resulted in 52 additional individuals being classified with only 4% (*n* = 5) of individuals not fitting any paths, 35% (*n* = 48) of retirees following path 1, 30% (*n* =41) following path 2a, 4% (*n* = 6) following path 2b, 15% (*n* = 20) following path 3a, 7% (*n* = 10) following path 3b, 3% (*n* = 5) following path 4, 2% (*n* = 3) following path 5a, and no individuals following path 5b. The majority of originally unclassified cases were coded as following path 1 (*n* = 22) and path 2a (*n* = 19). Further review of the five cases that did not fit the path structure indicated that these individuals did not experience a shock or script. All five individuals did experience some type of image violation, but they were satisfied with their job. All five were high in on-the-job embeddedness, and three were low in off-the-job embeddedness. The lack of a shock, script, or job dissatisfaction made these individuals unclassifiable according to the retirement turnover model.

No significant differences were found across path acceptance in age, race, gender, education, or income. In addition to applying the pattern matching technique above,

correlations between decision paths (dummy-coded such that the respective path was coded as "1" and all other paths were coded as "0") and the unfolding model variables were analyzed using point bi-serial correlations (for variable codings and correlations see Table 4) to evaluate the overall path structure. An examination of the correlation matrix generally supports the existence of these paths as well; correlations were evaluated for the critical features of each path and these were generally statistically significant; non-critical features (e.g., job satisfaction for path 1) are discussed as well.

These results are best interpreted by reviewing each path's critical features. For some of these analyses, the sample size was low given the number of cases following that path, but the analyses still resulted in significant correlations. For path 1, the correlation between the path and shocks (r = 0.25) and scripts (r = 1.00), critical features of the path, were both significant. Additionally, job satisfaction, on-the-job embeddedness, and off-the-job embeddedness were positively correlated with path 1. This indicates that although these individuals were highly satisfied and embedded in both their organization and community, they made the decision to retire based on the occurrence of the shock and script. Additionally, similar to results found in assessing levels of job satisfaction for the unfolding model of turnover, individuals who experienced scripts, in general, had higher levels of on-the-job embeddedness (M = 3.37) compared to individuals who experienced shocks without following a script (M = 3.17) or individuals who did not experience shocks (M = 3.12) although these differences were not significant ($F(2,135) = 2.45$, p = .09)., so while individuals on path 1 (following scripts) may have been more embedded

on their job, the scripts still led them to make the decision to retire, emphasizing the role of shocks and scripts even more.

Similarly, for path 2a, significant correlations were found between the path and shocks (r = 0.22), on-the-job embeddedness (r = 0.38), and off-the-job embeddedness (r = 0.27). The occurrence of a shock on path 2a and high on-the-job embeddedness and high off-the-job embeddedness are critical features of this path. For path 2b, the occurrence of a shock and high on-the-job embeddedness and low off-the-job embeddedness are critical features. Non-significant correlations were found for shocks (r = 0.07) and on-the-job embeddedness (r = 0.06), and a significant, negative correlation was found for off-the-job embeddedness (r = -0.47). Job satisfaction was considered irrelevant to these paths, but a significant correlation was found for path 2a and job satisfaction (r = 0.19), indicating that individuals leaving on path 2a were satisfied with their jobs and they still left their organization considering the context.

Critical features of paths 3a and 3b were the occurrence of a shock, low job satisfaction, low on-the-job embeddedness, and varying levels of off-the-job embeddedness (high for 3a; low for 3b). Non-significant correlations were found both paths and shocks. For path 3a, significant correlations were found for job satisfaction (r = -0.27) and on-the-job embeddedness (r = -0.46). For path 3b, significant correlations were found for all three features: job satisfaction (r = -0.19), on-the-job embeddedness (r = -0.39), and off-the-job embeddedness (r = -0.50).

For path 4, critical features of the path included the absence of a shock, low satisfaction, and high on on-the-job embeddedness and off-the-job embeddedness. A

significant, negative correlation was found for shocks (r = -0.58), but no significant results were found for job satisfaction, on-the-job embeddedness, or off-the-job embeddedness. Similarly, only shocks were negatively correlated with path 5 (r = -0.44). Path 5's critical features included the absence of a shock, low satisfaction, and low on-the-job embeddedness and high off-the-job embeddedness.

These above correlations combined with the general occurrence of the paths provided support for Hypotheses 1-7; Hypothesis 8 (path 5b) was not supported. Across the 30 correlations evaluated for paths 1 through 5a, 29 correlations (97%) were in the appropriate direction, although not all were significant, and 16 of these correlations (53%) were significant at the $p < .001$ and $p < .01$ level.

To provide a sense of the qualitative data, illustrative cases are provided for each decision path in Table 5. As suggested by Ellingson (2009), representative cases for each decision path were selected; each illustrative case contains qualitative data clearly articulating the situation surrounding the retirement decision and follows the respective decision path. For each case, a sample of qualitative data regarding both shocks and scripts is displayed with values of both on-the-job and off-the-job embeddedness and other model components.

In addition to classifying retirees into decision paths, shocks experienced were coded based what type of shock (personal versus organizational) individuals experienced. Of the 47 individuals (34% of respondents) who experienced a personal shock, 32 (23% of respondents) experienced a shock related to oneself, 11 (8% of respondents)

experienced a shock related to family and/or friends, and 4 (3% of respondents) experienced a shock related to both self and family and/or friends.

Most individuals who experienced self-related shocks experienced health problems (n = 12) which lead to their decision to retire. Others indicated that a birthday (n = 8), or a specific birthday they were planning for (n = 4), served as a shock to initiate the decision-making process. It is important to note that these individuals were differentiated from those that planned for a particular birthday to be eligible to retire with Social Security and other retirement benefits (n = 4); for these individuals, the birthday served as a shock to consider their retirement options rather than to engage in a pre-determined script that they would retire once they were eligible to receive retirement benefits unrelated to their employer after that birthday. Other individuals indicated that an event occurred that merely made them want to enjoy their retirement earlier (n = 4).

The most common personal shock related to friends and/or family was the declining health of a spouse or family member (n = 6). Other individuals indicated that they wanted to spend more time with their family (n = 3) or wanted to retire at the same time of their spouse (n = 2). Individuals who experienced personal shocks related to both themselves and others indicated personal (self) related reasons for considering retirement in addition to the retirement of their spouse (n = 3) or illness of their spouse (n = 1).

Of the 46 individuals (33% of respondents) who experienced an organizational shock, 34 individuals (24% of respondents) experienced a negative shock and 12 (9% of respondents) experienced a positive shock. A combination of negative events or variables was often cited, but the most-often discussed negative shocks (coded by the more

dominantly discussed shock) were changes in supervisors or leaders (n = 12) and changes in roles or responsibilities (n = 8). Individuals also indicated that the restructuring of the organization (n = 2; often coupled with changing supervisors/leaders or roles/responsibilities) served as shocks which lead to the retirement decision. Other negative shocks included: the mental and physical demands of the work (n = 6), lack of motivation (n = 4), and watching the company undergo layoffs (n = 2). Individuals who experienced positive organizational shocks indicated that eligibility for their full pension (n = 4) or early retirement packages or incentives (n = 8) initiated the retirement decision-making process. Finally, twenty-eight individuals (20%) experienced both personal and organizational shocks. These individuals indicated that something happened in their personal life and at work which caused them to start thinking about retiring.

To test Hypothesis 9 which suggested that decision path 1 shocks are positively related to personal shocks (as opposed to organizational shocks), 2 by 2 contingency tables were created to analyze the absence or presence of the decision path such that path 1 followers were coded "1" and all other path followers were coded "0." The absence or presence of a personal shock was coded such that the presence of a personal shock was coded "1" and the absence of a personal shock was coded "0." A chi-square test did not yield support for Hypothesis 9 ($\chi^2(1, n = 121) = 1.81, p = 0.12$) such that individuals who followed path 1 were not significantly more likely to experience personal shocks (see Table 6 for frequency distributions).

To test the hypothesized differences in the time between the first thoughts of retirement and the actual decision to retire and the time between the decision to retire and

actual retirement across the paths for Hypotheses 10a and 10b, a MANOVA was conducted, and comparisons were made across the time to make the decision to retire and the time between the decision and actually leaving. The time between the first thoughts of retiring and the decision to retire and the duration between the decision to retire and actual retirement were entered in as dependent variables with the decision path serving as the independent variable. Means and standard deviations for these times across the general paths are displayed in Table 7. No significance difference in the length of time to make the decision to retire was found between path groups (Wilks' $\lambda = 0.90$, $F(4, 111) = 2.18$, $p = .08$). Additionally, no significant difference was found across path groups in the time between the retirement decision and time between actual retirement groups (Wilks' $\lambda = 0.90$, $F(4, 111) = 0.89$, $p = 0.47$). Thus, Hypotheses 10a and 10b were not supported.

Hypothesis 11, which stated that image violations that retirees experienced are more likely to be personal rather than professional, was tested with a chi-square goodness of fit test. Of the individuals that experienced an image violation ($n = 138$), Hypothesis 11 was supported ($\chi^2 (1, n = 138) = 48.73$, $p < .01$) such that individuals were more likely to experience personal, rather than professional, image violations. Twenty-eight individuals experienced a professional image violation; 110 experienced a personal image violation. Hypothesis 12 could not be tested. All cases were coded such that an image violation occurred, therefore, correlations between image violations and job embeddedness could not be computed since the image violation variable was a constant.

Significant results were found for both Research Question 1 and Research Question 2. Results for Research Question 1, which questioned the positivity/negativity

of shocks for path 1 followers ($\chi^2(1, n = 106) = 12.54, p < .01$) indicated that retirees following path 1 were more likely to experience positive, rather than negative shocks. Results for Research Question 2 which questioned the positivity/negativity of shocks for path 2 and 3 followers ($\chi^2(1, n = 106) = 12.10, p < .01$), indicated that individuals following paths 2 and 3 were more likely to experience negative shocks. Table 8 and 9 displays the sample sizes for these respective analyses.

There was an insufficient sample to adequately test Research Questions 3 and 4, predicting bridge employment behaviors from age, finances, education level, and marital satisfaction (Research Question 3) and job satisfaction and job embeddedness (Research Question 4); few individuals ($n = 13$) in the sample actually engaged in bridge employment behaviors in this sample. To accurately interpret a multinomial logistic regression, Hosmer and Lemeshow (Hosmer & Lemeshow, 2000) suggest having at least 10 case per independent variable, therefore these analyses were not conducted.

Finally, Research Question 5, which asked whether the decision paths were predictive of bridge employment behaviors was evaluated using a chi-square test of independence (see Table 10) with decision path and bridge employment behaviors serving as the variables of interest. Significant results were not found, $\chi^2 (4, n = 13) = 7.97, p = .09$) with the small sample. The decision paths individuals followed were not indicative of which types of bridge employment behaviors they engaged in.

DISCUSSION

The present study applied the unfolding model to the retirement decision and tested the model with a sample of recent retirees. General support for the different decision paths retirees may follow was found by categorizing cases into the retirement decision paths and in reviewing correlations between paths and model component. The role of shocks in the retirement decision was emphasized in the qualitative responses from study participants and their respective path categorizations. After excluding search and evaluation behaviors during path classification and focusing on the core components of the model (i.e., shocks, scripts, and attitudinal variables), 96% of individuals were classified into the five decision paths. Using Yin's (1994) case-study approach, support was found for all decision paths with the exception of path 5b (no shock, low job satisfaction, and low on-the-job and off-the-job embeddedness) such that the paths, and essential features of those paths, were replicated multiple times. These results provided preliminary support for the existence of various paths individuals may follow leading to retirement, but more importantly suggested the importance of the role of shocks in the retirement decision; 90 percent of participants followed a decision path where a shock occurred, suggesting the decision to leave the workforce is often driven by a significant event such as a birthday milestone, the retirement of a spouse, the attainment of a financial goal, etc.

Similar to results found in turnover research, individuals who had planned on retiring when a particular event occurred (following path 1, engaging in a script) more often experienced shocks/events that were more likely to be positive in nature (i.e., individuals were more likely to develop scripts around positive events in their lives). These events were often expected (e.g., paying off the mortgage), and although analyses suggested these shocks were not more likely to be personal in nature (Hypothesis 9) in comparison to other paths, 70% of shocks experienced by path 1 individuals were personal in nature rather than purely organizational. Job satisfaction and job embeddedness, for these individuals, was not expected to be relevant in the path since a script was followed, and the data suggests that in fact, these path 1 individuals were generally satisfied with their jobs and were highly embedded both on and off-the-job, but they still retired and followed a script after the shock occurred. On the other hand, individuals experiencing a shock following paths 2 or 3 often experienced negative shocks such as a difficult organizational change, additional (and/or stressful) job duties, or organizational layoffs. For these individuals, job satisfaction was not relevant; the shock and image violation alone served as critical factors driving the retirement decision.

Across the paths, no significant differences were found in the time to make the decision to retire or the time between the decision and actual retirement across the paths; it was expected that individuals who experienced a shock (paths 1, 2, and 3) would make the decision to retire and would leave earlier than those that did not experience a shock (paths 4 and 5), and path 1 followers would exhibit the shortest times with the occurrence of a script to guide the process. Upon further review, it was discovered that a small subset

of path 1 followers (n = 19) took a year or more to make the decision to leave the organization, even though they had originally indicated they would leave the organization upon the occurrence of a particular shock (i.e., they said they would follow a script). While these results were not expected, this may reflect the complexity of the retirement decision. In turnover, a job offer from a company you interviewed with or an acceptance to graduate school may serve as shocks where timely scripts would be followed, but retirement scripts may be followed differently. In fact, many of the 19 respondents who took over a year to leave after making the decision to retire may have used the development of his/her script as a decision point (i.e., not the occurrence of the shock, leading to the following of a script), drawing out the time between the decision and leaving. For turnover, individuals often identify more proximal events associated with their leaving (e.g., a new job, a pregnancy, moving); they do not necessarily plan for an event to occur in four to five years causing them to leave.

Few results were found indicating that any of the unfolding model components affected decisions regarding bridge employment. Only a small subset of the sample (n = 13) actually engaged in bridge employment behaviors, so Research Questions 3, 4, and 5 were unable to be adequately tested. It is possible that these survey respondents may engage in more bridge employment behaviors in the future, but since these individuals had retired in the past year, many of them may have not yet considered bridge employment options. Research derived from the Health and Retirement Survey noted that over the course of 6 years, 19 to 24 percent of retirees reentered the workforce as either a part-time or full-time worker after full retirement (Maestas, 2010); therefore, to address

bridge employment questions, a larger sample of individuals who retired over the past 5 to 10 years may have been more appropriate.

Collectively, these results contribute to the retirement literature and suggest that more contextual factors should be considered when examining the retirement decision-making process. In the past, contextual factors such as the retirement of a spouse, illness, and increased opportunities outside the workplace (travelling, spending time with grandchildren) were expected to affect the retirement decision, but researchers have found mixed support for these variables as they were captured at the moment of survey, possibly long before the individual actually retired. This research suggests that these variables do have an impact on the retirement decision, but they must be considered in a different way. Rather than asking individuals yes or no questions or collecting health-related information, more details surrounding the circumstances surrounding the decision to retire and an assessment of individual goals and values should be made to properly consider the individual's state at the time of retirement.

Limitations

In this first empirical application of the unfolding model of retirement, there were some limitations. As this was an initial test of applying a turnover model to the retirement literature, a similar methodology that was used to test the turnover model was followed (T. W. Lee et al., 1999; T. W. Lee et al., 1996) such that individuals who had made the decision to retire were surveyed retrospectively. Respondents to the survey may have experienced recall bias and have biased memories of what occurred in the past year, and they may have felt the need to justify their retirement decision in survey responses. Still,

research suggests that events in episodic memory, especially those that are major life events, are accurately remembered (Wheeler, Stuss, & Tulving, 1997). Additionally, the survey was anonymous, so respondents may not have felt pressure to respond in a certain way. Ideally, the retirement decision should be studied longitudinally, assessing the components of the unfolding model over time. With a longitudinal study, changes in image violations, job satisfaction, and job embeddedness could be evaluated over time, and data on potential shocks and actual search/evaluation behaviors could be collected.

In addition to studying the retirement decision longitudinally, additional consideration should be given to search and evaluation behaviors. This variable seemingly manifests itself differently for retirees than it does for individuals in the turnover model. These behaviors are not necessarily driven by path; in fact, 99% of all retirees experienced some type of search or evaluation behavior. In reviewing the data, it was determined that the search and evaluation behaviors for retirees may have been defined too loosely in comparison to how these behaviors were conceptualized for turnover (see Appendix C). In the context of turnover, search and evaluation refers to searching for other jobs and opportunities and evaluating the possibilities. For retirees, search behaviors may include considering merely how one will spend one's days in retirement in addition to other jobs or solid opportunities. In the development of the survey, these items were left as open-ended, but perhaps specific behaviors should be considered in the future. For turnover these items often referred to other job offers or concrete options; for retirement, search and evaluation items should address bridge employment behaviors and other, more concrete options.

Additionally, measures previously used to assess image violations for turnover may have not adequately assessed the retirement experience. For the image violation measure, if retired individuals had met many of their personal and professional goals in life (which many may have late in life), previous items used for turnover research would not indicate an image violation. Similarly, while spending more time with family and travelling more are often considered personal goals, individuals did not always indicate these as such when responding to the image violations. More qualitative and quantitative data concerning individuals' professional and personal goals should be collected to more appropriately account for image violations. Brougham and Walsh (2005; 2007) assessed image violations by assessing 7 items for 29 goal categories (203 ratings) as their study focused specifically on the assessment of goals, but this method was not feasible for this study. Although participants provided enough information in their qualitative responses to code for image violations, in the future, open-ended items targeted specifically around whether organizational goals (e.g., continuing working) and personal goals (e.g., spending more time with grandchildren) are compatible or incompatible should be used to help assess whether or not an image violation occurred.

This study was the first to incorporate job embeddedness into the unfolding model. As such, the concept of using the relative strength of both on-the-job and off-the-job embeddedness (and coding individuals into "high" and "low" categories) is relatively new, and this proved to be more difficult for items which assessed off-the-job factors, many of which were dichotomously scored or had to be standardized before computing scores. Job embeddedness measures, as they exist, do not account for all aspects of one's

home life as the measure is often intended to be used in an organizational context although it accounts for both on-the-job and off-the-job dimensions. Job embeddedness measures are still being developed (Crossley, Bennett, Jex, & Burnfield, 2007; Mondore, 2009), but not all of these measures incorporate off-the-job factors. The Mitchell et al. (2001) measure was used in this study because, to date, it most thoroughly addresses off-the-job factors in comparison to other measures. Additional items were developed in this study to assess more of these off-the-job factors, but more consideration of other aspects of one's community that apply to the retirement decision should be taken in future studies examining the retirement decision as well as in other research examining off-the-job embeddedness.

Finally, this study was conducted during a period of recession in the United States, so respondents may have experienced unique circumstances when making the decision to retire and leave a source of steady income in times of uncertainty. The recession may have limited the sample; individuals may have intended to retire in 2008 and 2009 but then remained in the workplace due to financial concerns. I was not able to capture survey responses from these individuals. Additionally, within the sample, some respondents may have faced potential layoffs or incentives to retire early which may have served as shocks, and these individuals may have left the workforce earlier than intended.

Theoretical Implications

This study provided a new lens in which to view the retirement decision and highlights the importance of contextual factors. In today's workplace, individuals are provided with the opportunity to work later in life in more knowledge-based

organizations and often need additional financial resources to enjoy their retirement comfortably. As the retirement decision changes due to these and other factors, the way we conceptualize the retirement decision must change to include the consideration of context.

In applying the unfolding model to retirement, future research should consider the relative strength of the model components when understanding their role. Do shocks alone drive the decision to leave the organization or do more affective variables such as job satisfaction and on-the-job and off-the-job embeddedness play a larger role? This may vary from person to person depending on the situational strength of the shock, that is, how powerfully the shock affects the individual, his/her job, or one's images. Does the shock slightly affect one's value, trajectory, or strategic images? Does it affect one set of images strongly, etc.? The level of one's job satisfaction and job embeddedness both on-the-job and off-the-job may also affect the retirement decision-process, and of course, all of these components in combination may be viewed differently by individuals. To test the relative strength of these variables in the retirement decision-making process, more participants would be required and more focused questions surrounding the impact of the shock, specific image violations, and how model components were considered in the decision-making process would need to be asked.

Other ways to assess off-the-job embeddedness or one's personal life should be incorporated to better understand the role that one's home life plays in the retirement decision. One way to do this is to take a more targeted approach at identifying potential shocks by leveraging previous theoretical and empirical research on the predictors of

retirement and results from more qualitative research such as this to develop a list of potential triggers or shocks that would more clearly define the events in one's life surrounding the retirement decision. Similar to how you can gauge one's stress by using the Holmes and Rahe Stress Scale (1967), this shock "scale" or questionnaire could help gauge one's propensity to leave the organization based on one's life events at that time. While this scale may not be of practical use in application, it could help expand research on the role of shocks in the retirement decision-making process and more further define a list of potential shocks for employers to consider.

In addition, it is important to understand, from an individual perspective, how variables such as on-the-job and off-the-job embeddedness affect one's retirement satisfaction and if individuals that follow particular decision paths are more likely to be satisfied with their retirement decision. Similar work has been done evaluating job satisfaction (Schmitt, White, Coyle, & Rauschenberger, 1979) and whether retirement was voluntary or involuntary (Isaksson & Johansson, 2000) in relation to one's retirement satisfaction, suggesting that one's previous work experience affect satisfaction in retirement.

Additionally, many participants (35%) indicated that they had planned for a particular event (shock) to occur before retiring (following a script). Do retirement planning seminars or information help facilitate the development of scripts? Or could these sessions or information even serve as shocks to spur individuals to start thinking more about making the decision to retire? Research suggests that individuals who participate in retirement planning often have more realistic expectations about how they

will spend their retirement and respond more favorably to the retirement experience (Earl, 2005; J. E. Kim, Moen, & Lachman, 2001; Noone, Stephens, & Alpass, 2009), but does planning encourage retirement behaviors? This question could be assessed over time by surveying individuals who attend retirement seminars or workshops or receive specific newsletters or information around retirement and tracking their retirement decision. Similarly, this type of data could help us to better understand how scripts may be developed; are they driven by joint decision-making with one's spouse, peers' retirement behavior at work, individual differences, etc? In comparison to turnover, the retirement decision-making process appears to be more rationally approached; therefore, the occurrence of a shock, for some, may actually result in the development of a script, which will be enacted at a later time when another particular life event will occur. Of course, many may have developed these scripts ahead of time without a previous shock and will follow a similar path such as that in the turnover model, but scripts may be derived differently in the retirement model given the thought that goes into the decision. More targeted assessment of the development of scripts over time would be required to better understand this process.

