

DISSERTATION

RETIREMENT SELF-EFFICACY: THE EFFECTS OF A PRE-RETIREMENT
STRENGTHS-BASED INTERVENTION ON RETIREMENT SELF-EFFICACY AND
AN EXPLORATION OF RELATIONSHIPS BETWEEN POSITIVE AFFECT AND
RETIREMENT SELF-EFFICACY

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ABSTRACT

RETIREMENT SELF-EFFICACY: THE EFFECTS OF A PRE-RETIREMENT STRENGTHS-BASED INTERVENTION ON RETIREMENT SELF-EFFICACY AND AN EXPLORATION OF RELATIONSHIPS BETWEEN POSITIVE AFFECT AND RETIREMENT SELF-EFFICACY

A quasi-experimental waitlist comparison group design investigated if a strengths-based retirement workshop, based in positive psychology, helped to develop retirement self-efficacy. Retirement self-efficacy, as defined by this study, is one's belief, or confidence, in her/his ability to successfully negotiate the retirement transition to find purposeful and affirmative life engagement upon entering this new life chapter. The study also explored relationships between positive and negative affect and retirement self-efficacy.

The convenience sample of adult volunteers ($n = 66$) were primarily white and highly educated, with a blend of males ($n = 29$) and females ($n = 37$). The sample was divided into a control/waitlist treatment group ($n = 34$ and 29 , respectively) and an initial treatment group ($n = 32$). Results indicated that those participating in a strengths-based workshop made greater gains in retirement self-efficacy, with those in the waitlist treatment group making greater gains ($p = .002$, $d = .65$) than those in the initial treatment group ($p = .068$, $d = .22$). Overall, approximately 59% of participants made gains in

retirement self-efficacy, and about 31% had decreases. It was also found that negative affect was more strongly correlated to pre-workshop retirement self-efficacy ($r = -.50$) than was positive affect ($r = .26$). Furthermore, while not reaching statistical significance, results indicated that participants with high negative affect made greater gains following the workshop ($d = .36$) than did those with low negative affect.

Implications from these findings suggest that while strengths-based approaches hold promise in helping individuals develop greater retirement self-efficacy, it is a process that must also integrate one's readiness for change. Thus, a series of workshops or continued career counseling may benefit individuals approaching or in retirement. Additionally, it is important to consider that those with higher negative affect appear to have less retirement self-efficacy, but may make greater gains in developing it upon receiving a strengths-based intervention. Recommendations from this study point to the importance of defining and designing one's next life chapter rather than adhering to the notion that retirement is a pre-defined endpoint.

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CHAPTER 1: INTRODUCTION

Retirement has long been seen by many individuals as that tirelessly sought-after reward for many years of keeping the nose to the grindstone. Others see it as a much-to-be-avoided snare leading to passivity, lack of productivity, and eventually one's demise. The contemporary concept of retirement has been promoted as a time to relax, disengage from society and previous roles, and accomplish those activities previously postponed (Anthony, 2001; Goldberg, 2000; Koenig, 2002). This characterization of retirement can put a great deal of pressure on individuals. Thus, it is no wonder retirement can cause confusion, stress, and consternation, even for those looking forward to it.

Regardless of how an individual views retirement, it is a concept worthy of attention considering the sizable demographic shift towards an aging population occurring in the United States and globally. The U.S. Census Bureau (2006) has projected that one in five people in the United States will be age 65 or over by the year 2030. This will be 20% of the total U.S. population as compared to approximately 12% of the population being age 65 and over in 2003 (U. S. Census Bureau, 2006). Accordingly, increasing numbers of individuals will be facing the life transition of retirement.

Additionally, according to the National Center for Health Statistics (2009, March), the average life expectancy for individuals born in the United States in 2005 is roughly 78 years. Furthermore, individuals who were 65 in 2005 can expect to live another 18.7 years. Thus, not only will the United States likely see more people in

retirement, but it is also probable that more of these individuals will spend a larger portion of their lives in retirement due to increasing longevity.

Within this chapter, the background and setting of the study in terms of retirement, self-efficacy, positive affect, and strengths is provided. The purpose and potential benefactors of this study are discussed, research questions and hypotheses outlined, and definitions of terms provided. A discussion of assumptions and limitations is also included. Lastly, the researcher's perspective is presented.

Background and Setting

Retirement as a Social Construct

With the aging demographics, an increasing number of individuals are approaching the age of 65 which is often considered the traditional age of retirement. However, the concept of retirement in the United States was virtually non-existent until the industrial revolution. When the U.S. was primarily an agricultural society, older adults were highly respected. They were the keepers of the knowledge and served useful roles within the family, community, and society (Dychtwald, 2000; Freedman, 1999; Koenig, 2002; Schacter-Shalomi & Miller, 1995). Mature adults provided apprenticeships and preserved the culture, tradition, and history for the family and the community (Koenig, 2002). Elder parents and grandparents held social control since they owned the land, which was the source of an individual's economic wealth at that time (Dychtwald, 2000). However, the industrial age brought about a new set of priorities. Youth, energy, and mobility took precedence over stability, experience, and wisdom, and industrial jobs gave young men their own financial freedom and power (Dychtwald, 2000).

Industrialization also brought about pension plans. American Express began the first private pension plan in 1875 (Koenig, 2002). Arizona and Alaska began state-sponsored pensions in 1915 for very poor persons over the age of 70 who had no relatives that could take financial responsibility for them (Koenig, 2002). In 1935, the federal government passed the Social Security Act whereupon the age of 65 became the “official” retirement age. Although life expectancy had significantly increased by 1935, individuals were still only expected to live to approximately the age of 62. Additionally, only 7% of the population were over the age of 65 and they were expected to live just 12 years past retirement (Goldberg, 2000). Thus, very few people at that time would live to receive Social Security, and most of those that did would probably not live to utilize it for long. That is no longer the case. According to the National Center for Health Statistics (2009), life expectancy for individuals born in 2005 is 75.2 years for men and 80.4 years for women in the United States. Those that reached the age of 65 in 2005 are predicted to live another 18.7 years (National Center for Health Statistics, 2009). Obviously, this is well past the longevity envisioned when the retirement age of 65 was established. In fact, if current longevity were accounted for, then today’s workers in America would be waiting until the age of 73 to receive benefits (Peterson, 1999).

With industrialization and pensions setting the foundation for retirement, various business corporations provided the settings and promoted the notion of retirement as a time for disengagement and leisure. For example, the Del Webb development corporation opened the retirement community of Sun City in 1960; it was a phenomenal success (Freedman, 1999; Koenig, 2002). Having a life of leisure in an age-segregated community such as this became the symbol of successful aging (Koenig, 2002).

To have this life of leisure in a retirement community, an adequate financial nest egg has been a necessity. Thus, it is not surprising that Anthony (2001) expressed the opinion that retirement has been treated as an economic event rather than a life event. However, studies in the United States and other countries revealed that topics such as hobbies/leisure activities and health issues (Gee & Baillie, 1999; Marcellini, Sensoli, Barbini, & Fioravanti, 1997); social preparation (Marcellini, et al., 1997); and maintaining one's independence and increasing a sense of purpose in life (Slowik, 1991) were also of interest to participants.