Finally, while overall, preliminary support was found for the critical features of the path, search and evaluation behaviors did not fit into the unfolding model applied to retirement. This may have been due to measurement issues, discussed above, or it may be because retirement is so different from turnover that elements of the model are not relevant in the retirement decision. Previous research on the unfolding model has focused more on critical elements such as shocks, image violation, and job satisfaction when

reviewing the model (T. W. Lee et al., 1999; T. W. Lee et al., 1996), and search and evaluation behaviors have generally been reserved for job offers and job searches, rather than contemplating how one will spend one's retirement. In the future, as discussed above, these measures should be more specific, but researchers should also reconsider how these behaviors may manifest themselves on different paths. Items asking participants to elaborate on any alternatives they may have considered may help us to better understand the planning and evaluation of alternatives that go into the retirement decision-making process to tie the unfolding model research into existing research on bridge employment (S. Kim & Feldman, 2000; Wang et al., 2008) and retiree well-being (Earl, 2005; J. E. Kim & Moen, 2002; J. E. Kim et al., 2001; Noone et al., 2009).

Implications for Management

This research began to examine the role of job embeddedness in the retirement decision. For individuals who did not follow scripts, low levels of job satisfaction and on-the-job embeddedness may have helped contribute to the decision to leave, especially when individuals were highly embedded off-the-job. In general, individuals who followed scripts had higher levels of on-the-job embeddedness (M = 3.37) compared to individuals who experienced shocks without following a script (M = 3.17) or individuals who did not experience shocks (M = 3.12) although these differences were not significant. While no hypotheses or research questions were addressed in this study suggesting that low levels of on-the-job embeddedness nor high levels of off-the-job embeddedness predict retirement behaviors, this study begins to examine the role of job embeddedness in the retirement decision process. Job embeddedness may be an

additional factor organizations should consider not only when trying to retain workers in general, but also for retaining older employees. Job embeddedness is one variable organizations can try to impact by having individuals work more on teams, having older workers mentor younger employees, and making sure individuals know they are valued in the organization (Holtom, Mitchell, & Lee, 2006; Mitchell et al., 2001).

Finally, from a practical perspective, this model emphasizes the importance of the role that shocks play in the retirement decision-making process and highlights the importance of the context. This study suggests that employers need to pay more attention to personal and organizational events that occur in the life of their employees before they retire. By being aware of life events individual employees experience, employers can identify times when their employees are more vulnerable to thoughts of retirement. Of course, the interpretation of shocks vary from individual to individual, but managers could be advised to look out for potential triggers that may expedite the retirement decision.

Conclusion

The present study applied the unfolding model of turnover to the retirement decision and tested the model with a sample of individuals who retired within the past year. General support for the different decision paths retirees may follow was found by applying a case-study approach. In general, these results suggest that the retirement decision is often made following a significant event or shock, and for many individuals, is often planned out where a script is followed. Nonetheless, similar to turnover, some individuals retire due to dissatisfaction with their job/work or following a negative

organizational event. Also, like turnover, individuals may make the decision to retire even though they are high on job satisfaction and/or on-the-job embeddedness, due to the context or potentially off-the-job "pull" factors pulling them away from their work.

The role of the context, or more specifically, shocks, in the retirement decision was emphasized in the review of this model. Ninety percent of participants followed a decision path where a shock occurred, suggesting the decision to leave the workforce is often driven by a significant life event and individuals consider these events in their decision-making. Future research should continue to examine how the unfolding model integrates with other research regarding bridge employment behaviors and retirement well-being, in addition to more thoroughly examining the development of scripts and what types of shocks potential retirees experience.

Table 1

The unfolding model adapted to the retirement decision

Path	Shock	Script	Image Violation	Job Satisfaction	On-the-Job Embeddedness	Off-the-Job Embeddedness	Search/ Evaluation
1	Yes	Yes	Yes	Irrelevant	Irrelevant	Irrelevant	No
2a	Yes	No	Yes	Irrelevant	High	High	Yes
2b	Yes	No	Yes	Irrelevant	High	Low	Yes
3a	Yes	No	Yes	Low	Low	High	No
3b	Yes	No	Yes	Low	Low	Low	Possibly
4	No	No	Yes	Low	High	High	Yes
5a	No	No	Yes	Low	Low	High	No
5b	No	No	Yes	Low	Low	Low	Yes

Table 2

Intercorrelations of unfolding model variables (N = 138)

	M	SD	1	2	3	4	5
1. Shock	0.90	0.30	-				
2. Script	0.35	0.48	0.25**	-			
3. Image Violation	1.00	0.00	×	×	-		
4. Job Satisfaction	0.30	0.46	-0.04	0.15	×	-	
5. On-the-Job Embeddedness	3.25	0.54	0.06	0.18*	×	0.45**	-
6. Off-the-Job Embeddedness	3.70	0.64	0.01	0.20*	×	0.15	0.29**

Note. $p < .01$**, $p < .05$*, × - Cannot be computed: Image violation variable is a constant; Variables were coded as follows: Occurrence of shock (Yes = 1, No = 0), occurrence of script (Yes = 1, No = 0), occurrence of image violation (Yes = 1, No = 0), job satisfaction (1 = Satisfied, 0 = Dissatisfied). A rating of 1 or 2 to any of the job satisfaction measures indicated dissatisfaction.

Table 3

Qualitative results for individual cases not experiencing image violations according to Lee et al. (1999) measure (n = 57)

Case ID	*Shock item 1 – "Please describe the circumstances surrounding the time you first began to feel or think that you should retire."*	*Shock item 2 – "Was there a particular event(s) or milestone(s) reached that caused you to think about retiring?"*
2	work situation and needs of family members who were ill or had progressive illness	acute illness of person with progressive disease
5	When treated like a 2nd class citizen by my company management.	
7	When offered a hefty retirement incentive	Offer of retirement incentive - after working 40+ years
10	When it became clear that after the third series of Reductions-in-Force, and no improvement in business for our industry or our company in sight, I was let go. This was when I was 65 and 5 months of age. So I decided to retire in September.	Unemployed and the outlook for new employment looking very dim.
12	When I was released/fired from my previous employment.	When I was released/fired. Virginia is a hire-at-will (fire for no reason) state and I was let go for no apparent reason.
15	when I got laid off	job eliminated
18	Watching individuals and friends wait too long to retire and then not having good health to enjoy life during their delayed retirement influenced my decision to retire at 62. A long commute and work day prevented me from really taking care of things.	Reaching 62 and becoming eligible for SS and other retirement benefits.
21	Was 2 years beyond retirement eligibility. Decided did not need the stress of the position any longer. Wanted to spend more time with grandchildren and seek other interests.	Eligibility to retire.
27	To meet personal goal to retired early.	Full pension benefits from private Company that I used to worked for.
39	Passed 75th Birthday. Missing out on grandchildren's activities due to work schedule. Unable to help out own children if their kids were sick or had unanticipated days off. It was past TIME!	
41	Nothing special at work. I retired the soonest that I was eligible to start receiving a pension.	I could start collecting a pension after I reached the age of 55.

Case ID	*Shock item 1 – "Please describe the circumstances surrounding the time you first began to feel or think that you should retire."*	*Shock item 2 – "Was there a particular event(s) or milestone(s) reached that caused you to think about retiring?"*
49	My husband s parents are both in failing health and decided to retire and move to assist them.	As stated previously, my husband s parents are in failing health, and we decided to retire and move to where they live to assist them.
51	My company has a 30 year retirement plan and I had already worked there 36 years. Company started gradually moving areas of my work to younger managers. I became very bored in my job.	
58	Last 2 months of working for this establishment	feeling that employer wanted to get rid of me
60	In order to get my full pension, I needed to retire last spring.	the time I could first receive full benefits from my pension plan
61	In late 2008 I was working as a consultant and decided it was time to slow down.	
64	I work in a high level IT environment. Changes were happening every day and getting too much to deal with. I saw more changes coming down the road that would have affected my job greatly dealing with outside military agencies making decisions	
65	I was told I was taking early retirement AND being severed from my place of employment. I received the severance package and am eligible to start receiving my pension however, it would be only 70% of my monthly stipend.	Job was eliminated and it was offered along with the severance package.
67	I was requested to retire or at a later date the company would have to decide which to layoff. A younger worker who has a family or a worker that is ready for retirement, as if I had no family to provide for.	Forced by the company to retire.
70	I was hired for a special legal case for two years. This position went four years and I was happy with it. When the job came to an end I checked out retirement and found that taking my deceased husband s social security I would double what I had.	End of job contract.
71	I was getting tired and thinking of doing retirement activities.	I broke my ankle.
75	I was a work-a-holic and was with the same company for 45 years. I wanted a real life.	

Case ID	*Shock item 1 – "Please describe the circumstances surrounding the time you first began to feel or think that you should retire."*	*Shock item 2 – "Was there a particular event(s) or milestone(s) reached that caused you to think about retiring?"*
78	I've always considered retirement at some point in time. My actual retirement date was made to coincide with my wife s eligibility to full retirement.	
80	I retired at 57 and was living off my own retirement savings plus earnings from side endeavors. As the stock market dropped the need for additional income increased but those opportunities disappeared with the economic collapse.	I was employed in the computer software industry. The last several companies I worked for went through buy outs, downsizing, hostile takeovers, etc an
82	I reached early retirement age.	Reached early retirement age.
84	I knew that I would retire when I reached 55. I worked for the USPS and had 30 years under the Civil Service Retirement Program.	I had the age and my son was out of college... I still have mortgage but I knew I could handle the monthly bills.
87	I have undergone cancer treatment for the last year and a half and since I had 25 years in June of this year, decided that for my health, it would be wise to retire.	In 2007, I was diagnosed with breast cancer.
100	I decided several years ago to retire when I reached 62, since my husband is 5 years older than I am, and we wanted to have plenty of time to travel in our motor home after retirement and before we get to the point that we can no longer do so.	When I remarried in 2002 to a man 5 years older than myself, we decided that if at all possible financially, we would retire when he was 67 and I was 62.
102	I decided 3 years ago that I would retire in 2009. I worked 39 years for the Federal Government.	
105	I began to feel the strain of working a taxing job and decided it was time for me to retire.	My health began to suffer from the taxing job.
107	I AM SEMI RETIRED BECAUSE TIME SEEMS TO SLIP AWAY AND YOU WAKE UP TO FIND YOU ARE GETTING OLDER AND HAVE NOT COMPLETED ALL THE THINGS YOU WANT TO DO. I HAVE ELEVEN GRANDCHILDREN AND WORKING FULL TIME LIMITS	A FRIEND HAS BECOME SUCCESSFUL AS AN ARTIST AFTER SHE RETIRED AND HAD THE TIME TO PAINT AND WORK WITH CLAY.
110	I am 67 and have worked for 52 years. I need some time for myself.	My wife became eligible for Social Security.

Case ID	*Shock item 1 – "Please describe the circumstances surrounding the time you first began to feel or think that you should retire."*	*Shock item 2 – "Was there a particular event(s) or milestone(s) reached that caused you to think about retiring?"*
115	Former employer (local government) has rule of 75 retirement plan: age + years of service = 75, you're able to retire with a pension. I was nearing 75 and looking forward to retiring as soon as I was eligible when employer ran into budget	
117	First date of eligibility for retirement and I decided to take retirement from State employment.	first eligible date
121	eligibility to retire with pension	eligibility
124	Driving 45 miles each way began to get harder each winter.	Cut backs and layoffs at work.
126	Disability to young for operation Bosses helped with process.	Severe joint pain daily and coworkers, Bosses and Campus police told me I needed to retire. Doctors told me have to be 65 for operations (two ankle replacements)
129	Company brought in a new young director and after six months I began to feel the need to either retire or find another position. My management philosophies weren't in line with his and he wanted to replace his staff with managers that manage	Review meeting with my new director on job performance
130	Bypass operation at age 62.	Sufficient tenure to qualify for maximum social security and company pension benefits.
133	Boss began micro-managing me and my staff and generally made working for the organization unpleasant.	I had recently, within the last year, worked for the organization long enough to be achieve retirement eligibility but had not planned to retire for another few years.
134	Boredom	
136	Began thinking about this 5 years ago, then seriously in spring 2008. circumstances were that I was eligible for state retirement and I had always said I d leave when my boss, who I had worked with for years, was leaving.	State retirement eligibility and boss left thereby changing situation at work. His sudden decision to leave was unexpected, but I had been contemplated
137	Began having burnout several years Decided to retire when was able to collect Social Security at 62	Approaching age 62
140	Back and neck injuries. Wondered since about age 50 if I could make it to 65	Returned to work after a surgical procedure. I was informed that I had been reduced to 20 hrs per wk/ my assistant continued @ 40/wk. My section leader

Case ID	*Shock item 1 – "Please describe the circumstances surrounding the time you first began to feel or think that you should retire."*	*Shock item 2 – "Was there a particular event(s) or milestone(s) reached that caused you to think about retiring?"*
143	Approximately five years ago I developed a goal-oriented plan to retire and once I reached those goals I would retire.	55 years of age made me eligible for retirement medical benefits.
144	approaching retirement age	age and retied spouse
145	ALL EMPLOYMENT OPPORTUNITIES ENDED FOR ME AND I DID NOT WISH TO LOOK FOR A NEW CAREER. AT MY PRESENT AGE AND FINANCIAL SITUATION, I DECIDED TO RETIRE.	THE SALE OF MY PLACE OF EMPLOYMENT AND NO PLACE FOR ME.
147	age.	age.
148	Age, fatigue	Reached age 75 early in year, general fatigue- tired of drive
150	age 69 two younger brothers died in the last two years	drove school bus for the last six years. too many changes due to budget cuts
151	Age 62: returned to work after a surgical procedure, to find that my full time position was to be reduced to a 20 hr/wk position, and the person that was hired to be my assistant was retained at 4o hrs. Additionally my section manager had be	As noted in previous question
152	age	
154	After my kids got done with college I felt I needed to ready myself to retire.	My youngest finished undergraduate work
159	A year before I called it quits I begin to lose interest in my work. I stop paying attention to a lot of details.	Two, 44 years of employment and the closing of my work site.
162	1/2/2008 I began to think about retirement due to the long hrs. of work & the large amount stress I was under in my management position. I also had 40 yrs. of service with this same (automotive parts) company.	Downturn of the automotive business (light truck & SUV s).

Table 4

Correlations of unfolding model variables with decision path (N = 138)

Path		Shocks		Scripts		Image Violation	Job Satisfaction		On-the-Job Embeddedness		Off-the-Job Embeddedness	
		0.25**	(Yes)	1.00**	(Yes)	× (Yes)	0.15	(Ir)	0.18*	(Ir)	0.20*	(Ir)
Path 2a	(n = 48)	0.22*	(Yes)	-0.48**	(No)	× (Yes)	0.19*	(Ir)	0.38**	(H)	0.27**	(H)
Path 2b	(n = 7)	0.07	(Yes)	-0.16	(No)	× (Yes)	-0.14	(Ir)	0.06	(H)	-0.47**	(L)
Path 3a	(n = 25)	0.14	(Yes)	-0.30**	(No)	× (Yes)	-0.27**	(L)	-0.46**	(L)	0.01	(H)
Path 3b	(n = 11)	0.01	(Yes)	-0.20*	(No)	× (Yes)	-0.19*	(L)	-0.39**	(L)	-0.50**	(L)
Path 1	(n = 48)	-0.58**	(No)	-0.14	(No)	× (Yes)	-0.13	(L)	0.01	(H)	-0.05	(H)
Path 5a	(n = 4)	-0.44**	(No)	-0.11	(No)	× (Yes)	-0.10	(L)	-0.10	(L)	0.06	(H)

Note. $p < .01$**, $p < .05$*, × - Cannot be computed: Image violation variable is a constant; Variables were coded for analyses as follows: Occurrence of shock (Yes = 1, No = 0), occurrence of script (Yes = 1, No = 0), occurrence of image violation (Yes = 1, No = 0), job satisfaction (1 = Satisfied, 0 = Dissatisfied). A rating of 1 or 2 to any of the job satisfaction measures indicated dissatisfaction. Path components as noted in Table 1 are identified in parentheses after each correlation. Ir = Irrelevant, L = Low, H = High.

Table 5

Illustrative cases of decision paths

Path	Case	Shock	Script	Image Violation	JS	ONJE	OFJE
1		*Shock occurs.*	*Yes*	*Yes*	*Irrelevant*	*Irrelevant*	*Irrelevant*
1	2	Approximately a year before retirement, a family member was diagnosed with a progressive disease, and I decided to retire once I was eligible for benefits.	Yes	Yes*	D	3.14	4.13
1	84	I knew that I would retire when I reached 55. I worked for a federal agency and had 30 years under the Civil Service Retirement Program.	Yes	Yes*	S	3.71	3.73
1	110	My wife and I both retired when she became 66 years of age.	Yes	Yes*	D	3.60	4.44
2a		*Shock occurs.*	*No*	*Yes*	*Irrelevant*	*High*	*High*
2a	103	I began to seriously think about retirement in February 2008 after having a serious accident away from work. My hospital stay and recovery focused me on how fragile life is and the importance of spending more time with family.	-	Yes	D	3.06	3.80
2a	127	There was a company sponsored incentive program and I was very near my retirement goal. So I took it at age 59.	-	Yes	D	3.65	4.73

Path	Case	Shock	Script	Image Violation	JS	ONJE	OFJE
2a	136	Began thinking about this 5 years ago, then seriously in spring 2008. I was eligible for state retirement and my boss who I had worked with for years, was leaving.	-	Yes*	S	3.96	4.60
2b		*Shock occurs.*	*No*	*Yes*	*Irrelevant*	*High*	*Low*
2b	133	Boss began micro-managing me and my staff and generally made working for the organization unpleasant.	-	Yes*	D	3.68	2.42
2b	161	80 percent of the duties I was doing changed. The duties I had for the last 10+ years were ones that I really enjoyed doing. I loved my job. The totally new duties were not ones that I liked.	-	Yes	D	3.29	2.31
3a		*Shock occurs.*	*No*	*Yes*	*Low*	*Low*	*High*
3a	32	The level of stress and the pressure of unrealistic demands brought on by the organization for which I worked were taking a toll on my health/sanity.	-	Yes	D	2.62	4.11
3a	39	Passed 75th Birthday. Was missing out on grandchildren's activities due to work schedule. Unable to help out own children if their kids were sick or had unanticipated days off. It was past time!	-	Yes*	D	2.87	3.33

Path	Case	Shock	Script	Image Violation	JS	ONJE	OFJE
3a	104	I began to resent the time spent getting ready, the commute, and time spent at my place of employment. I also felt the corporate environment was changing drastically and I wasn't up for much more change…	-	Yes	D	2.80	4.11
3b		*Shock occurs.*	*No*	*Yes*	*Low*	*Low*	*Low*
3b	91	I had worked for this company for 12 years; I was burnt out by their policies.	-	Yes	D	2.63	2.91
3b	97	I did not like the way the company was going with the employees and the pay they were offering.	-	Yes	D	2.64	2.33
4		*Shock does not occur.*	*No*	*Yes*	*Low*	*High*	*High*
4	3	Work was no longer rewarding and required too much time. Wanted to have free time to enjoy grandchildren and hobbies. Finances indicated retirement income would be sufficient to allow no change in lifestyle.	-	Yes	D	3.11	3.53
4	29	There was a lot of stress involved in my job and I felt that I would be better off healthwise if I did not have this job	-	Yes	D	3.03	3.33
4	51	My company has a 30 year retirement plan and I had already worked there 36 years. Company started gradually moving areas of my work to younger managers. I became very bored in my job.	-	Yes*	D	3.54	4.24

Path	Case	Shock	Script	Image Violation	JS	ONJE	OFJE
5a		*Shock does not occur.*	*No*	*Yes*	*Low*	*Low*	*High*
5a	1	Worked until age 75 and wanted family time.	-	Yes	D	2.90	4.33
5a	28	These past 3 years I had moved from a career as a respiratory therapist in a hospital to home care of patients. I was very frustrated with commuting 80 miles daily usually spending between 10 & 12 hours daily on the job.	-	Yes*	D	2.50	3.87
5a	62	I worked at the same job for over 35 years and just got tired. I was getting cranky and bored. I felt that the quality of my work was slipping.	-	Yes*	D	2.70	4.00

Note. * indicates that an image violation was coded for although the Lee et al. (1999), measure did not indicate an image violation. JS = Job Satisfaction, ONJE = On-the-Job Embeddedness, OFJE = Off-the-Job Embeddedness. For Job Satisfaction, "D" indicates dissatisfaction, "S" indicates satisfaction. A rating of 1 or 2 to any of the job satisfaction measures indicated dissatisfaction. Path components are identified in rows in *italics* before each set of illustrative cases.

Table 6

Personal vs. non-personal shocks by decision paths (Hypothesis 9)

$\chi^2(1, n = 121) = 1.81, p = 0.12)$		Type of Shock	
		Non-Personal	Personal
Path	Path 1	14	32
	All Others	32	43

Table 7

Time, in days, to make the retirement decision and time between the decision and leaving

Path	Time to Make Decision (*n*)	Time to Make Decision (Mean)	Time to Make Decision (SD)	Time Until Leaving (*n*)	Time Until Leaving (Mean)	Time Until Leaving (SD)
1	40	293.58	394.69	40	734.28	2829.09
2	47	145.21	211.10	47	123.61	166.73
3	22	114.05	110.56	22	87.18	100.87
4	4	225.25	332.49	4	75.00	51.96
5	3	300.00	103.92	3	280.00	91.65
Mean	(*N* = 116)	197.23	286.22	(*N* = 116)	329.64	1677.91

Table 8

Positive vs. negative shocks for path 1 followers (Research Question 1)

$\chi^2(1, n = 106) = 12.54, p < .01)$		Path 1	Path All Others
Type of Shock	Positive	34	25
	Negative	11	36

Table 9

Positive vs. negative shocks for path 2 and 3 followers (Research Question 2)

$\chi^2(1, n = 106) = 12.10, p < .01)$		Path	
		Path 2 and 3	All Others
Type of Shock	Positive	24	35
	Negative	35	12

Table 10

Bridge employment behaviors by decision path (Research Question 5)

	Not Classified	Path 1	Path 2	Path 3	Path 4	Path 5a
Similar job and industry	1	1	-	4	-	-
Career bridge employment	1	3	2	-	1	-

Note. Retirees who engaged in bridge employment behaviors either found new employment in a similar job and similar industry or took on different type of job in another industry (career bridge employment).