Retirement Self-Efficacy

To experience a satisfying retirement, it is likely that individuals need to believe in their ability to negotiate this life chapter. Self-efficacy has been described as a perception about whether one is capable of producing a desired effect or accomplishing a certain level of performance (Bandura, 1986). Taylor-Carter and Cook (1995) have defined retirement self-efficacy as the belief that one has the knowledge and skills required to deal with the changes related to retirement. Although Neuhs (1991) did not specifically provide a definition of retirement self-efficacy, in composing her Retirement Self-Efficacy Scale she suggested that retirement self-efficacy refers to one's belief that she/he can manage tasks in the following five categories: health, finances, activities, government and pension regulations, and retirement itself. The last scale category measured such things as coping with changes in retirement, structuring leisure time, being satisfied that one selected the appropriate time to retire, and having confidence in successfully adjusting to retirement. For the purposes of this study, and to focus on the retirement transition itself, retirement self-efficacy has been defined by this author as

one's belief, or confidence, in her/his ability to successfully negotiate the retirement transition and find purposeful and affirmative life engagement upon entering this new life chapter.

According to Bandura (2006), self-efficacy beliefs affect people's goals and aspirations, their motivation levels, and their levels of perseverance when faced with adversity. They help determine how one perceives opportunities and obstacles. They also help shape individuals' outcome expectations, which are judgments of how likely their efforts will produce favorable or adverse outcomes. Furthermore, Bandura (2006) strongly asserted that efficacy beliefs affect one's quality of life in terms of emotional well-being and also determine the choices that individuals will make which can profoundly affect their life course. Hence, retirement self-efficacy may affect how individuals navigate retirement and what they expect their retirement will, or can, be like.

Broaden-and-Build Theory

Positive psychology has been defined as the "scientific and applied approach to uncovering people's strengths and promoting their positive functioning" (Snyder & Lopez, 2007, p. 3). More generically, it has been used as a broad term for the study of positive emotions and character traits, and what facilitates them (Seligman, Steen, Park, & Peterson, 2005). Whereas mainstream psychology has appeared to focus on dysfunction and negative behaviors, positive psychology has concentrated on positive character traits and positive experiences (Linley & Joseph, 2004).

Fredrickson (2006) has focused on positive emotions in her Broaden-and-Build Theory. Broadening includes such processes as contemplating new ideas, developing alternative solutions, reframing situations, reflecting on behaviors, and initiating new and

creative courses of action. Positive emotions facilitate this process because they widen one's focus and allow one to take in new information; whereas negative emotions allow an individual to focus and take swift action (e.g., fight or flight) (Fredrickson, 1998). The new possibilities and ideas that come from broadening subsequently "build" various physical, cognitive, social, and psychological resources. The resources that are built from broadening are thought to be long-lived and cumulative according to the Broaden-and-Build Theory. Additionally, there is an upward spiral effect where the positive emotion stimulates broadening, which in turn facilitates more positive emotions (Fitzpatrick & Stalikas, 2008; Fredrickson, 1998). Thus, more positivity may be associated with greater levels of the psychological resource of retirement self-efficacy and vice versa.

Strengths

Clifton and Anderson (2002) have defined a strength as "the ability to provide consistent, near-perfect performance in a given activity" (p. 8). Buckingham (2001, 2005, 2006) has also utilized this definition, but more often defines a strength by indicating that a strength is an activity that makes you feel strong, fulfills you, gives you deep satisfaction, etc. Individuals may be good at various activities, but if those activities do not provide deep satisfaction or feelings of strength and energy, then they are not strengths.

Approaches that involve the identification and use of strengths have been applied in numerous settings and with programs designed for leaders, managers, salespeople, customer service employees, nurses, teachers, students, and more (Hodges & Clifton, 2004). Furthermore, Hodges and Clifton found that strengths-based development has been associated with positive outcomes in a variety of studies from corporate to

educational domains. With its ability to impact a variety of life roles and domains, using a strengths-based approach in terms of constructing one's retirement may lead to beneficial results, including greater development of retirement self-efficacy as this author has defined it..

Researcher's Perspective

My approach to career counseling and teaching is to help individuals make meaning of their lives, their careers, and/or the information they are learning, in ways that are useful to them. I am inclined towards the work of Savickas (2005) who asserted that careers do not just unfold, but instead are constructed by individuals as they make career choices that help express their self-concepts and substantiate their goals. He stated that individuals impose meaning on their vocational behavior and occupational experiences which makes the construction of careers a subjective experience. Accordingly,

career denotes a subjective construction that imposes personal meaning on past memories, present experiences, and future aspirations by weaving them into a life theme that patterns the individual's work life. Thus, the subjective career that guides, regulates and sustains vocational behavior emerges from an active process of making meaning, not discovering preexisting facts. (Savickas, 2005, p. 43)

Similarly, the constructionist epistemological view has suggested that meaning is not discovered, but instead constructed through the interaction of subject and object (i.e., person and environment) (Crotty, 1998). Thus, human beings engage with their world and it is through this interaction that meaning is created. Additionally, this interaction and creation of meaning takes place within a social context. Thus, while individuals certainly make meaning through their interactions with the world, these interactions, and the meanings derived, are highly influenced by one's social world (Crotty, 1998).

Variables included in this study (e.g., retirement self-efficacy and positive affect) are subjective concepts experienced, influenced, and co-constructed by the individual and her/his social world. Additionally, the workshop aimed to facilitate the ability of individuals to identify their own strengths and construct their own meaning from them. Thus, the researcher's inclination towards constructivism was abundant.

Social sciences research, by its very nature, has consistently attempted to take subjective constructs and objectify them to further the understanding of humankind. Although no assessment can fully remove this subjectivity, this study used measures that objectified these variables as much as possible. Within this quantitative study, then, the subjective meaning participants experienced was quantified in a manner that allowed for the investigation of ways to develop retirement self-efficacy as well as the examination of variables associated with retirement self-efficacy.

Statement of the Problem

Given that retirement is a social construction, as discussed earlier, this study has proposed to view retirement in a new light. It is possible that the word "retirement" may no longer be useful since it has typically been considered to be an endpoint. This opinion has been corroborated by Siegel and Rees (1992) in their suggestion that retirement is often treated as a point in time, rather than a complex process. Feldman's (1992) definition of retirement as "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" (p. 287) also suggested that retirement is a point-in-time event. Instead, this study has viewed retirement as a transition to a time in life that will continue to be composed of new chapters and ongoing

transitions. Thus, for the purpose of this study, the word retirement has encompassed the idea that it is a process over time involving ongoing tasks and transitions. Evans, Ekerdt, and Bosse (1985) provided support for this statement in describing retirement as a major life change that encompasses multiple changes the retiree must make in areas such as use of time, income, support groups, and societal role perceptions.

More specifically, this study focused on individuals that made the general decision to retire but were currently in the process of planning what they will do for the initial phase of their new life chapter. These individuals were in a transition period where they needed to explore and begin identifying options for prospective purposeful and affirmative activities. In other words, they knew they were going to retire, but were possibly saying to themselves, “And then what?” In relation to this was also the question of whether individuals felt confident about their ability to negotiate this transition and find purposeful and affirmative activities to participate in upon entering into their newest life chapter. In other words, had they developed sufficient retirement self-efficacy?

While there have been numerous studies regarding various factors associated positively or negatively with retirement, fewer studies were found that looked specifically at the constructs of self-efficacy and positive affect in terms of negotiating retirement. Having self-efficacy, or confidence, about whether one can successfully negotiate retirement, has typically been discussed as a tangential factor or an outcome from other variables. Aside from Harper’s (2005) study that investigated retirement self-efficacy and if its development was associated with role models, little was found in a review of the literature regarding whether retirement self-efficacy can be developed via interventions. Additionally, positive affect may be another factor that is associated with the

psychological resource of self-efficacy. While the concept of positive affect is a concept receiving more attention, nothing was located that connected the study of positive affect to the retirement process or to retirement self-efficacy.