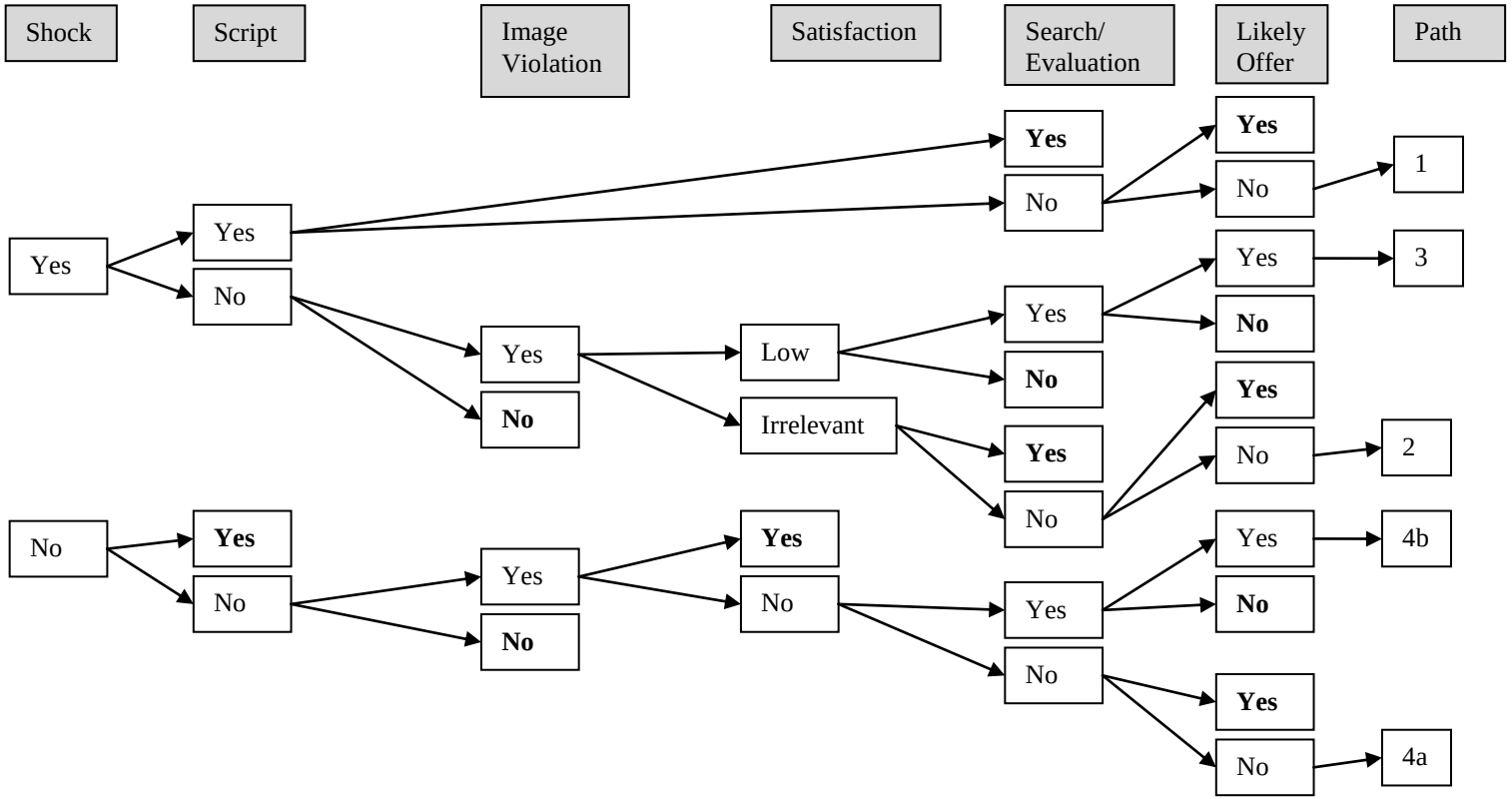

Figure 1. The unfolding model of turnover; from Lee, Mitchell, Holtom, McDaniel, & Hill, 1999. Reprinted with permission from the authors.

Note. Decisions in **bold** indicates that the route is not classifiable and that it represents a way in which an individual could leave an organization that would not be consistent with one of the model's paths.

APPENDIX A: DISSERTATION PROPOSAL

INTRODUCTION

By 2016, over 40% of the workforce is expected to be 55 and older (Toossi, 2007), within the timeframe in which they will consider leaving the workforce, to retire, thus creating a potential crisis for employers. This creates an urgent need to understand how employees decide when to retire. By understanding the retirement decision-making process, organizations can help to retain employees for a longer period of time while planning their workforce accordingly.

In this proposal, I present a model outlining the retirement decision process and discuss how various factors influence this process. This model will contribute to the retirement literature on how retirees follow different paths in the decision-making process leading to retirement. Previous models of predicting the retirement decision are discussed and a new way of modeling the retirement decision, more appropriately as a decision process, is presented. This new model, based on the unfolding model of turnover (T. W. Lee & Mitchell, 1994) accounts for more contextual factors that have proved more difficult to assess in traditional retirement research.

Definition of Retirement and the Retirement Decision Process

Before discussing the retirement decision process and current trends in retirement, it is important to understand what retirement is. Previous research notes that the relationships between retirement and other variables differ based on how retirement is conceptualized (Palmore et al., 1982). For example, individuals who retire before the age of 65 may be considered "early" retirees. These individuals differ from those employees who, at an age before 65, may begin working less than full-time even though both parties may consider themselves retired.

Given the changing nature of retirement discussed below, it is important to more clearly define retirement. I use a modified definition of Feldman's (1994) definition of retirement. Feldman suggested that retirement is "the exit from an organizational position or career path of considerable duration, taken by individuals after middle age, and taken with the intention of reduced psychological commitment to work thereafter" (Feldman, 1994, p. 287). Feldman's original definition was chosen because most operational definitions in past research fit within this general conceptual definition (Beehr et al., 2000) and it differentiates retirement from general turnover such that it is focused on the intent to reduce psychological commitment to the workplace and paid employment.

I would further extend this definition for the purposes of this proposal, from an organizational perspective, to suggest that this occurs in the context of one organization as well. From an organization's perspective, it is a loss when a valued, senior employee begins cutting back his or her hours, but the final exit of that employee is what creates the

greatest burden on the organization. When a more senior level employee leaves, he or she is leaving with a plethora of organizational knowledge, practical experience, and is truly gone from the organization. Therefore, I define retirement as *the exit from a position or career path of considerable duration from an organization, taken by individuals after middle age, and taken with the intention of reduced psychological commitment to work thereafter*. From an individual perspective, "retirement," in fact, may encompass leaving an organization for another position or a reduced workload and eventual withdrawal from the workforce (bridge employment), but for the organization's purpose, this individual is retired. I am interested in understanding the process from an individual decision-making context within an organization to consider organizational implications.

The retirement decision is the choice individuals make to engage in retirement as defined above. Most studies attempt to capture this decision by measuring the age at which one intends to retire (e.g., Adams, 1999; Beehr et al., 2000; Taylor & Shore, 1995). While this is a good prospective measure, it does not account for many factors that go into the decision-making process. Just as we know that much more goes into turnover decisions beyond job satisfaction, the retirement decision process is impacted by a variety of dynamic factors that are difficult to capture at one point in time. Therefore, researchers must take a step back and evaluate, holistically, what goes into the retirement decision process. Why do individuals decide to leave an organization, a career, and withdraw psychologically from the workforce and paid employment? To better understand the retirement decision process, the current workforce and the way retirement is changing is discussed.

Current Workforce

Today, 12 percent of the population is 65 or older; by 2030, 20% of the population is projected to be 65 or older (U. S. Census Bureau, 2004). While the number or proportion of older workers will continue to increase, labor force predictions suggest that there will also be fewer younger workers entering the workforce (Warr, 1994), and employers have not been taking the appropriate steps to account for these trends in workforce demographics (Velvet, 2004).

In the next few years, the first members of the baby-boom generation, those born in the two decades following World War II, will be eligible to retire (Aizenman, 2007). It is expected that in the next few years, over 18% of the Federal workforce will be planning to retire; 5 years ago this rate was less than 15% (Office of Personnel Management, 2004). This conundrum is often referred to as the "human capital crisis" and affects both public and private sectors. While a large percentage of the workforce will be eligible to leave the workforce with retirement benefits, not all will leave once they are eligible or are financially stable (Velvet, 2004). Many workers will continue their careers in the workforce beyond the traditional age of retirement.

Retirement Trends

Knowing which employees will continue to work once their organizational retirement benefits are maxed out is helpful to human resource professionals across the country, but what variables beyond age and finances go into the decision to retire? Due to expected labor shortages, it is important to understand how to best retain employees because the planning and decision-making going into retirement starts well before the end

of one's working life and continues into retirement (e. g. Atchley, 1971; Minkler, 1981). Individuals begin thinking about retirement years before their actual workforce exit (Beehr, 1986; Taylor & Shore, 1995), even though they may or may not start planning financially before then. Nonetheless, there are a variety of issues facing older workers today as they face retirement decisions.

It is important, first, to understand that the idea of "retirement" is drastically changing. The concept of leaving one's working life (i.e., retirement) was a product of the post-World War II economic boom. After working in blue-collar, physically demanding jobs for forty-plus years, many employees left under retirement plans built into their union contract and lived out their lives on a fixed income from their pension and Social Security. There has been a shift away from manufacturing-based organizations, which demand physical labor, to more knowledge-based organizations, where various services are provided (Morgeson & Campion, 2003). Knowledge-based organizations require less physical demands on their workers, thus, older workers have the luxury of staying in the workforce if they chose to do so.

A recent press release by the U.S. Census Bureau showed that the number of people aged 65 to 74 who were still working went from one in five in 2000 to one in four in 2006. In the Washington, D.C. metropolitan area, this ratio was even higher; one in three older workers remain working (U.S. Census Bureau, 2007). The larger ratio of older workers in the D.C. metro area may be due to the large number of highly-skilled, knowledge-based jobs in the area (Aizenman, 2007) as well as the high cost of living in the area. Many workers can simply not afford to quit working with mortgage payments and other bills to cover.

The shift towards more knowledge-based organizations also contributes to older workers staying in the workforce. Technology allows jobs to become more flexible in scheduling (Cascio, 2003), but not all organizations allow for part-time work and bridge employment opportunities for older workers. Even if organizations are interested in a phased retirement plan where older employees are allowed to gradually reduce their hours, organizations must still decide who would be eligible, how this would impact retirement benefits, and decide how to deal with flexible working arrangements (Hutchens, 2007). Therefore, while organizations may say they are interested in creating phased retirement plans for their employees (Hutchens, 2003), this has not become a reality (Hutchens, 2007).

The Census bureau results also reflect the increasing number of Americans who may be ready to retire once their own children have left the house, but who are now becoming caregivers to their elderly parents (Pew Research Center, 2005). It is not uncommon for individuals in their 60s to have one or both parents living, but who now need supervised care. The cost of caring for one's parents, possibly in addition to one's children, creates a financial strain on retirees, so many may remain working to fund their parent's care.

Employer pensions have also changed. In the past, employees had defined benefit plans which encouraged the younger workers to stay and earn more. Between the ages of 55 and 65, pension accruals would generally lessen or become negative, so these plans encouraged early retirement. Today, many employers use defined contribution plans

which do not encourage early retirement, but the number of private sector workers eligible for an employer-sponsored retirement plan has been declining (Wiatrowski, 2005), so many individuals must rely on their savings once retired.

Housing and health care costs are also rising, requiring additional income. Many retirees will need additional coverage beyond Medicare which leads to a major source of uncertainty for older individuals. Since most organizations do not fund insurance for retirees (Buchmueller et al., 2006), many individuals continue working after the age of 65 for supplementary insurance in addition to Medicare. Beehr, Glazer, Nielson, and Farmer (2000) found that concern over the cost and availability of health insurance led individuals to intend to stay in the workforce longer.

Due to this, many employees who retire early (generally before the age of 65) and leave the workforce re-enter the workforce (Hansson et al., 1997), thus, the retirement decision process today is much more complex. Older workers have a variety of options. They can choose to retire and leave the workforce, or many organizations allow their older workers to slowly cut back their hours and work part-time. Many organizations do this to keep employees with valuable organizational experience around to help train and mentor younger workers. If they decide to continue working after deciding to retire, many retirees stay in bridge employment similar to their previous jobs, i.e., career bridge employment (Hardy, 1991; Moen et al., 2000) or they may consider bridge employment in a different field. This variety of options makes the actual decision process difficult to capture; but similar to turnover, there are a variety of factors that may impact this process.

Since I am interested in the retirement decision process from an organizational perspective, alternative outcomes such as bridge employment will not be the focus of the proposed model, but research questions regarding these retirement behaviors will be explored. With these trends and realities in mind, I will discuss previous research with regards to the retirement decision.

THE RETIREMENT LITERATURE

In the past 20 years, there have been few models developed to understand retirement decisions, and only portions of these models have been empirically tested. Those that do test the models of retirement decisions often only consider a small number of variables and fail to account for some variables that may explain more variance and address particular variables which organizations can impact. More importantly, all of these studies focus on the intent to retire and attempt to capture variables to predict retirement. That is, they do not study the actual decision-making process nor focus on actual retirees and their experiences. Proposed models of the decision to retire are discussed, and a review of relevant factors in the retirement decision-making process is given.

Previous Theory and Research on Retirement Decisions

There have been two major conceptualizations of the retirement decision in the psychological literature. Beehr's (1986) model of retirement was one of the first models on the retirement decision based on industrial and organizational (IO) psychology. Feldman's (1994) review of the retirement decision focused on early retirement, bridge

employment, and factors that affect the decision-making process. Both of these perspectives are discussed as well as other research stemming from their original work.

Beehr's (1986) model of retirement decisions accounted for personal and environmental variables that could influence the retirement decision including both work and non-work related factors. Personal factors include such variables as personality and economic well-being, and environmental factors include such variables as one's attainment of occupational goals and leisure pursuits. A summary of Beehr's model is given in Figure 1a.

More recently, Feldman (1994) reviewed the retirement research and provided his own conceptualization of the retirement decision. His review focused on variables leading to the decision to retire early, whether or not a retiree would engage in bridge employment, and if that employment would be in the same career or industry. This review built the foundation for the bridge employment literature, but research (Higgs, Mein, Ferrie, Hyde, & Nazroo, 2003; S. Kim & Feldman, 2000) fails to consider both retirement decisions and bridge employment concurrently. Wang and colleagues (Wang, 2007; Wang et al., 2008) has considered which variables predict various bridge employment behaviors, but this research has not extended to which variables predict the initial decision to retire and leave the organization. The hypothesized variables that Feldman suggested affect retirement decisions fell under four general factors: individual differences, opportunity structures in career paths, organizational factors, and external environments as opposed to Beehr's model that more generally focused on personal factors and job-related and non-job-related environmental factors.

For example, Feldman (1994) and Beehr (1986) both noted that health status, marital status, and economic factors affect the retirement decision, but Feldman extended the consideration of personal factors/individual differences to include gender, race, and attitudes towards work and retirement. Both researchers included a component of skill obsolescence (Beehr, 1986) or performance decrements (Feldman, 1994) in their model, but Beehr did not account for other job-related variables beyond the characteristics of the job or the attainment of goals at one's job. Feldman (1994) included work-related factors such as discrimination, the type of industry, the availability of retirement programs, and the labor market. He also discussed how external factors like uncertainty about the economy or Social Security eligibility influence the retirement decision. While Feldman's review thoroughly discussed a number of variables that Beehr did not incorporate (such as attitudes toward work and retirement), and he considered bridge employment in his model, a full evaluation of his hypotheses is yet to be tested. Empirical support for the various factors that Feldman highlighted is discussed below.

Feldman's (1994) review provides a more comprehensive starting point than Beehr's model to think about the complexity of retirement decisions today as it incorporated the various options potential retirees today have when making a retirement decision. These individuals can: retire, remain working full-time (i.e., stay), remain working part-time, change organizations, change industries, or even change careers given the work environment today, but as I discuss below, past research has failed to capture a number of variables and circumstances that affect the retirement decision-making process.

Empirical Research on Retirement Decisions

There have been increasingly more studies examining retirement and potential predictors of retirement. Table 1a presents factors discussed by Beehr (1986) and related empirical studies, and Table 2a notes factors affecting the retirement decision as discussed by Feldman's (1994) and supporting empirical studies. Studies that yielded null or contrary findings are in *italics.* A brief review of these findings is discussed.

Research has generally shown that economic well-being is a consistent predictor in determining the expected age that an individual intends to retire (Adams, 1999; Bahrami, 2001; Beehr et al., 2000; Schmitt & McCune, 1981). Support for the impact of one's health on retirement, though, is mixed. Some researchers have found no effect for health (Adams & Beehr, 1998; Taylor & Shore, 1995), while others found that health and one's intended retirement age were positively correlated (Adams, 1999; Bahrami, 2001; Beehr et al., 2000; Schmitt & McCune, 1981; Shultz & Wang, 2007). These mixed findings may be due to how health is defined and measured. If health is defined as the lack of a major illness or physical impairment (as Feldman defined it), health generally impacts one's intent to retire (Shultz & Wang, 2007). In general, if individuals have poor health, they are more likely to leave the workforce, and if individuals are well off financially, they are more likely to retire than an individual who may have financial obligations or poor savings for retirement, thus retirement researchers regularly control for both of these variables.

No researchers have explicitly examined skill obsolescence, as noted by Beehr (1986) as a potential predictor of retirement, and only one study has linked retirement intentions to Type A personality (Swan, Dame, & Carmelli, 1991). These researchers found that retirees who were more "Type A" were more likely to have expressed that their retirement was involuntary and that they would have preferred to continue working.

For work-related variables, Adams (1999) found that one's occupational goal attainment was negatively related to one's planned retirement age such that individuals who felt that they accomplished their goals in the workplace intended to retire at an earlier age. Similarly, Brougham and Walsh (2005, 2007) found that one's occupational goals and personal goals help to predict one's retirement intentions. When individuals perceived a misfit or incompatibility of personal goals with working, individuals were more likely to intend to retire at an earlier age; that is, they intended to retire earlier to fulfill their personal goals. Similarly, if individuals perceived a misfit or incompatibility of work goals with retiring, they were more likely to intend to retire at a later age; that is, they intended to keep working to try to meet their goals (Brougham & Walsh, 2007).

Beehr (1986) hypothesized that a job with undesirable characteristics would motivate the worker to decide to retire earlier than an employee in a job with desirable characteristics. Beehr recommended that this notion be expanded to consider more aspects of one's job such as travel requirements, supervisory styles, working conditions, the impact of technology on-the-job, and so on. Little research has expanded on this hypothesis. While many researchers include job satisfaction in their studies (Hanisch & Hulin, 1991), most researchers have not found support for job satisfaction's (or similar variables) impact on one's retirement age (Adams, 1999; Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995). Research on organizational commitment, though, has been

more promising. Studies have found a positive relationship between organizational commitment and one's intended retirement age (Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995).

One's involvement in leisure pursuits also contributes to the retirement decision (Bahrami, 2001; Beehr et al., 2000). If an individual has attractive non-work alternatives, he or she is more likely to retire in comparison to individuals who do not engage in leisure activities. Beehr's model also suggested that one's family life has an impact on the retirement decision. While he did not provide specific hypotheses, he suggested that the attractiveness of one's home life, the number of dependents (specifically, children), and one's spouse can affect the retirement decision serving as "pull" factors that would encourage the potential retiree to leave the workforce and pull him or her away from work. Most studies consider one's marital status and whether or not one's spouse is working when evaluating this factor. The findings from these studies are mixed; some studies have found that one's spouse influences intended retirement ages (W. K. M. Lee, 2005; Pienta & Hayward, 2002), and others have not found this effect (Adams, 1999; Bahrami, 2001).

Problems with Past Studies on Retirement

While researchers have begun to study factors that impact one's intention to retire, they rarely focus on individuals who have followed through the retirement decision process and made the actual decision to leave the organization. Most researchers collect data from workers aged 50 or older and then measure their intended age of retirement to capture retirement intentions (Adams, 1999; Bahrami, 2001; Beehr et al., 2000; Taylor & Shore, 1995). Some researchers have gone further to develop retirement intention scales (Adams et al., 2002; Brougham & Walsh, 2005, 2007). While past studies on predictors of retirement are good first steps, it would be helpful to understand the greater decision process that goes into making a retirement decision. The best way to do this though is by assessing the retirement decision-making process over a period of time, longitudinally (Feldman, 1994). For the purposes of this study though, individuals who are already retired will be surveyed retrospectively, rather than asking older employees about their intended retirement age. Research suggests that events in episodic memory, especially those that are major life events, are accurately remembered (Wheeler et al., 1997) and that these memories grow increasingly accurate over time (Symons & Johnson, 1997). Therefore, by surveying individuals who have recently retired, we can review the decision-making process from another angle.

The decision to retire, similar to the decision to leave an organization, is different for everyone and is highly contextualized (Feldman, 1994). Therefore, a retirement decision model should account for these contexts. As will be discussed below, the unfolding model of turnover (T. W. Lee & Mitchell, 1994) will be used to capture unique factors and circumstances that are not commonly measured or considered in the retirement decision literature. Similarly to past research that has been done on the unfolding model (Donnelly & Quirin, 2006; Holtom & Inderrieden, 2006; T. W. Lee et al., 1999; T. W. Lee et al., 1996), a retrospective approach will be taken. While it would be ideal to survey individuals just before and following their retirement, capturing more of the actual decision process, that is not practical in the sense that the retirement decision

process may take weeks or months for some individuals and years for others. Also, this is an initial test of applying this turnover model to the retirement literature, so similar methods (retrospective surveys following the decision to leave) will be followed (T. W. Lee et al., 1999; T. W. Lee et al., 1996).

Although turnover and retirement are considered distinct forms of organizational withdrawal (Hanisch & Hulin, 1991), turnover models can be applied to the retirement decision. Traditional turnover models (March & Simon, 1958; Mobley, 1977; Porter, Steers, Mowday, & Boulian, 1974) have been followed in previous retirement research (Adams, 1999; Adams & Beehr, 1998; Adams et al., 2002; Beehr, 1986; Beehr et al., 2000; Taylor & Shore, 1995) by considering how organizational variables such as job satisfaction and organizational commitment combine with age and finances to predict retirement. Over time, researchers have began to focus on other individual and organizational variables that are more appropriately suited for retirement such as career commitment (Adams, 1999), job involvement (Adams et al., 2002), the perceived ability to adjust to retirement (Taylor & Shore, 1995) and so on but have failed to capture life events that affect the retirement decision process.

The turnover literature suggests that individuals leave organizations for more than just poor organizational attitudes. In fact, job satisfaction and organizational commitment, in a recent meta-analyses, only correlate -.19 and -.23 with the intent to leave (Griffeth, Hom, & Gaertner, 2000), and these numbers do not reflect actual turnover. Lee and Mitchell (1994) suggest that this poor prediction is due to the complexity of the turnover decision. Similar to retirement models, turnover models have generally failed to capture the complexity of the context in which these withdrawal behaviors occur. Therefore, Lee and Mitchell (1994) proposed an alternative model to turnover, the unfolding model.

THE UNFOLDING MODEL

The unfolding model of turnover, introduced by Lee and Mitchell (1994) views turnover as a decision-making process based on image theory (Beach, 1990; Beach & Mitchell, 1987). The unfolding model was developed by Lee and Mitchell (1994) to account for more of the complexity in the turnover process. Unlike traditional turnover models (e.g., Mobley, 1977; Steers & Mowday, 1981), image theory suggests that factors beyond job satisfaction can initiate the turnover decision process, and individuals may or may not search for or have an alternative in mind. While traditional turnover models tend to focus on job dissatisfaction and affective measures, Lee and Mitchell argued that turnover was not necessarily due to poor attitudes. Image theory suggests that other factors can initiate the turnover process, and unlike traditional turnover models, employees may or may not compare their current position with alternatives. By using image theory, they took more of a decision-making approach to the turnover process.

The unfolding model suggests that the decision-making process often, but not necessarily, begins with a *shock*, or a particular, jarring event. In turn, this model is driven by *scripts*, *image violations*, *job satisfaction*, and *search and/or evaluation of alternatives*. The basis of the unfolding model, image theory is reviewed, and Lee and Mitchell's modifications are discussed below to outline the model.

Image Theory

Image theory (Beach, 1990) was developed as an alternative to classical decision theory. In contrast to classical decision-making, Beach suggests that for decision makers: a) evaluation of options is rarely extensive, b) decision makers rarely have choice, c) behavior is pre-programmed, d) we enlist a variety of strategies in making choices and e) the field has abandoned its economic view of decision-making (Beach, 1993, p. 272).

Image theory is based on three types of images, or cognitive structures, that sum up one's perceptions of "what must be accomplished and why, about how it is to be done, and about the results of effort to do it" (Beach, 1990, p. 6), and information obtained from screening the environment is tested against these images (Beach, 1993). These images are *value images, trajectory images,* and *strategic images*. A value image consists of the decision maker's principles (or values). This image serves as a guide for what is 'right' and 'wrong' in the decision-making process. The trajectory image deals with one's vision for the future; where he or she is going. This image helps guide the decision-maker into choices that will help him or her accomplish his/her goals. Finally, the strategic image involves one's plans or tactics to obtain those goals that the decision-maker is pursuing (Beach, 1990).

According to image theory, there are two types of decisions. *Adoption* decisions involve accepting or rejecting options as constituents of the value, trajectory, or strategic images, and *progress* decisions involve the evaluation of whether or not a particular strategic image path is making satisfactory progress towards a goal or end-state (Beach, 1990).

When making these two types of decisions, there are two types of decision "tests" according to image theory (1987). First, there is a *compatibility test*. This test deals with whether or not a proposed option is compatible with one's various images and whether or not one's strategic image (plan to obtain goal) is compatible with one's trajectory image (goals). This test helps to screen out the unacceptable options.

Through the screening process, if an option survives the compatibility test and past the evaluation of all three images, individuals most frequently compare this option or alternative to the status quo. In most cases, the status quo wins, but one's images may be adjusted slightly.

There is also a *profitability test* (only in adoption decisions) which assesses whether or not particular options can help to attain goals and comply with the value image. This test helps the decision-maker select the best option if action is to be taken. A model of image theory is in Figure 2a.

It is also important to note that individuals have different sets of images for different domains in their lives. The main sets of images relate to work, family, friends, recreation, and ethics/spirituality (Mitchell & Beach, 1990). This has implications for the withdrawal process in organizations. It is possible for these image sets to conflict such that one's work goals (e.g., continue working) may conflict with family goals (e.g., spend more time with one's grandchildren).

Applying image theory to turnover. Lee and Mitchell (1994) modified image theory, focusing on incongruencies with or violations to one's images and applied it to turnover. The unfolding model suggests that the decision-making process often, but not necessarily, begins with a *shock*, or a particular, jarring event. The decision-making

process is then driven by *scripts, image violations, job satisfaction,* and *search and/or evaluation of alternatives* leading to different paths within the unfolding model. Lee, Mitchell, and colleagues have tested the unfolding model and have found support for its components and four decision paths (T. W. Lee et al., 1999; T. W. Lee et al., 1996). After their initial test of the model (T. W. Lee et al., 1996), Lee and colleagues clarified the role of scripts, shocks, and the search for and evaluation of alternatives (T. W. Lee et al., 1999). These modifications helped to classify more leavers (62.5% classifiable leavers with original model to 92.6% with modified model); therefore relevant modifications to the model are discussed below in addition to Lee and Mitchell's original (1994) unfolding model of turnover. These nuanced modifications apply mainly to specific contexts within decision paths and do not affect the general premise of the unfolding model.

First, a shock may or may not occur in the turnover decision-making process. A shock may be considered a "significant event that causes an employee to evaluate the implication of the event on his job." According to Lee and Mitchell (1994), this particularly jarring event may or may not be personal, and it may be positive, negative, or neutral. For example, a large number of organizational layoffs would be a negative organizational shock, whereas getting accepted into law school would be a positive personal shock. It is important to note that a shock is not necessary to initiate the withdrawal process. As I will discuss, individuals who follow paths 4a and 4b in Figure 3a, the unfolding model, do not encounter a shock in the turnover decision process.

Secondly, individuals may or may not engage in a predetermined plan of action when a shock occurs, also referred to as a *script* (Fiske & Taylor, 1991) or a type of cognitive structure (schema) that retains knowledge of series of events for a particular situation. This script may be based on past experiences, social expectations, or the mere observation of others who are confronted with a similar shock. For example, if your parents had always wanted you to move back to your hometown, and your spouse had a job offer there, you may quit your job in order to move back and follow through on their expectations without much evaluation.

In this process, regardless of whether a shock occurs, if there is no pre-determined script to follow, that individual will then evaluate how the job fits with his or her images and evaluate whether an *image violation* occurs. An image violation occurs if the job/organization/shock conflicts with one's value, trajectory, or strategic images. The unfolding model (Figure 3a) does not account for instances where an image violation does not occur, but if a shock occurs, it is likely that some basic image has been violated for that individual to start thinking about leaving the organization.

Lee and Mitchell (1994) also incorporated job satisfaction in their model. As suggested previously, these authors suggested that there was more to the turnover process than poor satisfaction, but did not deny that job satisfaction plays a part in the turnover process. Depending on the path that is followed, job satisfaction plays different roles in the decision-making process. For some individuals, job satisfaction is irrelevant (decision path 1). For others, such as decision path 4 followers, low levels of satisfaction serve as a precipitating force, leading to an image violation in and of itself. The role of job satisfaction is discussed more in depth below within the description of each decision path.

Finally, the unfolding model accounts for the search and/or evaluation of alternatives. An individual may or may not engage in these behaviors. Some may leave without any formal search of other jobs, or some may only need to evaluate a new job offer which served as a shock. These two behaviors, search and evaluation, do not need to necessarily occur together. One may search without discovering any alternatives to evaluate, and one may also have an alternative to consider (a job offer) without initially searching for it (T. W. Lee et al., 1999). It is also important to note that alternatives may also include (which is especially relevant to the retirement aspect) other forms of work (e.g., volunteering) and non-work options (T. W. Lee et al., 1999).

Decision Paths of the Unfolding Model

The combination of the above pieces of the unfolding model yields four different paths that leavers follow. Support has been found for these four paths; studies have found that 47 to 93% of leavers can be categorized according to these four decision paths (Donnelly & Quirin, 2006; Holt et al., 2007; T. W. Lee et al., 1999). See Figure 3a for a brief overview of the decision paths that leavers can follow.

Decision path 1. Individuals who follow decision path 1 generally follow an expected plan. When a shock occurs within this decision path, the individual generally enacts a script (pre-existing schema or script) to follow once this shock occurs. Job dissatisfaction is not an issue, and the individual is not looking actively for alternatives; he or she is sticking to a plan that was set into motion by a shock. An example of this would be if an individual's spouse changed jobs forcing him or her to move to another location and he or she is unable to continue employment with his/her current company. After the initial test of the unfolding model and evaluating the results, Lee, Mitchell, Wise, and Fireman (1996) confirmed that scripts that directly affect quitting are essential to this decision path, whereas scripts may facilitate, but not directly effect, decision paths 2, 3 and 4. That is, scripts play an essential role in decision path 1, and they may also play an ancillary role in the decision-making process in other paths. Lee et al. (1996) also confirmed that shocks are essential to this path. Most turnover models neglect to consider individuals who follow decision path 1 in leaving an organization such that attitudes (job satisfaction, organizational commitment, etc.) often drive the model, but individuals often leave organizations after experiencing a shock even though they are satisfied or committed to the organization.

Decision path 2. In path 2, individuals do not engage in a script after a shock occurs. In this path, one's level of job satisfaction is irrelevant though; the shock was sufficiently strong enough to result in an image violation which results in a departure from the workforce before considering options. The essential features of this path are a shock and an image violation (T. W. Lee et al., 1996). An example of this would be an individual who was passed over for a promotion who then quit without a job search or evaluation of alternatives.

Decision path 3. Similar to decision path 2, a shock and image violation occurs in decision path 3. In this path though, low levels of job satisfaction drive the individual to make comparisons with other alternatives and/or jobs. Consequentially, the individual evaluates these alternatives according to personal, trajectory, and strategic images. The dissatisfaction with one's current job can result in an image violation, and hence, the

alternative is pursued. Thus, the essential features of this path are a shock, an image violation, some dissatisfaction, a possible search, and an evaluation of alternatives (T. W. Lee et al., 1996). A search may not be necessary in decision path 3 if a job offer, for example, served as the shock.

Decision paths 4a and 4b. Both decision paths 4a and 4b stem from job dissatisfaction; a shock does not occur in these paths. There is no set script or plan for the individual to follow, but the individual is dissatisfied in his/her job. Followers of decision path 4a end up leaving without a search for alternatives or other employment, whereas followers of decision path 4b leave after successfully finding a new job. In both cases, dissatisfaction is a driving force, but the search for alternative occupations and offers makes these two decision paths distinct.

Applying the Unfolding Model to Retirement

Research on the unfolding model supports the different decision paths that individuals follow when leaving an organization (Donnelly & Quirin, 2006; Holt et al., 2007; Holtom & Inderrieden, 2006; T. W. Lee et al., 1999; T. W. Lee et al., 1996). Although retirement and turnover are different, I propose this model applies well to the retirement decision process as this is often a long-term decision-making process (Beehr, 1986; Taylor & Shore, 1995) and cannot easily be captured by organizational attitudes and demographics. In the retirement literature, models often measure complex life events as simplistic demographic variables. For example, the question "Is your spouse working?" captures different information than "Has your spouse recently retired?" such that the first does not account for the spouse's working history. If one's spouse has not worked for years, that may impact the retirement decision process differently than if one's spouse retired in the past month (Jungmeen E. Kim & Moen, 2001; Szinovacz, DeViney, & Davey, 2001). Many of the factors that are expected to affect retirement in theory may be adequately captured as significant, jarring events, referred to as "shocks" in the unfolding model of turnover. Therefore, it is expected that the unfolding model would also work well in modeling the retirement decision-making process. A brief review of how the concepts of the unfolding model can be applied to the retirement decision-making process follows.

Job embeddedness. In the retirement literature, we already know that satisfaction is not necessarily a predictor of retirement (Adams, 1999; Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995), but I propose that other organizationally relevant variables could combine with job satisfaction to more appropriately address attitudinal factors that affect the retirement decision process. *Job embeddedness*, which encompasses the various ways one is integrated within an organization and community, has been found to predict turnover above and beyond measures of job satisfaction and organizational commitment, and I propose it applies well to the retirement literature as it accounts for the job, organization, and community in which an employee is enmeshed. No published studies that I am aware of have examined the relationship between job embeddedness and the retirement decision process.

Job embeddedness represents a number of factors contributing how enmeshed one is in his or her job, organization, *and* the community (T. W. Lee et al., 2004; Mitchell et al., 2001). Mitchell et al. (2001, p. 1104) describe job embeddedness as "a net or a web in

which an individual can become stuck." While the overall level of job embeddedness is often the construct of interest, it can be broken down into three elements: links, fit, and sacrifice. Each of these elements can be viewed both in the context of the job and the community and have been shown to be negatively related to turnover and independently contribute to the prediction of turnover as well as job performance (Mitchell et al., 2001)

Links refer to the extent to which people have connections to other people or activities. These connections can be both formal and/or informal connections. There are a number of possible links that could tie individuals and their families to a community or organization. These links can be social, psychological, and even financial, including work and non-work friends, the community, and the actual physical environment in which one lives. Work-role attachment theory (Carter & Cook, 1995) suggests that the more links an individual has in an organization, the more difficult it would be to replicate those links in another organization. Therefore, as one's links within the organization increase, the less likely one would be to leave an organization to work at a similar organization in both retirement and bridge employment.

On the other hand, if one has multiple links in the community, these links may serve as a "pull" factor, pulling employees away from the workplace, and encouraging employees to retire. Therefore, as one's links within the community increase, one would be more likely to retire. For example, according to this concept, an individual involved in his or her church, the local parks service, and a volunteer organization would be more likely to retire than a similar individual who was not involved in the community. This assumption has not been formally tested, but some researchers note that well-being is tied to one's activities after retirement such that individuals who engage in non-work activities such as volunteering after retirement are more satisfied with their retirement decision (Dorfman & Moffett, 1987; Moen, 1996).

Fit refers to the extent to which one's job and community where one lives are similar to one another and whether or not one's job and the community fit in with other aspects in one's life (Mitchell et al., 2001). This concept of fit goes beyond the constructs of person-job fit as discussed by Werbel and Gilliand (1999) and person-organization fit (Kristof-Brown, 1996, 2000; Schneider, 1987) and serves a more general purpose and focuses on an overall perception of fit. Fit, as conceptualized by Mitchell and colleagues (2001) includes consideration of one's values and career goals in relation to the organization as well as the requirements (knowledge, skills, abilities) of one's job and asks about perceived fit with coworkers, workgroups, the job, organizations, general cultures, and the community. More importantly, this general element of fit considers the context of community.

Finally, *sacrifice* refers to what one would give up by leaving one's job and/or community and the ease with which various links can be broken (Mitchell et al., 2001). This includes both financial and/or material losses as well as psychological benefits that may be lost when leaving a job. For example, when an individual retires, he or she may be giving up a sense of contributing to society and doing meaningful work as well as valuable connections with friends at work. This concept is similar to the continuance commitment component of organizational commitment (Meyer & Allen, 1997), but

encompasses sacrifices outside of the organization as well as those within the organization (Mitchell et al., 2001).

As job embeddedness is still a relatively new concept, its applications are still being studied. On-the-job embeddedness (ONJE) and off-the-job (community) embeddedness (OFJE) have explained variance in both turnover behavior and performance on the job independently (T. W. Lee et al., 2004). In the turnover literature, both on-the-job and off-the-job embeddedness have been shown to prevent turnover behavior such that individuals high on both ONJE and OFJE are less likely to leave. In the retirement domain though, ONJE and OFJE may lead to conflicting values and goals (images) which may impact the retirement decision-making process.

Shocks. For the retirement process, shocks may occur and provoke the retirement decision-process. Previous studies of retirement decisions have tried to study how life events affect the retirement decision process, but most have failed to capture these occurrences as life events. For example, researchers have tried to measure how the retirement of a spouse or coworkers could prompt others to retire, but most fail to adequately capture the relevant concept. For example, "Is your spouse retired?" does not capture the "shock" value of this state of being, so it is important to capture shocks in the retirement decision. By accounting for shocks in studying the retirement decision process, life events such as the retirement of a spouse, children graduating from college, health-related changes, and the reaching of particular financial goals (i.e., debts repaid, Social Security benefits begin) can be measured as (some) potential events that may hasten the retirement decision process.

Image violations. Again, an image violation occurs when "an individual's values, goals, and strategies for goal attainment do not fit with those of the…organization or those implied by the shock" (T. W. Lee et al., 1999, p. 451). For retirement, this image violation may occur for a variety of reasons. In turnover, image violations more likely to be related with low job satisfaction and deal with organizational values and goals that may conflict (T. W. Lee et al., 1999), whereas for individuals contemplating retirement, there are often conflicting goals between one's work life and one's leisure (off the job) life (Brougham & Walsh, 2005, 2007).

Job satisfaction. Similar to the unfolding model of turnover (T. W. Lee & Mitchell, 1994; T. W. Lee et al., 1999; T. W. Lee et al., 1996), job satisfaction is expected to play a role in the retirement decision process. While job satisfaction has not been found to necessarily predict the age at which one expects to retire (Adams, 1999; Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995), it still may be an important factor to consider when evaluating the actual decision process and through the lens of the unfolding model. For some paths, job satisfaction may not play a role; these contingencies are discussed in the description of the model below.

Search for and/or evaluation of alternatives. Individuals are expected to also vary in their search behaviors. The possibilities for these behaviors are discussed below in depth for each specific path that one may follow. For individuals that may be hesitant to retire or have not experienced a shock, a search for other opportunities such as career bridge employment or bridge employment in a different field may be conducted.

THE PRESENT STUDY

The present study applies the unfolding model, previously applied to turnover, to the retirement decision-making literature. While turnover and retirement are distinct forms of organizational withdrawal (Adams & Beehr, 1998), this turnover decision-making model, as applied to retirement, is proposed to capture some of the intricacies that other retirement models have failed to consider. The unfolding model of retirement takes contextual factors into consideration as well as a new construct, job embeddedness, with its on-the-job and off-the-job components. Past studies looking at the retirement decision process have tended to focus on the intended age of retirement, not actual retirement, and while this design helps predict what factors facilitate or inhibit one's exit from the workplace, it does not consider what actually happens during the retirement decision process or why one ultimately decides to begin to withdraw from the workplace.

Figure 4a presents the unfolding model adapted to the retirement decision. This overall model is similar to the original model developed for turnover decisions regarding the occurrence of shocks, whether one engages in a script or not, whether an image violation occurs, and accounts for variations in job satisfaction. The greatest difference between these two models is the inclusion of both on-the-job embeddedness and off-the-job embeddedness and the possibility of alternative withdrawal outcomes. The eight paths in this unfolding model of retirement are outlined, and expected findings are discussed.

Decision Paths and Hypotheses

The following paths are hypothesized paths that individuals are expected to follow on the road to retirement. Similar to Lee and Mitchell's (1994) original model, this unfolding model of retirement serves as a possible decision-making process that retirees follow. After discussing the various decision paths that retirees may follow, I outline some expectations for the unfolding model as it is applied to retirement. Specifically, I discuss how shocks and image violations may differ for the retirement process as well as how job embeddedness more appropriately fits into the unfolding model for retirement rather than job satisfaction. Additionally, research questions are posed regarding the employment behaviors of individuals after retiring from an organization.

Decision path 1. Similar to the turnover model, an individual on decision path 1 experiences a shock, automatically engages in a script, and retires from the organization without searching for or evaluating alternatives. For example, an individual may have always imagined retiring with his or her significant-other, so when one's significant-other retires, this shock may lead that individual to quickly proceed through the retirement decision process. The shock, and automatic engagement of a script makes the image violation evaluation unnecessary. The shock and script are the two essential factors driving this path.

Hypothesis 1: In decision path 1, a shock occurs and a matching script is followed. The individual does not evaluate alternatives.

Decision paths 2a and 2b. On paths 2a and 2b, individuals experience a shock, but do not automatically engage in a script. In this case, individuals do not have a pre-existing plan on what to do if a particular shock occurred (as in decision path 1). This shock sufficiently triggers an image violation for the individual. That is, the shock's effects are incongruent with that individual's value, trajectory, or strategic images. One's

level of job satisfaction does not play a role at this point. The violation in and of itself may be strong enough to harbor thoughts of retirement, regardless of levels of job satisfaction. Unlike decision paths 3a and 3b, discussed below, individuals following this path are high on ONJE. Levels of OFJE, for these decision paths (2a and 2b) serve as a moderator. For decision path 2a, a high level of off-the-job embeddedness is pulling the individual to leave. He or she may evaluate alternatives (bridge employment, part-time work) due to financial constraints or other reasons but eventually decides to retire. For decision path 2b, individuals are *not* highly embedded off-the-job. Therefore, these individuals are likely to search for alternatives to retirement such as bridge employments rather than fully retire. This final part of the path may be influenced by the type of shock and image violation that occurs. Implications of the type of shock/image violation experienced are discussed below, after the full model is discussed.

Hypothesis 2: In decision path 2a, a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives occurs, and individuals are high in both on-the-job and off-the job embeddedness.

Hypothesis 3: In decision path 2b, a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives occurs, and individuals are high in on-the-job embeddedness and low in off-the job embeddedness.

Decision paths 3a and 3b. Similar to decision path 2, for decision path 3, individuals experience a shock, but do not automatically engage in a script. Although an image violation occurs, this individual is *not* highly embedded in his or her job/organization and job satisfaction is likely low. For path 3a retirees, the high levels of off-the-job embeddedness will pull them towards retirement without considering alternatives. Similarly, path 3b retirees will retire without considering alternatives, but may return to the workforce later due to a lack of embeddedness within the community. The major difference between these two paths is the difference in levels of off-the-job embeddedness. Again, OFJE is expected to serve as a moderator. Levels of job embeddedness consequently may shape one's values and goals (images), hence the level and type of image violation that occurs will result in slightly different decision paths. Individuals on decision path 3a, in this case, will consider leaving their organization once an image violation occurs knowing there are strong linkages and good fit within the community whereas there are fewer factors keeping that individual from leaving the workforce (low on-the-job embeddedness and low job satisfaction). For 3b individuals, since there are no ties and job satisfaction low, that individual may retire, or choose to engage in bridge employment, so a search is likely to occur.

Hypothesis 4: In decision path 3a, a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives does not occur, and individuals are low in job satisfaction, low in on-the-job embeddedness, and high in off-the job embeddedness.

Hypothesis 5: In decision path 3b, a shock and image violation occurs, but a script does not. A search and/or evaluation of alternatives occurs, and individuals are low in job satisfaction and both on-the-job and off-the job embeddedness.

Decision path 4. Individuals on decision path 4 do not experience a shock, so there is no engagement of a script. This process likely occurs over a longer period of time

since there is no critical event facilitating the decision-making process. As in the unfolding model of turnover, the paths without shocks are mainly driven by dissatisfaction within the job, so for paths 4 and 5, it is expected that the model will be driven mainly by low levels of job satisfaction. It is expected that an image violation occurs in this decision path, and it is likely that the image violation comes about because personal goals are interfering with work goals (Brougham & Walsh, 2005, 2007) or because of low levels of job satisfaction. Decision path 4 retirees are high in on-the-job embeddedness, and similar to those in decision path 2a, the high level of off-the-job embeddedness pull employees away from work and into retirement. But, unlike decision path 2a, since a jarring shock does not occur but job satisfaction is low, it is expected that the individuals will consider bridge employment opportunities before retiring fully, thus a search will likely occur.

Hypothesis 6: In decision path 4, shocks and scripts do not occur in the decision-making process. An image violation occurs as well as a search and/or evaluation of alternatives. Individuals are low in job satisfaction and high in both on-the-job and off-the job embeddedness.

Decision paths 5a and 5b. The final two decision paths of the unfolding model occur without a shock or script to follow as well. On these paths, individuals experience an image violation and low job satisfaction, but they are low in on-the-job embeddedness compared to path 4 retirees. On decision path 5a, since individuals are highly embedded in the community though, they are likely to end up fully retiring without a search whereas for decision path 5b, these individuals are likely to go into bridge employment since they are not heavily embedded in the community. In the case of decision path 5a, the lack of ONJE and low job satisfaction drives the employee to leave since embeddedness within the community is much stronger whereas the lack of ONJE and low job satisfaction drives the employee to retire in decision path 5b, but not necessarily quit working since levels of OFJE are low as well. The consideration of alternatives is likely for individuals on path 5b (since they may engage in bridge employment), but not likely for path 5a followers.

Hypothesis 7: In decision path 5a, shocks and scripts do not occur in the decision-making process. An image violation occurs, but a search and/or evaluation of alternatives does not. Individuals are low in job satisfaction and on-the-job embeddedness and high in off-the job embeddedness.

Hypothesis 8: In decision path 5b, shocks and scripts do not occur in the decision-making process. An image violation occurs as well as a search for and/or evaluation of alternatives. Individuals are low in job satisfaction and on-the-job embeddedness and off-the job embeddedness.

It should be noted that individuals are not expected to leave without a shock if they are high in on-the-job embeddedness and are not heavily embedded in the community since there are no factors pulling the individual to leave. Beyond testing the overall fit of the unfolding model as it applies to retirement, some specific hypotheses regarding the components of the models are raised. Additionally, this study also incorporates some research questions regarding more individual factors related to retirement.

Shocks. Shocks for decision path 1 (within the turnover model) often involve larger, evolving processes within a person's life (T. W. Lee et al., 1999). Similar to the first path of the turnover model, individuals on decision path 1 for retirement will engage in a script once a shock occurs. It is expected that these retirement shocks, similarly, will be more personal in nature (T. W. Lee et al., 1999) and that they may be expected such that there was a script in place for individuals to follow once this shock occurred. The emphasis of shocks in the retirement model is expected, based on the life course perspective (Crosnoe & Elder, 2002; Elder, 1995). This theory suggests that life transitions occur under specific circumstances and the social context is one of these key factors (Wang, 2007). Since many of these circumstance (i.e., a spouse's retirement, an age milestone passed, eligibility for retirement income) are expected, it is expected that retirees may have had a script in place that would facilitate their retirement after the occurrence of one of these or similar circumstances. This would affect the duration of the decision-making process. For individuals who experience a shock and follow a script, it is expected that these individuals will move more quickly through the decision-making process than individuals who do not have a script to follow because individuals who do not have a schema with which to interpret the shock will require more mental deliberations (T. W. Lee & Mitchell, 1994). By definition, a shock is sufficiently jarring to get the individual to think about retiring and making a judgment about their job (T. W. Lee & Mitchell, 1994). Therefore, it is expected that individuals who experience a shock (paths 1-3) will move more quickly through the decision-making process than individuals who follow a non-shock path (path 4 and 5).

Hypothesis 9: Decision path 1 shocks that retirees experienced are more likely to be categorized as personal shocks.

Hypothesis 10a: The time between the first thoughts of retiring and the decision to retire as well as the duration between the decision to retire and actual retirement are shortest for decision path 1.

Hypothesis 10b: The time between the first thoughts of retiring and the decision to retire as well as the duration between the decision to retire and actual retirement are shorter for decision paths 1, 2, and 3 than decision paths 4 and 5.

Lee et al. (1999) also considered the positivity or negativity of shocks. I am interested in evaluating whether a particular type of shock occurs more frequently within a decision path for retirees. Lee and colleagues presented some original hypotheses regarding levels of expectation or the occurrence of positive or negative shocks in their replication study, but the unfolding model as it applies to retirement, as discussed below, varies in both context and structure, so at this time, exploratory analyses will be conducted on the characteristics of the shocks only. I am specifically interested in if the type of shocks varies depending on which path the retirees follow. Since decision path 1 retirees enact a script, I would expect that they had planned for a positive event to unfold, but individuals may also plan for negative events. For leavers on decision paths 2 and 3, the nature of the shock is not as clear. The shock, positive or negative, gets the individual to start thinking about retiring, but it does not necessarily have to be positive or negative.

Research Question 1: Are retirement shocks more positive or negative in nature for leavers in decision path 1?

Research Question 2: Are retirement shocks more positive or negative in nature for leavers in decision paths 2 and 3?

Image violations. Brougham and Walsh, using a list of both leisure goals and work goals, asked individuals to rank personal goals and then evaluate the utility both in continued work or retirement as a means to achieve those goals (2005). They found that these goal evaluations helped to predict retirement intentions such that when working interfered with personal life goals, individuals were more likely to express the desire to retire sooner. Recently, they applied image theory to similar data and found that the incompatibility of goals predicted twenty-five percent of variance in their measure of retirement intent (Brougham & Walsh, 2007). Similar to the nature of shocks, it is expected that image violations for retirement will deal with the lack of fit between personal life goals and working. Thus:

Hypothesis 11: Image violations that retirees experienced are more likely to be categorized as personal image violations.

Job embeddedness. Mitchell and Lee (2001) suggest that the unfolding model could benefit from being combined with the job embeddedness construct. No formal model has yet incorporated job embeddedness into the unfolding model. Holtom and Inderrieden (2006) have evaluated aspects of both, but they did not fully discuss how job embeddedness could be integrated into the unfolding model. For their research integrating job embeddedness into the unfolding model, they did not model levels of job embeddedness within the decision paths, per se. Instead, they compared levels of job embeddedness and whether a shock occurred (and the individual left), a shock did not occur (and the individual left), or the individual stayed. This study integrated the unfolding model by using shocks and the job embeddedness literature on turnover, but it did not fully integrate job embeddedness into the unfolding model of turnover.

The turnover literature has only used the global composite of the embeddedness construct since it is expected that both on and off-the-job embeddedness presents factors that encourage employees to stay (Holtom & Inderrieden, 2006; T. W. Lee et al., 2004; Mitchell et al., 2001), but for retirement, I suggest that these two types of embeddedness work against one another. That is, on-the-job embeddedness serves as a force to keep the individual in the workplace, whereas off-the-job embeddedness serves as a force to pull the individual away and out into retirement, the community, etc. To be able to retire and spend more time in your community would be more attractive to those who fit well in their community, are high on links in the community, and who make sacrifices to spend time away from their community (and work).

Job embeddedness accounts for unique variance in withdrawal decisions over measures of job satisfaction (Mitchell et al., 2001), and researchers have not found much support for job satisfaction's (or similar variables) impact on one's intended retirement age (Adams, 1999; Adams et al., 2002; Beehr et al., 2000; Taylor & Shore, 1995) although job satisfaction is predictive in determining whether one engages in bridge employment (Wang et al., 2008). More importantly, retirement research has failed to account for community-related variables that may affect the retirement-decision beyond marital status (Adams, 1999; Bahrami, 2001; W. K. M. Lee, 2005; Pienta & Hayward, 2002). For the unfolding model applied to retirement, various levels of job embeddedness

are expected to steer individuals towards different decision paths. This is especially true for decision paths 4 and 5. As noted, a shock is not expected to occur for individuals following these decision paths; rather, an image violation triggers the retirement decision process which may be driven by low levels of job satisfaction. As suggested by their own application of image theory, Brougham and Walsh (2005; 2007) found that perceptions of incompatibility (or an image violation) with personal goals and working were positively related to the intent to retire. Similarly, for the current study, if an individual is high in off-the-job embeddedness, regardless of levels of on-the-job embeddedness, it would be expected that an image violation would occur since individuals who are highly embedded in their community will have more forces pulling them towards retirement and this image violation would likely be the source of dissatisfaction and thinking about leaving (rather than a shock).

Hypothesis 12: Off-the-job embeddedness is positively correlated with image violations.

Other Research Questions

Similar to the unfolding model for turnover, this model has distinct paths one may follow. It is important to keep in mind that this decision-making model accounts for paths of *leaving* the organization, not staying. Hence, all paths lead to retirement from the organization, and paths that would not lead to retirement, but rather staying, are not accounted for (in **bold** in Figure 4a). For the individual, decision paths may temporarily lead to related behaviors such as career bridge employment or bridge employment in a different field, but ultimately they lead to retirement.

Beyond this original development of an unfolding model for turnover, there are some expectations in how this model may be followed. First, individuals who retire on decision path 1 may be more likely to return to the workforce in bridge employment. This would be expected since these individuals did not consider alternatives to retirement in their decision-making process. Similarly, individuals who do not consider alternatives in this unfolding model of retirement and retire are also likely to return to the workforce in some form of bridge employment. This is especially true for individuals who are high in on-the-job embeddedness. Job embeddedness, for those who originally retire, may serve as a moderator in evaluating whether or not an individual will return to work either in career bridge employment or bridge employment in a different field. This would apply to both forms of off-the-job embeddedness and on-the-job embeddedness such that individuals low on off-the-job embeddedness may not fit within their community and yearn to be back in the workplace, and individuals high in on-the-job embeddedness may miss those links and their fit within the organizational context so much that they want to return. These expected future outcomes are denoted by dashed lines in Figure 4a.

While it is the intent of this study to model the retirement decision-making process from the employee's perspective in an organization, it is still important to understand the final outcome of former employees once they leave the organization. While no studies to my knowledge have predicted actual retirement from an organization with these variables, Wang et al. (2008) found that age, finances, health, education, work stress, and marital satisfaction were predictive of various bridge employment behaviors and made comparisons across full retirement, career bridge employment, and bridge

employment in a different field. Select variables, as well as the occurrence of the decision paths, will be examined to see which factors lead to various retirement behaviors. Work stress will not be assessed to reduce the length of the survey.

Research Question 3: Are age, finances, education level, and marital satisfaction predictive of bridge employment behaviors?

Research Question 4: Are job satisfaction and job embeddedness predictive of bridge employment behaviors?

Research Question 5: Are the decision paths predictive of bridge employment behaviors?

METHOD

Design

To test the unfolding model as it is related to retirement, a multiple case study design, as described by Yin (1994) will be used. Yin suggests that this approach is appropriate to testing theoretical propositions; the generalization to a larger population is a secondary concern (1994). This approach was chosen because the unfolding model, as it applies to the retirement decision process, has never been tested, and it is the intent of this study to deduce the essential features of each decision path and more closely examine the retirement decision-making process. Therefore, some modifications to the paths may be required upon further examination of the data. This approach has also been used when studying the unfolding model of turnover (Donnelly & Quirin, 2006; T. W. Lee et al., 1999; T. W. Lee et al., 1996).

Participants

Ideally, data will be collected from an organization that can benefit from knowing more about how their employees decide to retire. Employees at a government agency would be ideal for this sample since many agencies are already looking for outside help in workforce planning in preparation for a mass exodus of baby boomer employees (Schings, 2008). Since most Federal agencies use the same standard pay scale and benefits, I could control for differences across various departments, and these results would likely be generalizable to other Federal employees.

There are some potential drawbacks to a Federal sample. First, many Federal employees may be encouraged to retire early and then seek a job in the private sector depending on their industry. Oftentimes, individuals with specialized government knowledge are highly sought after consultants in the private sector, so the financial gains available to some individuals may affect their retirement decision. Nonetheless, the measurement of shocks and follow-up questions on work behaviors would capture this phenomenon and be useful information for the organization.

Ideally, an initial sample of 500 retirees will be contacted to yield a sample of 100 to 200 participants. Past research on the unfolding model, which used similar methodology, had response rates of 14% to 31% (Donnelly & Quirin, 2006; T. W. Lee et al., 1999; Morrell et al., 2004). Power analyses using G*Power3 (Faul et al., 2007) were conducted for the various proposed statistical tests proposed using an alpha of .05, power of 0.80, and small to medium effect sizes estimations based off of past work assessing the unfolding model (T. W. Lee et al., 1999; T. W. Lee et al., 1996). These analyses yielded suggested sample sizes of 64 participants to test the overall path structure (using

correlations) and samples of 105 and 160 to test the proposed chi-square goodness of fit tests and ANOVA tests, respectively. Therefore, a sample of 160 participants will be the intended sample. Potential incentives and ways to improve the participation rate will be discussed below.

Data Collection

Once a sample is identified, the plan is to sample recent retirees who have retired in the past six months or individuals who intend to retire in the next six months. Individuals will be surveyed through the mail. Human resources professionals will be asked to address survey invitations to the relevant sample (recent retirees who have left in the past six months or individuals who are to retire in the next six months).

Relevant individuals will be mailed an invitation to the study from their organization describing the research and asking for his or her participation in the study. The survey and a self-addressed, stamped envelope will also be included. Since the research requires the participants to mail back the survey acknowledging their consent, I will ask the Human Subjects Review Board to waive the informed consent form.

Additionally, I intend to use funding available through the Psychology department to offer a small incentive ($1 included with each survey). Sending a prepaid monetary incentive of $1 has been found to increase the participation rate in a number of samples (Jobber, Saunders, & Mitchell, 2004; King & Vaughan, 2004; Ryu, Couper, & Marans, 2006), and the stamped, pre-addressed envelope should also provide incentive to potential participants.

Measures

Individuals will fill out a short survey on the decision-making process that went into their decision to retire (see Appendix C). They will also be given a modified version of a job embeddedness measure along with questions on demographic variables.

Individuals will be asked a number of questions regarding the decision process. These items are based on previous research done by Lee et al. and others on the unfolding model (T. W. Lee et al., 1999; T. W. Lee et al., 1996; Morrell et al., 2004). For most items, modified measures from Lee et al. (1999) will be used.

Shocks. To account for shocks, individuals will be asked about the circumstances and events that may have occurred before they decided to retire. This measure will be modified from the Lee et al. (1999) study. An appropriate answer to at least one of the questions (see Appendix A) would indicate that a shock occurred. Individuals will be asked to describe the event/circumstances surrounding their retirement, if appropriate, and will complete items developed by Morrell et al. (2004) to evaluate different characteristics of the shocks. These items were chosen over the questions that Lee et al. (1999) used to evaluate shock characteristics because these shock characteristic items are more efficient in the evaluation of shocks and account for a range of shock characteristics. Rather than asking people yes or no questions (i.e., "Was the event expected?"), items will be responded to with scaled responses (i.e., "To what extent was the event expected or unexpected?"). The scaled items will be followed with a five-point scale anchored by semantic opposites (i.e., totally unexpected to totally expected).

Scripts. To evaluate whether or not the individual engaged in a script, questions will be asked regarding pre-existing plans regarding certain events. These items will be

taken and modified from the Lee et al. (1999) study for the purposes of retirement. An example item includes, "At the time I retired, I had already determined that I would leave the organization if a certain event were to occur (e.g., my spouse retired) or I reached a certain milestone." An appropriate answer (yes) to any of these items will indicate an engaged script. "No" responses will indicate that no script was activated.

Image violations. To evaluate whether or not an image violation occurred, measures from Lee et al. (1999) will be modified to be applicable to the retirement decision. Items will reference the compatibility of values and goals with the former organization and perceptions of being able to achieve those goals if one would have remained working. Example items include, "How compatible were your personal goals with those of your former employer," and "At my organization, my career was progressing as I expected." Participants will respond on a scale of 1 (Not compatible or Strongly disagree) to 5 (Compatible or Strongly agree). A response of 1 or 2 to at least one of the items will indicate that an image violation occurred.

Job satisfaction. For job satisfaction, the same measure used by Lee et al. (1999) will be used. This measure asks how satisfied individuals were with a number of factors such as financial rewards, coworkers, the nature of the work, etc. Participants will respond on a scale of 1 (Very dissatisfied) to 5 (Very satisfied). As in the Lee et al. (1999) study, a rating of 1 or 2 to any of the following will indicate dissatisfaction. A single-item measure from the Health and Retirement Study, used by Wang (2007) will also be included. This item will be rated on the same scale and is, "How satisfied or dissatisfied were you with your former job?"

Job embeddedness. To evaluate levels of job embeddedness, the Mitchell et al. (2001) measure will be modified to fit accordingly with retirement research and a retrospective approach. The original job embeddedness measure (Mitchell et al., 2001) contains 42 items across the six dimensions of on-the-job fit, links, and sacrifice and off-the-job fit, links, and sacrifice. Items from the measure will be deleted if they had low factor loadings in the studies in Mitchell et al. (2001) or if they were only used in one study; additional items that may apply to the job embeddedness construct will be developed for this measure. Responses will range from 1(Strongly disagree) to 5(Strongly agree) for scaled items.

Job embeddedness, according to the taxonomy developed by Law, Wong, and Mobley (1998), is best captured as a composite. For each dimension, an average score will be taken, and these averages will be averaged together for an overall measure of job embeddedness to equally weight the influence of the distinct dimensions. Aggregate measures of on-the-job and off-the-job embeddedness will be calculated by averaging the three dimensions of fit, links, and sacrifice for each respective group. For certain items within the links dimensions (see Appendix A), items will be standardized before being analyzed or included in composites (e.g., How long did you work for your organization?).

Search and evaluation. Search and evaluation behaviors will be measured with items from Lee et al. (1999) modified to apply to the retirement, rather than turnover, decision. Appropriate answers to at least one of the respective behaviors (search and/or evaluation) will indicate that those behaviors occurred. These items intend to measure

how much the retirees searched for or considered other alternatives before deciding to retire.

Alternatives and bridge employment. To account for individuals who left the organization and then engage in bridge employment or other alternative forms of work, individuals will be asked about their current work behaviors. If working, they will be asked to elaborate on their job. If they are not working, they will be asked about their daily activities. These items will be developed for the purpose of this study.

Economic factors. The consideration of economic factors will be measured with two modified, scaled items from Donnelly and Quirin (2006). Responses range from 1(Strongly disagree) to 5(Strongly agree). One item is "Economic factors played a major part in my decision."

Health factors. The consideration of health factors will be measured with three scaled items based off of the economic consequences items from Donnelly and Quirin (2006). Responses range from 1(Strongly disagree) to 5(Strongly agree). An example item is "My decision to quit was made primarily for health reasons." One item will also refer to spousal health. Additionally, an item from the Health and Retirement Survey, used by Wang and colleagues (Wang, 2007; Wang et al., 2008), will be used.

Other measures. Individuals will also be asked about basic demographic items regarding gender, race, age, retirement income/savings, and dependents. Two items will also be included to assess the timing of the retirement decision process (length of process; length from decision to leaving) based on the *speed of decision* items from Lee et al. (1999).

Piloting of Measures

A pilot study was conducted to assess the viability of these intended measures. Five individuals (two females, three males) who retired in the past year completed the survey over the phone. Their responses to the items were collected, and any questions or comments they had while completing the measures were noted to improve the survey items. Additionally, a psychologist from the Army Research Institute, nearing retirement, completed the survey as if retired and provided comments on how to improve the survey items.

These comments and suggestions were then used to modify survey items. Changes to the items, based off of participant comments are noted in Appendix B. The final items are included in the Retirement Survey, in Appendix C. Participant responses (of the five retirees) were also coded to note the occurrence of decision paths. One individual followed decision path 1, two individuals followed decision path 3b, and two individuals followed decision path 5a. These results provide preliminary support for these different decision paths; once a larger sample is assessed, more paths may be supported.

Additionally, while coding the pilot study responses, it was noted that there was no "rule" for job embeddedness levels, therefore, it was decided that average responses of 3.00 or less would be coded as low for levels of job embeddedness. This rule is noted in Appendix A.

Scoring

Classification of decision paths. Once surveys are collected, I will categorize each individual into decision paths using decision rules created by Lee et al. (1999). These

rules are included within the measures in Appendix A. In their replication of the 1996 study, Lee and colleagues developed a set of classification rules to categorize leavers. The initial test of the unfolding model (T. W. Lee et al., 1996) used interview data, and since the measures were being developed, there was no clear set of rules to classify leavers beyond the absence or presence of the paths essential features (T. W. Lee et al., 1996). For the replication study, modifications to the model were made, so the authors had to create a more complete set of rules for classification. The authors broke the full sample down and evaluated subsets of the data to test their rules. Their resulting classification rules, incorporated into the measures of shocks, scripts, search, evaluation of alternatives, etc. will be followed for the purposes of this study.

Replication of decision path classification. I will also train 2-3 independent raters on the categorization schema of the unfolding model. Raters will be given the coded data with a brief description of the unfolding model as it relates to retirement, and then be given criteria (embedded within the measures in Appendix A) to judge whether: 1) a shock occurred, 2) a script was followed, 3) a search/evaluation was made and so on to reach agreement as to how retirement decision paths should be categorized.

ANALYSIS PLAN

To test my hypotheses, a variety of analyses and methodologies will be conducted, including: pattern matching, correlations, tests of chi-square, logistic regression, and analysis of variance (ANOVA). The classification of paths will be done by applying a pattern matching technique, as discussed by Yin (1994). To test Hypotheses 1-8, regarding the components of the different decision paths, each case (participant) will be coded for decision path. A hypothesis will be supported when the theorized essential features for that respective decision path (for that hypothesis) is judged to occur across multiple cases, lending support for the existence of that path. According to Yin (1994), a successful "theoretical replication" is achieved when the pattern of essential features (as discussed in Hypotheses 1-8) result in the unique classification of cases (i.e., each case follows one decision path). This pattern-matching technique was used to test the original unfolding model of turnover (T. W. Lee et al., 1996).

In addition to applying the pattern matching technique, correlations will be analyzed for each component and the decision paths across individuals to assess the occurrence of each component within the decision paths. In past research, these correlations provided supplemental support to the different components of each decision path (T. W. Lee et al., 1996). Similar to Lee's work, participant "cases" will be discussed for each path. Individuals who do not follow an expected path will also be reviewed and discussed in depth to provide insight for future research on the retirement decision process.

Some modifications to the paths, based on the classification process and results, may be required. Once all relevant cases have been categorized into paths, the other hypotheses may be tested. If some decision paths must be reclassified after testing the decision path structure (Hypotheses 1-8), the other hypotheses may need to be revisited. Nonetheless, the same theory behind each component-based hypothesis (Hypotheses 9-14) will hold, but the decision path of interest may change such that a new path may be

the path of intended focus. The expectations of how the components of the unfolding model will work will not change.

For the component-based hypotheses, it is hypothesized (Hypothesis 9) that decision path 1 shocks are positively related to personal shocks. To test this, 2 by 2 contingency tables will be created to analyze the absence or presence of the decision path 1 (coded 0 or 1) such that path 1 followers are coded "1" and all other path followers are coded "0." The absence or presence of a personal shock will be coded, and a chi-squared test will be conducted. To test the hypothesized differences in path speed for Hypotheses 10a and 10b, an ANOVA will be used, and comparisons will be made across average periods of time. The time between the first thoughts of retiring and the decision to retire and the duration between the decision to retire and actual retirement will be entered in as dependent variables with the decision path serving as the independent variable.

Hypothesis 11, which states that image violations that retirees experienced are more likely to be personal, rather than professional, will be tested with a chi-square goodness of fit test. Hypotheses 12 will be analyzed with a correlation analysis, evaluating the relation of off-the-job embeddedness to image violations.

To test Research Questions 1 and 2, regarding the positivity and negativity of retirement shocks, again, a chi-square goodness of fit test will be used. Research Question 3, for all variables, will be assessed using multinomial logistic regression, with age, finances, education level, and marital satisfaction serving as independent variables, and bridge employment behaviors (i.e., full retirement, bridge employment in a different field, and career bridge employment) serving as the dependent variable.

Similarly, Research Question 4 will be evaluated using multinomial logistic regression, with job satisfaction and job embeddedness serving as predictors and bridge employment behaviors serving as the dependent variable. Finally, Research Question 5 will be evaluated using a chi square test of independence with decision path and bridge employment behaviors serving as the variables of interest.

Table 1a

Empirical support for factors suggested by Beehr (1986) that affect the retirement decision

Beehr's (1986) Model			
Type	*Factor*	*Hypothesized Effect*	*Empirical support*
Personal	Type A behavior	Negatively related to the preference to retire	Swan, Dame, & Carmelli (1991).
Personal	Skill obsolescence	Positively related to the preference to retire	No empirical support.
Personal	Economic well-being	Positively related to the preference to retire	*Taylor & Shore (1995);* Adams (1999); *Adams & Beehr (2002);* Schmitt & McCune (1981); Beehr et al (2000); Bahrami (2001).
Environmental - Job	Attainment of occupational goals	Non-directional effect hypothesized	Brougham & Walsh (2005; 2007); Adams (1999).
Environmental - Job	Favorability of job characteristics	Negatively related to the preference to retire	JS: *Taylor & Shore (1995); Adams (1999); Adams & Beehr (2002); Beehr et al (2000);* Schmitt & McCune (1981) OC: Taylor & Shore (1995); Beehr et al (2000); Adams & Beehr (2002).
Environmental - Non-job	Marital family life	Non-directional effect hypothesized	*Adams (1999); Bahrami (2001);* Pienta & Hayward (2002); Lee (2005).
Environmental - Non-job	Leisure pursuits	Positively related to the preference to retire	Beehr et al (2000); Bahrami (2001)

Note. References in *italics* measured, but did not find support for, these factors.

Table 2a

Empirical support for factors suggested by Feldman (1994) that affect the retirement decision

Feldman's (1994) Model			
Type	*Factor*	*Hypothesized Effect*	*Empirical support*
Individual difference	Work history	Greater the years of continuous service to the organization → early retirement	*Bahrami (2001)*; Most studies do not address tenure, but rather chronological age; For chronological age: Taylor & Shore (1995); Adams (1999); Adams & Beehr (2002).
Individual difference	Marital status	Married with spouse working → early retirement; less likely to accept bridge employment	*Adams (1999); Bahrami (2001);* Pienta & Hayward (2002); Lee (2005); Wang et al. (2008).
Individual difference	Demographic status	Greater the discrimination in the labor market → less likely to retire early, more likely to accept bridge employment, and less likely to change industry/occupation in bridge employment	No studies have evaluated discrimination in the labor market explicitly. No studies have addressed race, and little support for gender has been found.
Individual difference	Health	Major physical illness and functional impairments → early retirement; less likely to accept bridge employment	Taylor & Shore (1995); Schultz (1999); Schultz & Wang (2007); Wang et al. (2008); *Adams (1999); Adams & Beehr (2002); Beehr et al (2000); Schmitt & McCune (1981).*
Individual difference	Attitudes toward work	More an individual's self-identity is tied to work → less likely to retire early, more likely to accept bridge employment, and less likely to change industry/occupation in bridge employment	Beehr et al (2000); Wang et al. (2008); *Adams & Beehr (2002).*
Individual difference	Attitudes toward retirement	Greater the certainty about retirement → early retirement	*Taylor & Shore (1995); Adams (1999).*

Feldman's (1994) Model			
Opportunity structures in career path	Age-related performance decrements	Greater the negative impact of age on performance → early retirement, less likely to accept bridge employment, more likely to change industry/occupation in bridge employment	No empirical support.
Discrimination against older workers	Opportunity structures in career path	Greater the discrimination against older workers in an occupation → more likely to accept bridge employment outside their industry/occupation	No empirical support.
Opportunity structures in career path	Type of industry	Working for large firms in declining manufacturing industries → early retirement, less likely to accept bridge employment in the same industry or occupation	No empirical support.
Opportunity structures in career path	Primary vs. secondary labor market jobs	More likely to retire early from primary labor-market jobs than from secondary labor-market jobs	No empirical support.
Organizational factor	Financial rewards	Greater the current wages are and expected future pension benefits → early retirement, less likely to accept bridge employment	Financial well-being: *Taylor & Shore (1995);* Adams (1999); *Adams& Beehr (2002);* Beehr et al (2000); Bahrami (2001).
Organizational factor	Early retirement counseling	Comprehensive, pre-retirement counseling → early retirement	Perceived ability to adjust leads to an earlier retirement (Taylor & Shore, 1995); Wang et al. (2008).
Organizational factor	Flexibility in managing older workers	Greater the organization's flexibility in managing older workers → early retirement, more likely to accept bridge employment, less likely to change industry/occupation in bridge employment	No empirical support.
External environment	Uncertainty about macroeconomic trends	Greater the uncertainty about macroeconomic trends → less likely to retire early, more likely to accept bridge employment	No empirical support.

Note. References in *italics* measured, but did not find support for, these factors.

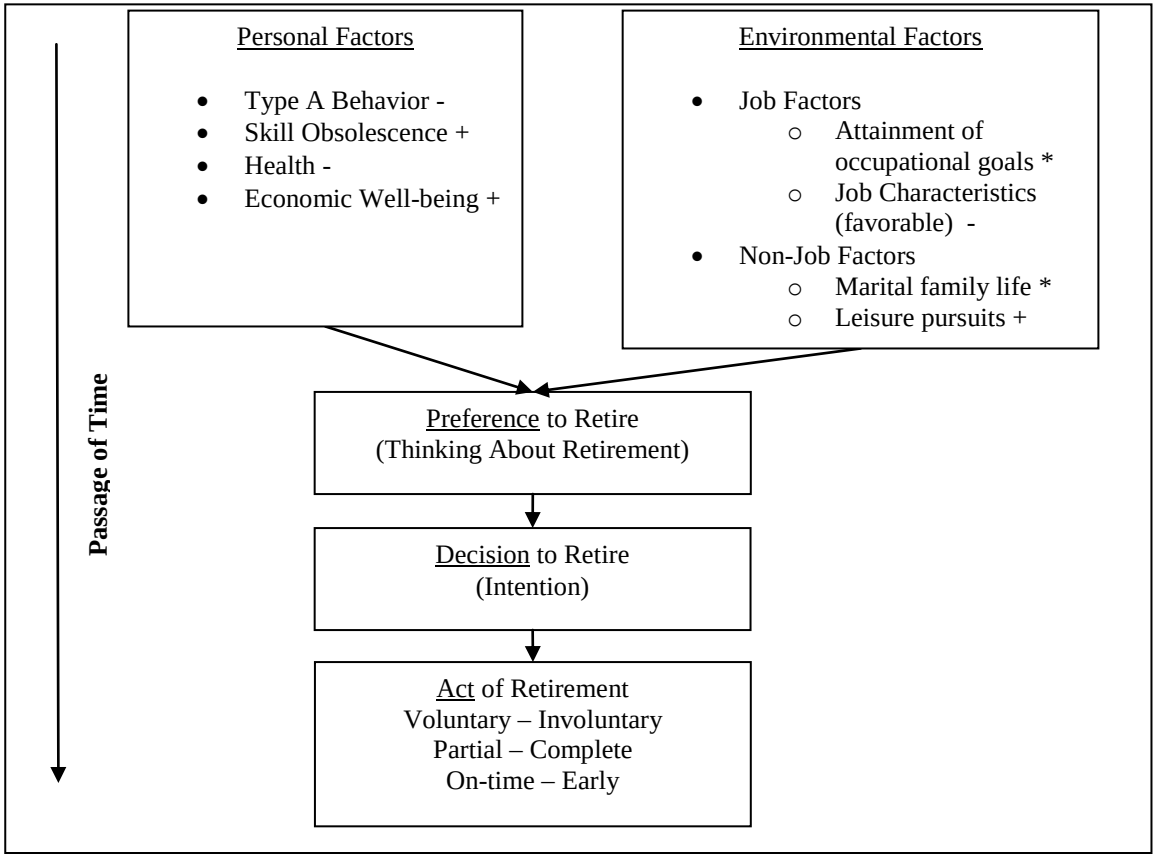

Figure 1a. Proposed individual and environmental causes in the process of retirement according to Beehr (1986)

Note. + and – are related to the expected effects that factors have on the preference to retire (i.e., for health, as health declines, the preference for retirement goes up). An * denotes a non-directional hypothesis.

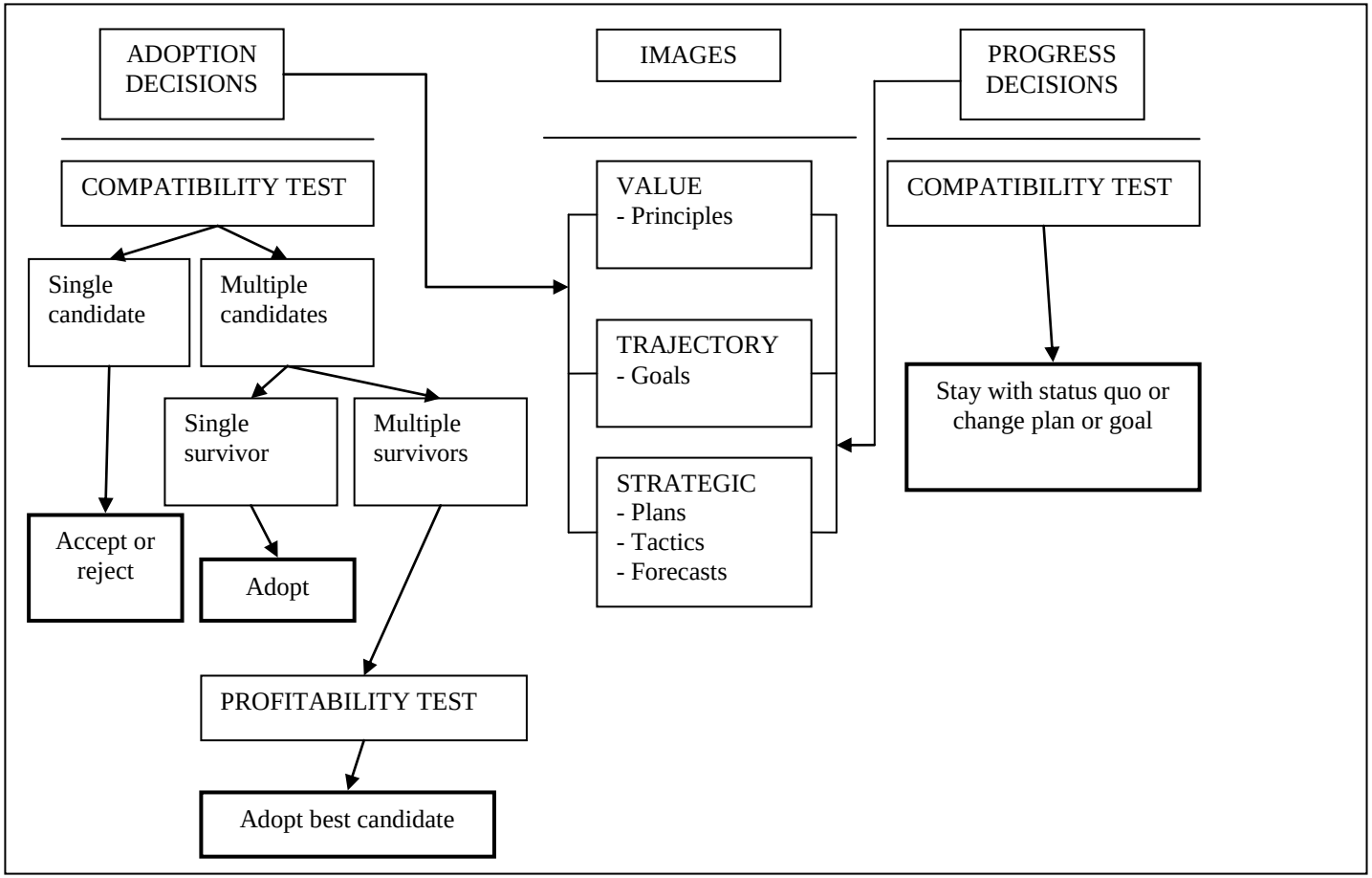

Figure 2a. A model of image theory; from Beach (1990), taken from Beach and Mitchell (1987).

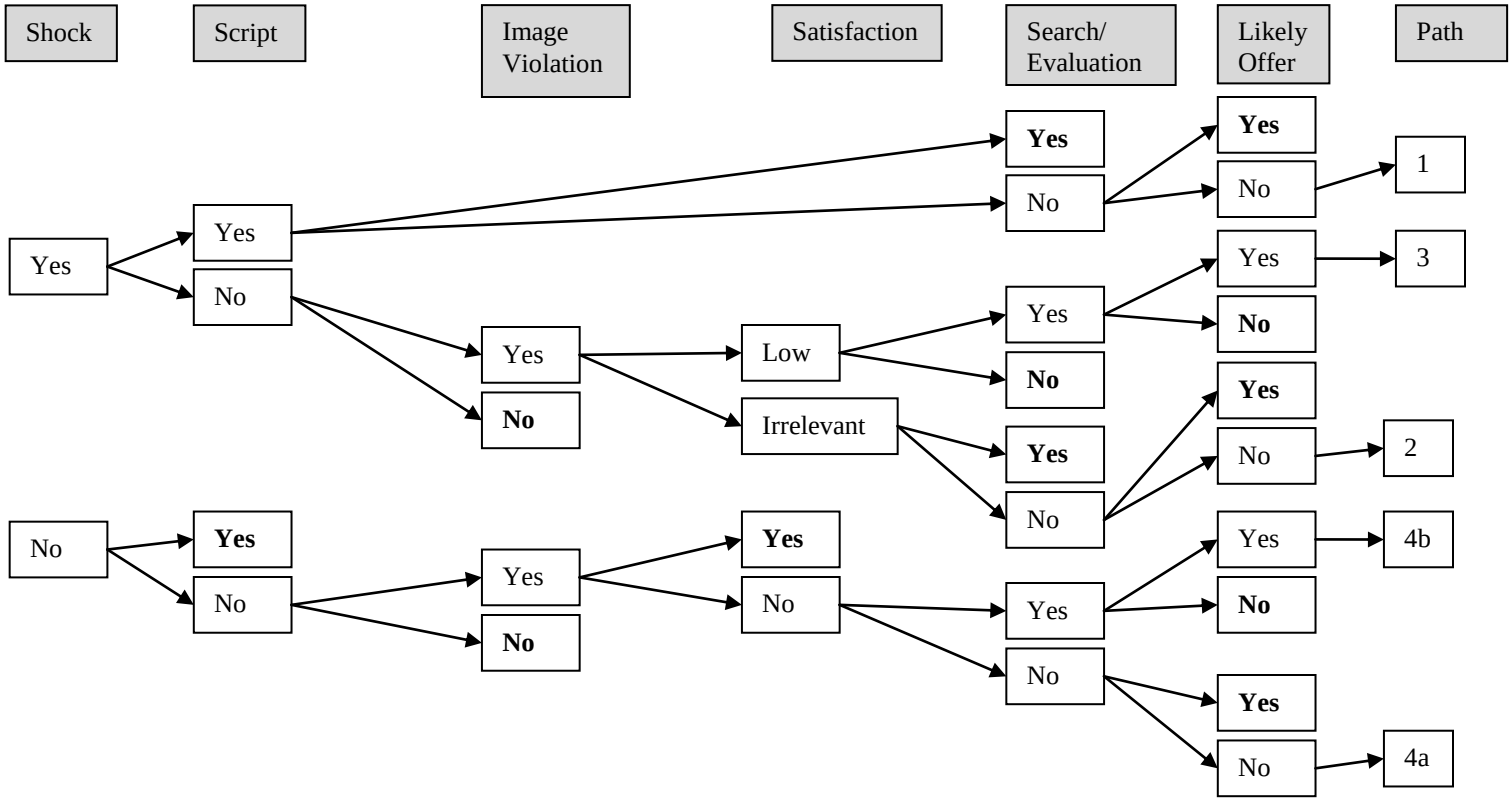

Figure 3a. The unfolding model of turnover; from Lee, Mitchell, Holtom, McDaniel, & Hill, 1999. Reprinted with permission from the authors.

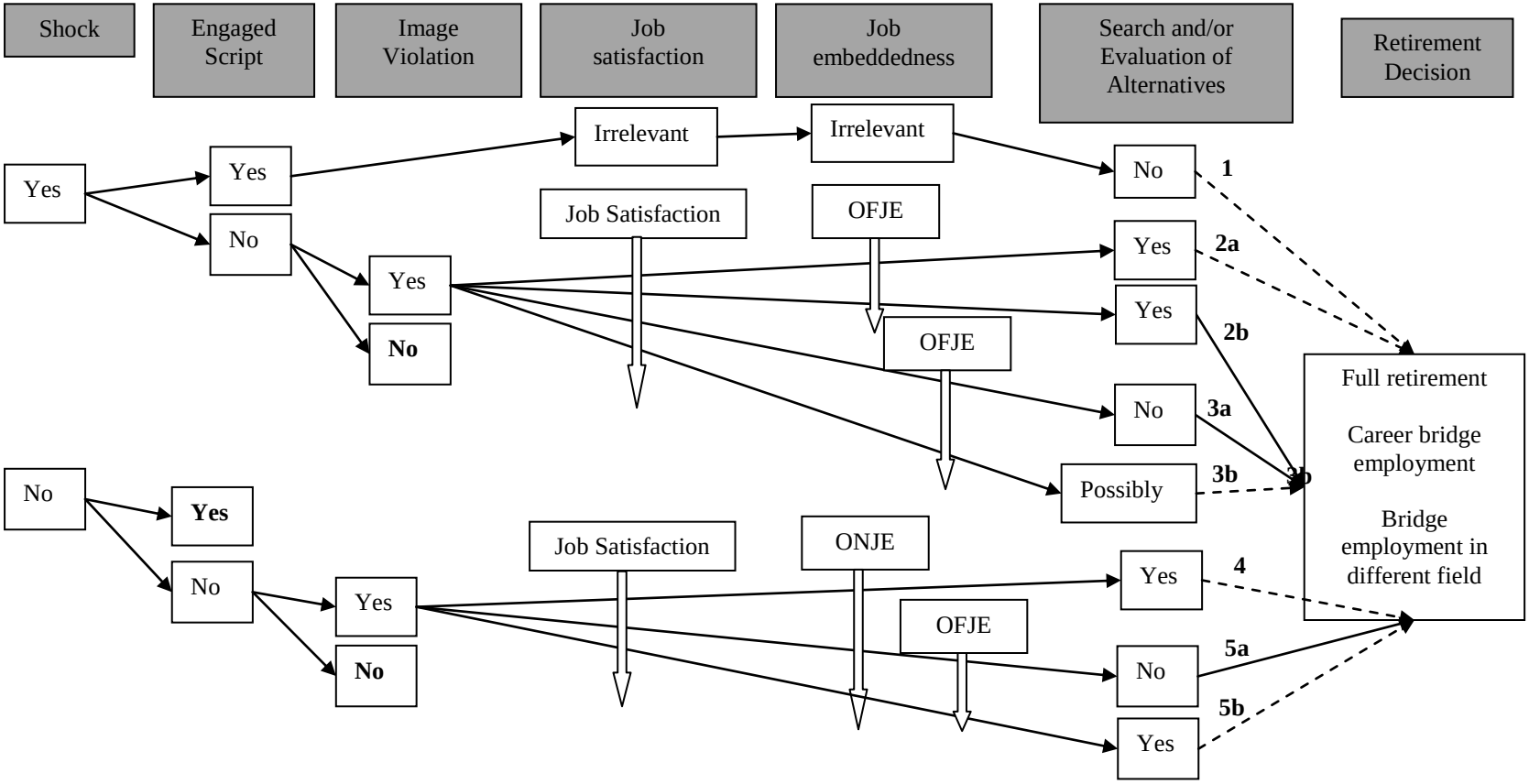

Figure 4a. The unfolding model adapted to the retirement decision.

APPENDIX B: WEB-BASED SURVEY

INTRO TO SURVEY WEBPAGE

Please respond as accurately as possible to the following questions and review all options before responding.

1. Which of the following best describes your employment status?
   a) Completely retired, and not working or looking for work
   b) Employed full-time
   c) Employed part-time
   d) Unemployed and looking for work
   e) Not employed and NOT looking for work
   f) Homemaker or Student{Terminate}

{If completely retired, skip respondent to Q2}

{ASK IF: employed full time or part time}
1a. Which of the following best describes your work situation? Are you . . .
   a) Retired but working
   b) Never been retired and working

{If never been retired, lead respondent into "Worker Survey"}
{If retired (even if working in retirement), lead respondent to "Retiree Survey"}

{ASK IF: unemployed and looking for work}
1b. Which of the following best describes your situation? Are you . . .
   a) Retired but looking for work
   b) Never been retired and looking for work

{If never been retired, lead respondent into "Worker Survey"}
{If retired (even if working in retirement), lead respondent to "Retiree Survey"}

{ASK IF: not employed and not looking for work}
1c. Which of the following best describes your situation? Are you . . .
   a) Retired {*go to Q2}*
   b) Never been retired {Terminate}

{ASK IF: retired}
2. When did you retire?
   a) Within the past 6 months
   b) 6 – 12 months ago
   c) More than a year ago {Terminate}
   d) Don't know {Terminate}

{If never been retired, lead respondent into "Worker Survey"}
{If retired (even if working in retirement), lead respondent to "Retiree Survey"}

RETIREE SURVEY

THE RETIREMENT DECISION

In this survey, the term "organization" refers to the company or organization that employed you right before you retired.

Please respond to the following questions to the best of your ability regarding your retirement decision.

1. Please describe the circumstances surrounding the time you first began to feel or think that you should retire.
{open text box}

2. Was there a particular event(s) or milestone(s) reached that caused you to think about retiring?
   a) Yes
   b) No
{If no, send to question 2f. If yes, send to 2a-2f.}

   2a. Please describe that event.
   {open text box}

   2b. To what extent was the event expected or unexpected? *(Totally unexpected, Somewhat unexpected, Neutral, Somewhat expected, Totally expected).*

   2c. To what extent was the event a positive or negative experience? *(Very positive, Somewhat positive, Neutral, Somewhat negative, Very negative)*

   2d. At the time you retired, had you already determined that you would leave the organization if the event discussed above were to occur (e.g., your spouse retired) or you reached a certain milestone?
   a) Yes
   b) No
   {If no, send to question 2f. If yes, send to 2e, then 2f.}

   2e. Please elaborate.
   {open text box}

   2f. Please respond to the following items as you would have **ONE YEAR** before you retired. In general, how satisfied or dissatisfied were you with your job? *(Very dissatisfied, Somewhat dissatisfied, Neutral, Somewhat satisfied, Very satisfied).*

3. Just before you retired, how would you have divided a total of 100 points among the following areas to indicate their relative importance in your life at that time? Please enter in whole points summing to 100.
_____ Your leisure (hobbies, sports, recreation, and contacts with friends)
_____Your community (voluntary organizations, union, and political organizations)
_____Your work
_____Your religion (like religious activities and beliefs)
_____Your family

4. Did you have at least one alternative to your previous job in mind when you decided to retire (other work, hobbies, etc.)?

a) Yes
b) No

5. Did the *general* availability of alternative activities influence your decision to retire (e.g. were you pretty sure that you could find work or non-work alternatives, though you didn't have a specific alternative in mind)?

a) Yes
b) No

6. Before you left the organization, how comprehensive was your search for another activity (e.g., Did you gather lots of information on other opportunities to engage in after retirement)? *(No search, Some search, Comprehensive search, Very comprehensive search)*

7. After your first thoughts about retiring, did you evaluate any *specific* alternatives (both job-related and/or leisure-related) before deciding to leave?

a) Yes
b) No

8. After your first thoughts about retiring, did *general* availability of alternatives affect your decision to retire (e.g., you were pretty sure you could find work or non-work alternatives, though you didn't have a specific alternative in mind)?

a) Yes
b) No

9. In making your final decision to retire, did you seriously consider work-related options (e.g., working part-time, finding a job at another organization)?

a) Yes
b) No

{If no, send to question 10. If yes, send to 9a.}

9a. Please indicate the other work-related options you actually looked into or considered.
{open text box}

10. After your *first* thoughts of retiring that eventually led to your decision to retire, how long did it take you to make the *final* decision to retire? Please specify in terms of months, weeks, days and/or hours.

_____ months
_____weeks
_____days
_____hours

11. Which, if any, of the following issues influenced your decision to retire? For each, check whether it was major factor, a minor factor, or not a factor at all in your decision to retire. *(Major factor, Minor factor, Not a factor at all)*

- *You had achieved your retirement savings goal.*
- *You had achieved certain career or job-related goals.*
- *You felt financially able to retire.*
- *You became eligible for Medicare or other retiree health benefits.*
- *You became eligible to receive payments from Social Security, an employer pension plan, a 401(k) , IRA, or other retirement account.*
- *You wanted to try new activities that you had never tried before (non-work activities or another type of job).*
- *You wanted to spend more time with your family or friends.*
- *You wanted to spend more time pursuing a hobby or involved in community activities.*
- *You had health problems or a disability.*
- *You had to care for a spouse or other family member.*
- *Your employer offered early retirement incentives to workers.*
- *Your employer laid off workers or eliminated positions.*

12. After you retired, did you end up working at your former employer part-time or as a contractor?

a) Yes
b) No

{If yes to Q12 (send to 12c if no)}

12a. Are you still working there part-time or as a contractor?

a) Yes
b) No

12b. After you made the final decision to retire, how long did you stay with the organization before you actually left the organization or transitioned into a contractor job at the same organization (whichever came first)? Please specify in terms of months, weeks, days and/or hours

_____ months
_____weeks
_____days
_____hours

{If no to Q12:}

12c. After you made the final decision to retire, how long did you stay with the organization before you actually left? Please specify in terms of months, weeks, days and/or hours.

_____ months
_____weeks
_____days
_____hours

YOUR FORMER JOB AND ORGANIZATION

In this section, your "former job" and "former organization" refer to the job you held and organization that you were working for just before you retired.

1. What was your job/title just before you retired? Please elaborate if necessary.
{open text box}

2. How long were you in this job (position) before retiring? _____ years

3. How long did you work for this organization? _____ years

4. How many coworkers were highly dependent on you in this organization? (Include any co-workers that reported to you and/or co-workers that relied on you to help them do their jobs.) _____

5. How many coworkers were in your workgroup in this organization? _____

6. How many, if any, work teams were you on? _____

7. Please select what industry this organization was in:
   a) Construction
   b) Education and educational services
   c) Entertainment, Leisure, and Hospitality (e.g. entertainment, food services, lodging)
   d) Finance/Insurance/Real estate
   e) Government
   f) Healthcare / Health services
   g) Information, and Information Services (e.g. services such as publishing, media, telecommunications, and Internet Service providers.)
   h) Manufacturing
   i) Professional and Business Services (e.g.: services such as legal services, marketing, advertising, consulting, bookkeeping, and engineering)
   j) Retail Trade
   k) Transportation
   l) Other [Please Specify:]

8. Considering all the organizations you have worked for, how many years did you work in the same industry as your last organization? _____ years

9. Please note your response to the following statements. *(Not compatible, Somewhat incompatible, Neutral, Somewhat compatible, Compatible)*
- *How compatible were your personal values/ethics with those of your former organization?*
- *How compatible were your professional values/ethics with those of your former organization?*
- *How compatible were your personal goals with those of your former organization?*
- *How compatible were your professional goals with those of your former organization?*

10. Please note your response to the following statements. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree, N/A)*
- *If I had continued working at my former organization, I would have been able to achieve most of my career goals before retiring. If you had achieved your goals, select N/A.*
- *If I had continued working at my former organization, I would have been able to achieve most of my personal goals before retiring. If you had achieved your goals, select N/A.*
- *At my organization, my career was progressing as I expected.*
- *At my organization, my personal goals were progressing as I expected.*

11. Please note your response to the following statement.
In general, how satisfied or dissatisfied were you with your job when you left? *(Very dissatisfied, Somewhat dissatisfied, Neutral, Somewhat satisfied, Very satisfied)*

12. When you left your former organization, how satisfied were you with each of the following? *(Very dissatisfied, Somewhat dissatisfied, Neutral, Somewhat satisfied, Very satisfied)*
(1) the supervision you received?
(2) the organization as an employer?
(3) career opportunities?
(4) financial rewards?
(5) your coworkers?
(6) nature of the work?
(7) recreational activities?
(8) benefits (e.g., vacation, insurance, retirement plans)?

13. When you left your former organization, how satisfied were you with the work environment related to each of the following? *(Very dissatisfied, Somewhat dissatisfied, Neutral, Somewhat satisfied, Very satisfied)*
(9) competitive pressures among co-workers and other organizations?
(10) autonomy of the work?
(11) the workload/pace
(12) time flexibility?

14. Please note your response to the following statements below about your former organization.
(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)

- *I liked the members of my work group.*
- *My coworkers were similar to me.*
- *My job utilized my skills and talents well.*
- *I felt like I was a good match for the organization.*

15. Please note your response to the following statements regarding your former organization. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *I fit with the organization's culture.*
- *I liked the authority and responsibility I had at the organization.*
- *The perks in my job were outstanding.*
- *I sacrificed a lot when I left my job.*
- *My promotional opportunities were excellent.*
- *I was well compensated for my level of performance.*
- *The health-care benefits provided by this organization were excellent.*
- *The retirement benefits provided by this organization were excellent.*

YOUR COMMUNITY AND PERSONAL LIFE

1. Since retiring, have you relocated to a different area/community?
    a) Yes
    b) No
{If yes, send to question 1c. If no, send to 1a and 1b, skipping 1c.}
{1c If no to 1 only}

1a. Do you intend to relocate to a different area/community in the next 5 years?

a) Yes
b) No

1b. Please note your response to the following statements. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *I really love the place where I live.*
- *The weather where I live is suitable for me.*
- *This community is a good match for me.*
- *I think of the community where I live as home.*
- *The area where I live offers the leisure activities that I like.*
- *Leaving this community would be very hard.*
- *I feel respected by the people in my community.*
- *My neighborhood is safe.*

1c. Please note your response to the following statements with regards to your community/city where you lived when you were employed with your former organization. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *Before I moved, I really loved the place where I lived.*
- *Before I moved, the weather where I lived was suitable for me.*
- *That community was a good match for me.*
- *I think of the community where I lived as home.*
- *The area where I lived offered the leisure activities that I like.*
- *Leaving that community was very hard.*
- *People respected me a lot in that community.*
- *My neighborhood was safe.*

2. What is your marital status?

a) Married or partnered
b) Separated or divorced
c) Widowed
d) Never married

{If b, c, or d, send to question 3. If a, send to 2a and 2b.}

2a. Does your spouse/partner work outside the home?

a) Yes
b) No

2b. Generally speaking, would you say that the time you spend together with your husband/wife/partner is:

a) Extremely enjoyable
b) Very enjoyable
c) Somewhat enjoyable
d) Not too enjoyable
e) Not applicable

3. Do you own the home you live in?

a) Yes
b) No

4. How often do you participate in volunteer activities with a community-based group, at your place of worship, etc.?

a) Daily
b) Four to five times a week
c) Two to three times a week
d) Once a week
e) Once or twice a month
f) A few times per year
g) Do not participate in volunteer activities

{IF EMPLOYED FT OR PT PER SCREENING QUESTION, Page 1}:

5a. Are you currently:

a) Working Full-time on one job for pay
b) Working Part-time on one job for pay
c) Working multiple jobs for pay

5b. Are you working in a similar type of job from which you retired? Please explain.
{open text box}

{IF NOT EMPLOYED PER SCREENING QUESTION, Page 1}:

5c. What activities or alternatives to work do you engage in?
{open text box}

YOUR HEALTH AND FINANCES

1. Please note your response to the following statements below by checking the appropriate boxes below. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *My decision to retire was made primarily for health reasons.*
- *My health and well-being played a major part in my decision.*
- *My spouse's health and well-being played a major part in my decision.*
- *The current economic downturn played a major part in my decision to retire.*
- *At the time of retirement, I felt financially stable.*

2. At the time of your retirement, would you say your health was:

a) Excellent
b) Very good
c) Good
d) Fair
e) Poor

3. Currently, you would say your health is:

a) Excellent
b) Very good
c) Good
d) Fair
e) Poor

4. Were you eligible for any of the following retirement-related income payments when you retired? Check all that apply.

_____ Social Security
_____ Income from a traditional pension that your employer provides to which you do not have to contribute money ,
_____ Savings from an employer 401K plan
_____ Savings from an IRA
_____ Veterans benefits
_____ Disability benefits
_____ Rents, royalties, estates, or trusts
_____ Other - Please explain: {allow for open text}

5. What was your total household income in 2008; that is, the income for all members of your household during 2008?

a) Less than $10,000
b) $10,000 to under $25,000
c) $25,000 to under $50,000
d) $50,000 to under $75,000
e) $75,000 to under 100,000
f) $100,000 to under $150,000
g) $150,000 to under $200,000
h) $200,000 or more

6. What do you expect your annual retirement income for all members of your household to be(including social security and other retirement-related income above)?

a) Less than $10,000
b) $10,000 to under $25,000
c) $25,000 to under $50,000
d) $50,000 to under $75,000
e) $75,000 to under 100,000
f) $100,000 to under $150,000
g) $150,000 to under $200,000
h) $200,000 or more

7. What percent of your income, in retirement, comes or will come from Social Security payments? (Your best guess is fine.)

a) None
b) Less than 25%
c) 25-50%
d) 51-75%
e) 76-100%
f) Don't Know

8. At what age did you retire? _____ years

9. Did you retire earlier than planned, or later than planned, or about when you planned to?

a) Earlier than planned
b) Later than planned
c) About when you planned

10. Are you currently receiving Social Security retirement payments?

a) Yes
b) No

{If yes to 10}

10a. At what age did you start receiving Social Security retirement payments? ___ years

10b. Before you started receiving Social Security retirement payments, did you try to figure out whether your age at the time that you start receiving payments would impact the size of the payments that you are eligible to receive?

a) Yes
b) No

{If no to 10}

10c. At what age do you expect to start receiving Social Security retirement payments? ____ years

10d. Have you tried to figure out whether your age at the time that you start receiving payments would impact the size of the payments that you are eligible to receive?

a) Yes
b) No

11. To what extent do you feel the economic downturn of 2008 and 2009 will affect your financial situation in retirement? *(It will not affect your retirement at all, It will slightly affect your retirement, It will somewhat affect your retirement, It will affect your retirement, It will greatly affect your retirement)*

12. Please elaborate; how will the economic downturn of 2008 and 2009 affect your financial situation and retirement? Will it affect your standard of living, your activities? Will you re-enter the workforce? *{open text box}*

DEMOGRAPHICS

1. In what year were you born} ? _____

2. Do you provide care for a child or for an adult who requires assistance with daily living?
   a) Yes
   b) No

{If no, send to 3. If yes, send to 2a.}

2a. Who do you provide care for? Check all that apply.
   a) A parent
   b) A spouse
   c) A child
   d) A grandchild
   e) An In-Law
   f) A friend
   g) Another adult relative

3. What is your gender?
   a) Man
   b) Woman

4. Are you of Hispanic or Latino origin or descent?
   c) Yes
   d) No

5. How would you identify your racial/ethnic group?
   a) Asian American
   b) Black/African American
   c) Caucasian/White
   d) Other

6. What is the highest level of education that you have completed?
   a) No formal degree completed
   b) 12th grade, High School diploma
   c) Some college, Associates degree
   d) 4 years college, Bachelors degree (BA, BS)
   e) Post-graduate degree (MA, MS, PhD)

Thank you for taking the time to complete this survey!
Please click here to submit your survey responses: {SUBMIT BUTTON}

If you would like information from AARP about issues related to the retirement decision, please go to:

http://www.aarp.org/money/retirement

If you have any additional comments or questions about this survey, please contact
Tiffany M. Bludau; tbludau@gmu.edu; 703-868-6288; http://mason.gmu.edu/~tbludau/

WORKER SURVEY

THE RETIREMENT DECISION

Please respond to the following questions to the best of your ability regarding your future retirement decision.

Roughly speaking, when do you expect to retire?

a) More than 10 years from now
b) 6 to 10 years from now
c) 3 to 5 years from now
d) 1 to 2 years from now
e) Within the next year
f) Not sure

{If respondent selects d or e, go to 1. If other (a, b, c or f), go to 3.}

1. Please describe any circumstances surrounding a time you first began to feel or think that you should retire soon.
{open text box}

2. Was there a particular event(s) or milestone(s) reached that caused you to think about retiring from your organization?

a) Yes
b) No

{If no, send to 3. If yes, send to 2a-2c.}

2a. Please describe that event.
{open text box}

2b. To what extent was the event expected or unexpected? *(Totally unexpected, Somewhat unexpected, Neutral, Somewhat expected, Totally expected).*

2c. To what extent was the event a positive or negative experience? *(Very positive, Somewhat positive, Neutral, Somewhat negative, Very negative)*

3. Currently, how would you divide a total of 100 points among the following areas to indicate their relative importance in your life? Please enter in whole points summing to 100.

_____ Your leisure (hobbies, sports, recreation, and contacts with friends)
_____Your community (voluntary organizations, union, and political organizations)
_____Your work
_____Your religion (like religious activities and beliefs)
_____Your family

4. The following is a list of issues that might influence a person's decision to retire. For each, please indicate whether you expect it to be a major factor, a minor factor, or not a factor at all in your decision regarding when to retire.
(Major factor, Minor factor, Not a factor at all)

- *Achieving your retirement savings goal*
- *Achieving certain career or job-related goals*
- *Feeling financially able to retire*
- *Being eligible for Medicare or other retiree health benefits*
- *Being eligible to receive payments from Social Security, an employer pension plan, a 401(k) , IRA, or other retirement account*
- *Wanting to try new activities that you had never tried before (non-work activities or another type of job)*
- *Wanting to spend more time with your family or friends*
- *Wanting to spend more time pursuing a hobby or involved in community activities*
- *Experiencing health problems or a disability*
- *Having to care for a spouse or other family member*
- *Your employer offered early retirement incentives to workers*
- *Your employer laid off workers or eliminated positions*

YOUR JOB AND ORGANIZATION

If selected "Unemployed" at beginning, skip this section and go to YOUR COMMUNITY AND PERSONAL LIFE.

1. What is your job/title? Please elaborate if necessary.
{open text box}

2. How long have you been in this job (position)? _____ years

3. How long have you worked for this organization? _____ years

4. How many coworkers are highly dependent on you in this organization? _____

5. How many coworkers are in your workgroup in this organization? _____

6. How many work teams are you on? _____

7. Please select what industry this organization is in:

a) Construction
b) Education and educational services
c) Entertainment, Leisure, and Hospitality (e.g. entertainment, food services, lodging)
d) Finance/Insurance/Real estate
e) Government
f) Healthcare / Health services
g) Information, and Information Services (e.g. services such as publishing, media, telecommunications, and Internet Service providers.)
h) Manufacturing
i) Professional and Business Services (e.g.: services such as legal services, marketing, advertising, consulting, bookkeeping, and engineering)
j) Retail Trade
k) Transportation
l) Other [Please Specify:]

8. Considering all the organizations you have worked for, how many years have you worked in the same industry as your current organization? _____ years

9. Please note your response to the following statements by checking the appropriate boxes below. *(Not compatible, Somewhat incompatible, Neutral, Somewhat compatible, Compatible)*

- *How compatible are your personal values/ethics with those of your current organization?*
- *How compatible are your professional values/ethics with those of your current organization?*
- *How compatible are your personal goals with those of your current organization?*
- *How compatible are your professional goals with those of your current organization?*

10. Please note your response to the following statements below by checking the appropriate boxes below. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree, N/A)*

11. Please note your response to the following statement below by checking the appropriate box below.

- *If I continue working at my current organization, I will be able to achieve most of my career goals before retiring. If you have already achieved your goals, select N/A.*
- *If I continue working at my current organization, I will be able to achieve most of my personal goals before retiring. If you have already achieved your goals, select N/A.*
- *At my organization, my career is progressing as I expected.*
- *At my organization, my personal goals are progressing as I expected.*

In general, how satisfied or dissatisfied are you with your job?
(Very dissatisfied, Somewhat dissatisfied, Neutral, Somewhat satisfied, Very satisfied)

12. How satisfied are you with each of the following aspects of your current job? *(Very dissatisfied, Somewhat dissatisfied, Neutral, Somewhat satisfied, Very satisfied)*
(1) the supervision you receive?
(2) the organization as an employer?
(3) career opportunities?
(4) financial rewards?
(5) your coworkers?
(6) nature of the work?
(7) recreational activities?
(8) benefits (e.g., vacation, insurance, retirement plans)?

13. When you left your former organization, how satisfied were you with the work environment related to each of the following? *(Very dissatisfied, Somewhat dissatisfied, Neutral, Somewhat satisfied, Very satisfied)*
(9) competitive pressures among co-workers and other organizations?
(10) autonomy of the work?
(11) the workload/pace
(12) time flexibility?

14. Please note your response to the following statements below by checking the appropriate boxes below. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *I like the members of my work group.*
- *My coworkers are similar to me.*
- *My job utilizes my skills and talents well.*
- *I feel like I am a good match for the organization.*

15. Please note your response to the following statements regarding your current organization. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *I fit with the organization's culture.*
- *I like the authority and responsibility I have at the organization.*
- *The perks in my job are outstanding.*
- *I would sacrifice a lot if I left my job.*
- *My promotional opportunities are excellent.*
- *I am well compensated for my level of performance.*
- *The health-care benefits provided by this organization are excellent.*
- *The retirement benefits provided by this organization are excellent.*

YOUR COMMUNITY AND PERSONAL LIFE

1. Please note your response to the following statements. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *I really love the place where I live.*
- *The weather where I live is suitable for me.*
- *This community is a good match for me.*
- *I think of the community where I live as home.*
- *The area where I live offers the leisure activities that I like.*
- *Leaving this community would be very hard.*
- *People respect me a lot in my community.*
- *My neighborhood is safe.*

2. What is your marital status?

a) Married or partnered
b) Separated or divorced
c) Widowed
d) Never married

{If b, c, or d, send to question 3. If a, send to 2a and 2b.}

2a. Does your spouse/partner work outside the home?

a) Yes
b) No

2b. Generally speaking, would you say that the time you spend together with your husband/wife/partner is:

a) Extremely enjoyable
b) Very enjoyable
c) Somewhat enjoyable
d) Not too enjoyable
e) Not applicable

3. Do you own the home you live in?

a) Yes
b) No

4. How often do you participate in volunteer activities with a community-based group, at your place of worship, etc.?

a) Daily
b) Four to five times a week
c) Two to three times a week
d) Once a week
e) Once or twice a month
f) A few times per year
g) Do not participate in volunteer activities

{If employed FT or PT per screener, Page 1}

5. Are you currently:

a) Working Full-time on one job for pay
b) Working Part-time on one job for pay
c) Working multiple jobs for pay

YOUR HEALTH AND FINANCES

1. Please note your response to the following statements below by checking the appropriate boxes below. *(Strongly disagree, Somewhat disagree, Neither disagree nor agree, Somewhat agree, Strongly agree)*

- *Economic factors will play a major part in my decision to retire.*
- *At the time of retirement, I plan to feel financially stable.*

2. Currently, you would say your health is:

a) Excellent
b) Very good
c) Good
d) Fair
e) Poor

3. Do you expect to be eligible for any of the following retirement-related income payments when you retire? Please check all that apply.

_____ Social Security
_____ Income from a traditional pension that your employer provides to which you do <u>not</u> have to contribute money
_____ Savings from an employer 401K plan
_____ Savings from an IRA
_____ Veterans benefits
_____ Disability benefits
_____ Rents, royalties, estates, or trusts
_____ Other - Please explain: {allow for open text}

4. What was your total household income in 2008; that is, the income for <u>all members of your household</u> during the past year?

a) Less than $10,000
b) $10,000 to under $25,000
c) $25,000 to under $50,000
d) $50,000 to under $75,000
e) $75,000 to under 100,000
f) $100,000 to under $150,000
g) $150,000 to under $200,000
h) $200,000 or more

5. What do you expect your annual retirement income for all members of your household to be(including social security and other retirement-related income above)?

a) Less than $10,000
b) $10,000 to under $25,000
c) $25,000 to under $50,000
d) $50,000 to under $75,000
e) $75,000 to under 100,000
f) $100,000 to under $150,000
g) $150,000 to under $200,000
h) $200,000 or more

6. What percent of your income, in retirement do you expect will come from Social Security payments?

a) None
b) Less than 25%
c) 25-50%
d) 51-75%
e) 76-100%
f) Don't Know

7. At what age do you expect to retire? ____ years

8. At what age do you expect to start receiving Social Security retirement payments? ___years

9. Have you tried to figure out whether your age at the time that you start receiving Social Security payments would impact the size of the payments?

a) Yes
b) No

{If no to 9}

9a. There may be many reasons why people do not look into whether their age at the time that they start receiving Social Security payments would impact the size of the payments. What are the main reasons that you have not looked into this? Check all that apply.

a) You were not aware that your age could affect the size of your Social Security payments
b) You need the money as soon as you're eligible to receive Social Security payments and can't afford to wait another year or two even if waiting would increase the size of your payments
c) Other (specify): *{open text}*

10. To what extent do you feel the economic downturn of 2008 and 2009 will affect your financial situation? *(It will not affect your retirement at all, It will slightly affect your retirement, It will somewhat affect your retirement, It will affect your retirement, It will greatly affect your retirement).*

11. Please elaborate; how will the economic downturn of 2008 and 2009 affect your financial situation and retirement? Will it affect your retirement decision, your standard of living, your activities, etc.? *{open text box}*

DEMOGRAPHICS

1. In what year were you born} ? _____

2. Do you provide care for a child or for adult who requires assistance with daily living?
   a) Yes
   b) No

{If no, send to 3. If yes, send to 2a.}

2a. Who do you provide care for? Check all that apply.
   a) A parent
   b) A spouse
   c) A child
   d) A grandchild
   e) An In-Law
   f) A friend
   g) Another adult relative

3. What is your gender?
   a) Man
   b) Woman

4. Are you of Hispanic or Latino origin or descent?
   a) Yes
   b) No

5. How would you identify your racial/ethnic group?
   a) Asian American
   b) Black/African American
   c) Caucasian/White
   d) Other

6. What is the highest level of education that you have completed?
   a) No formal degree completed
   b) 12th grade, High School diploma
   c) Some college, Associates degree
   d) 4 years college, Bachelors degree (BA, BS)
   e) Post-graduate degree (MA, MS, PhD

Thank you for taking the time to complete this survey!
Please click here to submit your survey responses: {SUBMIT BUTTON}

If you would like information from AARP about issues related to the retirement decision, please go to:

http://www.aarp.org/money/retirement

If you have any additional comments or questions about this survey, please contact
Tiffany M. Bludau; tbludau@gmu.edu; 703-868-6288; http://mason.gmu.edu/~tbludau/

APPENDIX C: ORIGINAL MODEL MEASURES MODIFIED FOR THE RETIREMENT DECISION

Shock (Modified from Lee et al., 1999 and Morrell et al., 2004)
A "Yes" answer to the second question below indicated a shock occurred. Additionally, responses to the first item were reviewed for shocks.

- Please describe the circumstances surrounding the time you first began to feel or think that you should retire. (Lee et al., 1999) *Open-ended.*
- Was there a particular event that caused you to think about retiring from your organization? *Yes/No.*(Lee et al., 1999)
    - If yes, please describe that event. *Open-ended.*(Lee et al., 1999)
    - If yes, to what extent was the event expected or unexpected? (Morrell et al., 2004) *1 (Totally unexpected) through 5 (Totally expected)*
    - If yes, to what extent was the event a positive or negative experience? (Morrell et al., 2004) *1 (Totally positive) through 5 (Totally negative)*

Script (Modified from Lee et al., 1999)
An answer of "yes" to the following indicated an engaged script. "No" responses indicated that no script was activated. Additionally, responses to the first shock item were reviewed for scripts as well.

- At the time I retired, I had already determined that I would leave the organization **IF** a certain event were to occur (e.g.. my spouse retired). *Yes/No.*

Image Violation (Modified from Lee et al., 1999)
An answer of 1 or 2 (on a scale of 1 to 5) to at least one of the following indicated violation. Responses of 3 or higher indicated that no violation occurred.
Responses ranged from 1 (Not compatible) to 5(Compatible)

- How compatible were your *personal values/ethics* with those of your former organization? (Value image)
- How compatible were your *professional values/ethics* with those of your former organization? (Value image)
- How compatible were your *personal goals* with those of your former organization? (Value and trajectory image)
- How compatible were your *professional goals* with those of your former organization? (Value and trajectory image)

Responses ranged from 1(Strongly disagree) to 5(Strongly agree)

- If I had continued working, I would have been able to achieve most of my career goals. (Trajectory and strategic image)
- If I had continued working, 1 would have been able to achieve most of my personal goals. (Trajectory and strategic image)
- At my organization, my career was progressing as I expected. (Strategic image)
- At my organization, my personal goals were progressing as I expected. (Strategic image)

Job satisfaction (Modified from Lee et al., 1999)
A 1 or 2 answer to at least one of the following indicated dissatisfaction. Responses for all items ranged from 1 (Very dissatisfied) to 5 (Very satisfied)

How satisfied or dissatisfied were you with your former job? (Wang, 2007; from HRS)

At your former firm, how *satisfied* were you with:
(1) the supervision you received?
(2) firm as an employer?
(3) career opportunities?
(4) financial rewards?
(5) your coworkers?
(6) nature of the work?
(7) recreational activities?
(8) fringe benefits (e.g., vacation, insurance coverage, retirement plans, sick leave)?

At your former firm, how satisfied were you with the work environment related to:
(9) competitive pressures?
(10) autonomy of the work?
(11) pressures at work?
(12) time flexibility?

Job embeddedness (Modified from Mitchell et al., 2001)
Responses ranged from 1(Strongly disagree) to 5(Strongly agree) for scaled items. For certain items within the links dimensions, marked with an asterisk * below, items were standardized before being analyzed or included in composites after being transformed (+2.50). Items in *italics* were created for this study. Factor loadings from the two studies in Mitchell et al. (2001), are included in parentheses. Averages of 3.00 or less were considered "low" for coding purposes.

Fit to Community
- I really love the place where I live. (.77, .74)
- The weather where I live is suitable for me. (.53, .59)
- This community is a good match for me. (.84, .87)
- I think of the community where I live as home. (.80, .80)
- The area where I live offers the leisure activities that I like. (.70, .69)

Fit to Organization
- I liked the members of my work group. (.57, .53)
- My coworkers were similar to me. (.51, .40)
- My job utilized my skills and talents well. (.72, .80)
- I felt like I was a good match for the organization. (.80, .82)
- I fit with the organization's culture. (.72, .72)
- I liked the authority and responsibility I had at the organization. (.67, .74)

Links to Community
- Are you currently married? (.93, .93) (No = 1; Yes = 5)
- If you are married, does your spouse work outside the home? (.88, .91) (No = 1; Yes = 5)
- Do you own the home you live in? (.67, .65) (No = 1; Yes = 5)
- *To what extent do you participate in your church or another community-based group?*
- *To what extent do you participate in volunteer activities in your community?*

Links to Organization
- How long you in your present position before retiring? * (.65, .32)
- How long did you work for your organization? * (.72, .46)
- How long did you work in the [insert here] industry? * (.83, .37)

- How many coworkers were highly dependent on you? * (.42, .57)
- How many work teams were you on? * (.37, .73)

Community-Related Sacrifice

- Leaving this community would be very hard. (.78, .83)
- People respect me a lot in my community. (.80, .76)
- My neighborhood is safe. (.68, .85)

Organization-Related Sacrifice

- The perks in my job were outstanding. (.73, .75)
- I sacrificed a lot when I left my job. (.56, .56)
- My promotional opportunities were excellent. (.74, .68)
- I was well compensated for my level of performance. (.62, .59)
- The health-care benefits provided by this organization were excellent. (.58, .67)
- The retirement benefits provided by this organization were excellent. (.60, .60)

Search (Modified from Lee et al., 1999)
An answer of "Yes" or 4 or higher to the following indicated a search occurred.

- Did you have at least one alternative to working in mind when you decided to leave? *Yes/No.*
- If you didn't have an alternative to working in mind when you retired, did you believe that finding an alternative was very likely? *Yes/No.*
- Before you left the organization, how comprehensive was your search for another activity (e.g., Did you gather lots of information on other opportunities)? *1(No search) to 5(Very Comprehensive Search).*

*Evaluation (*Modified from Lee et al., 1999)
An answer of "Yes" to at least one of the following indicated the evaluation of job alternatives.

- After your first thoughts about retiring, did you evaluate any *specific* alternatives (work or non-work) before deciding to leave? *Yes/No.*
- After your first thoughts about retiring, did *general* availability of alternatives affect your decision to leave (e.g., you were pretty sure you could find work or non-work alternatives, though you didn't have a specific alternative in mind)? *Yes/No.*
- In making your final decision to retire, did you seriously consider work-related options (e.g., working part-time, finding a job at another organization)? *Yes/No.*
    - If you responded yes, please indicate the other work-related options you actually pursued. *Open-ended.*

APPENDIX D: CODING MATERIALS

ITEMS TO CODE

RETIREE SURVEY

1. "Please describe the circumstances surrounding the time you first began to feel or think you should retire" *SHOCK*
2. "Please describe that event" *SHOCK*

3. "Please elaborate" *SCRIPT*

4. "Please indicate the other work-related options you actually looked into or considered" *ALTERNATIVES*

5. "What was your job/title just before you retired?" *DESCRIPTIVES*

6. "Are you working in a similar type of job from which you retired?" *DESCRIPTIVES*

7. "How will the economic downturn of 2008 and 2009 affect your financial situation and retirement? Will it affect your standard of living, your activities? Will you reenter the workforce?" *DESCRIPTIVES*

WORKER SURVEY

1. "Please describe any circumstances surrounding a time you first began to feel or think that you should retire soon" *SHOCK*
2. "Please describe that event" *SHOCK*

3. "What is your job/title?" *DESCRIPTIVES*

4. "How will the economic downturn of 2008 and 2009 affect your financial situation and retirement? Will it affect your standard of living, your activities?" *DESCRIPTIVES*

DEFINITIONS

Shock

A shock may or may not occur in the turnover decision-making process. A shock may be considered a "significant event that causes an employee to evaluate the implication of the event on his job." According to Lee and Mitchell (1994), this particularly jarring event may or may not be personal, and it may be positive, negative, or neutral. For example, a large number of organizational layoffs would be a negative organizational shock, whereas getting accepted into law school would be a positive personal shock.

Script

Individuals may or may not engage in a predetermined plan of action when a shock occurs, also referred to as a script (Fiske & Taylor, 1991). This script may be based on past experiences, social expectations, or the mere observation of others who are confronted with a similar shock. For example, if your parents had always wanted you to move back to your hometown, and your spouse had a job offer there, you may quit your job in order to move back and follow through on their expectations without much evaluation.

Alternatives to Working

The unfolding model accounts for the search and/or evaluation of alternatives. An individual may or may not engage in these behaviors. Some may leave without any formal search of other jobs, or some may only need to evaluate a new job offer which served as a shock. These two behaviors, search and evaluation, do not need to necessarily occur together. One may search without discovering any alternatives to evaluate, and one may also have an alternative to consider (a job offer) without initially searching for it. It is also important to note that alternatives may also include (which is especially relevant to the retirement aspect) other forms of work (i.e. volunteering) and non-work options (T. W. Lee et al., 1999).

RETIREE SURVEY – ROUND 1

1. **"Please describe the circumstances surrounding the time you first began to feel or think you should retire"** ***SHOCK***
2. **"Please describe that event"** ***SHOCK***

If the participant indicates that a particular event occurred that caused them to start thinking about retirement, code as a shock occurring. These items (and other surrounding items) are somewhat duplicative, but we wanted to make sure to account for events as sometimes participants fail to elaborate fully on open-ended responses. It is okay to have conflicting responses here (i.e. #1 is coded as a shock and #2 is not coded as a shock occurring).

(Shock)
0 – No shock
1 – Shock occurred

(Type of Shock)
1 – Personal – Self (Related to self; aging, health, personal decision)
2 – Personal – Family/Friends (Related to others; declining health, spending times with children)
3 – Personal – Both (A combination of the above)
4 – Organizational – Negative (Related to a negative organizational event; down-sizing, lay-offs, forced retirement, etc.)
5 – Organizational – Positive (Related to a positive organizational event; retirement bonus, left at top of organization, etc.; this one will likely not be common)

3. **"Please elaborate"** ***SCRIPT***

This item is to validate the response to the previous question. If individuals had said they would retire if a particular event occurred (yes or no), they were asked to elaborate. This data will also be helpful if we need to more clearly distinguish between scripts. For these items, you will likely either have no response (code as "0") or a script being followed.

(Script)
0 – No script
1 – Script followed

4. **"Please indicate the other work-related options you actually looked into or considered"** ***ALTERNATIVES***

We'd like to code what other alternatives individuals considered in retiring. The most common responses will likely be 2 or 3.

(Alternatives)
0 – No options listed
1 – Part-time/flexible hours
2 – Working at other organization
3 – Changing careers
4 – Other

5. "What was your job/title just before you retired?" *DESCRIPTIVES*

(Job)
0 – No response
1 – Executive (President, Vice-President, CEO, CFO, CIO, etc.)
2 – Supervisor/Manager/Senior Level (include business owners and self-employed here; note any of these if large company)
3 – Individual Contributor

6. "Are you working in a similar type of job from which you retired?" *DESCRIPTIVES*

Refer to job/title item and industry to help make this decision.

(Bridge Type)
0 – No response; unable to code.
1 – Yes – I am working in a similar job, in the same industry.
2 – Yes – I am working in a similar job, but in a different industry.
3 – No – I am working in a different job, but in the same industry.
4 – No – I am working in a different job, in a different industry.

7. "How will the economic downturn of 2008 and 2009 affect your financial situation and retirement? Will it affect your standard of living, your activities? Will you reenter the workforce?" *DESCRIPTIVES*

Basically, we'd like to account for people who say they will re-enter workforce. If other responses are common, we may want to discuss.

(Downturn)
0 – No response
1 – Will re-enter workforce
2 – Will reduce standard of living; will save more
3 – Other

WORKER SURVEY – ROUND 2

1. **"Please describe any circumstances surrounding a time you first began to feel or think that you should retire soon"** ***SHOCK***
2. **"Please describe that event"** ***SHOCK***

If the participant indicates that a particular event occurred that caused them to start thinking about retirement, code as a shock occurring. These items (and other surrounding items) are somewhat duplicative, but we wanted to make sure to account for events as sometimes participants fail to elaborate fully on open-ended responses. It is okay to have conflicting responses here (i.e. #1 is coded as a shock and #2 is not coded as a shock occurring).

(Shock)
0 – No shock, 1 – Shock occurred

(Type of Shock)
0 – No shock
1 – Personal – Self (Related to self; aging, health, personal decision)
2 – Personal – Family/Friends (Related to others; declining health, spending times with children)
3 – Personal – Both (A combination of the above)
4 – Organizational – Negative (Related to a negative organizational event; down-sizing, lay-offs, forced retirement, etc.)
5 – Organizational – Positive (Related to a positive organizational event; retirement bonus, left at top of organization, etc.; this one will likely not be common)
6 – Combination of Personal and Organizational
7 – Not able to infer

3. **"What is your job/title?"** ***DESCRIPTIVES***

(Job)
0 – No response
1 – Executive (President, Vice-President, CEO, CFO, CIO, etc.)
2 – Supervisor/Manager/Senior Level (include business owners and self-employed here)
3 – Individual Contributor

4. **"How will the economic downturn of 2008 and 2009 affect your financial situation and retirement? Will it affect your standard of living, your activities?"** ***DESCRIPTIVES***

(Downturn)
0 – No response/commentary
1 – Will re-enter workforce, work part-time
2 – Will reduce standard of living; will save more
3 – Other (ensure discusses something they will do; not commentary)
4 – Delayed Retirement

IMAGE VIOLATION CODING

RETIREE SURVEY

1. "Please describe the circumstances surrounding the time you first began to feel or think you should retire"
2. "Please describe that event"

DEFINITION

Image Theory and Image Violations

Image theory (Beach, 1990) was developed as an alternative to classical decision theory. In contrast to classical decision-making, Beach suggests that for decision makers: a) evaluation of options is rarely extensive, b) decision makers rarely have choice, c) behavior is pre-programmed, d) we enlist a variety of strategies in making choices and e) the field has abandoned its economic view of decision-making (Beach, 1993, p. 272).

Image theory is based on three types of images, or cognitive structures, that sum up one's perceptions of "what must be accomplished and why, about how it is to be done, and about the results of effort to do it" (Beach, 1990, p. 6), and information obtained from screening the environment is tested against these images (Beach, 1993).

It is also important to note that individuals have different sets of images for different domains in their lives. The main sets of images relate to work, family, friends, recreation, and ethics/spirituality (Mitchell & Beach, 1990). This has implications for the withdrawal process in organizations. It is possible for these image sets to conflict such that one's work goals (e.g., continue working) may conflict with family goals (e.g., spend more time with one's grandchildren).

An image violation occurs if the job/organization/shock conflicts with one's value, trajectory, or strategic images.

Value Images

A value image consists of the decision maker's principles (or values). This image serves as a guide for what is 'right' and 'wrong' in the decision-making process.

Trajectory Images

The trajectory image deals with one's vision for the future; where he or she is going. This image helps guide the decision-maker into choices that will help him or her accomplish his/her goals.

Strategic Images

The strategic image involves one's plans or tactics to obtain those goals that the decision-maker is pursuing.

CODING

For each case, review the information regarding the retirement situation and shock. Then, rate whether or not an image violation occurred.

(Image Violation?)
0 – No Image Violation
1 – Image Violation

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CURRICULUM VITAE

Tiffany M. Bennett (formerly Bludau) graduated valedictorian from Hallettsville High School in Hallettsville, Texas in 1999. She received her Bachelor of Arts in Psychology and Managerial Studies from Rice University in 2003. She has been employed as an instructor in the School of Management at George Mason University, a research fellow for the Consortium Research Fellowship Program at the U.S. Army Research Institute for Behavioral and Social Sciences, and a Research Scientist at Personnel Decisions Research Institutes (PDRI) in Arlington, Virginia. She attended George Mason University for her graduate career and received her Master of Arts in Psychology in 2005 and her Doctor of Philosophy in Psychology in 2010.

Selected Publications

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