Purpose of the Study

This study proposed that retirement self-efficacy is an important factor in retirement satisfaction and that retirement self-efficacy may be related to an individual's level of trait positive affect. It also proposed that helping individuals to identify and define their strengths to assist them in discovering purposeful and affirming activities in retirement may lead to greater feelings of retirement self-efficacy. The purpose of this study, then, was to investigate whether an intervention in the form of a strengths-based retirement workshop would help develop retirement self-efficacy. In other words, it sought to discover if a workshop utilizing an approach which helped individuals to identify and clarify those activities that provide them with feelings of strength and passion would help improve their retirement self-efficacy. Additionally, this study examined the relationship between retirement self-efficacy and trait positive affect and evaluated if some combination of factors (i.e., the workshop, positive affect, gender, and self-rated health) could help predict gains in post-workshop retirement self-efficacy levels.

This research has attempted to provide various contributions to a range of constituents. In general, it has endeavored to add to the field of positive psychology and to the knowledge base surrounding retirement in terms of the concepts of positive affect, self-efficacy, and strengths. Additionally, individuals (e.g., counseling professionals) working with pre-retirees or retirees have been provided with additional information

regarding this particular transition including a possible approach to help individuals develop retirement self-efficacy so they can find purposeful and affirmative life engagement in their next life chapter.

Research Questions

Various forms of questions were asked in this study. These included both difference and associational questions as discussed by Morgan, Gliner, and Harmon (2006). The first research question asked if there was a difference between a group receiving a workshop focusing on strengths and a group that did not receive the workshop in regard to average retirement self-efficacy gain scores. It was anticipated that the group receiving the workshop would experience greater gains in retirement self-efficacy. The second research question examined if there were associations between retirement self-efficacy and trait positive affect. The final research question sought to determine if there was a combination of type of treatment (workshop or no workshop), trait positive affect scores, gender, and self-rated health scores that predicted retirement self-efficacy better than any one predictor variable alone.

Definitions of Terms

The following terms were operationally defined for the purposes of this study:

Retirement: A transition process whereby one leaves their current employment situation and utilizes (at least partially) either a pension, Social Security retirement benefits, and/or other forms of financial support such as retirement accounts, savings, and other personal assets to support her/himself. The initial part of the transition process may involve exploration and planning to create one's post-retirement environment and activities.

Retirement Self-Efficacy: One's belief, or confidence, in her/his ability to successfully negotiate the retirement transition to find purposeful and affirmative life engagement upon entering this new life chapter.

Positive Affect: Positive affect, positive emotion, and positivity were used interchangeably to represent the pleasant end of emotions, moods, sentiments and attitudes (Fredrickson & Losada, 2005). Specific positive emotions were not singled out in this study.

Strengths: Activities that an individual is not only good at, but also gives her/him a feeling of "strength". Feeling strong may mean different things to different people, but commonly includes a sense of exhilaration and deep satisfaction (Buckingham, 2007). Often, an individual will experience the intense psychological state of *flow* when using strengths. With flow, as described by Csikszentmihalyi (1997), time passes without notice and the individual is completely immersed in the activity.

Delimitations

Participants in this study were delimited to those individuals proposing to retire within three years and indicating that they did not have financial security needs that would require them to work full-time upon leaving their current position. This financial delimitation assisted in recruiting a group of participants that believed that their financial security would be adequate to support activities outside of full-time paid employment. Furthermore, participants had to be able to independently access the internet. To gain an adequate sample size, the delimitation of required availability for either date of the workshop (allowing for random assignment into experimental and waitlist groups) was dropped.

Limitations

The study's sample consisted of voluntary participants that were not randomly selected. Thus, it was likely a more homogenous sample in terms of financial security since only participants that indicated they were financially secure enough to not have to continue to work full-time upon retirement were included. Additionally, certain assumptions of data analysis techniques had the possibility of being violated by using a nonprobability sample. These limitations lowered population external validity, thus requiring that generalization of results to populations outside of the sample be done with caution. Towards that end, demographic data was gathered to help determine the characteristics of the sample and to provide that information to consumers of the study.

Another limitation of this study was that I, the researcher, provided the workshop. This could have impeded my ability to be an unbiased observer. However, this also enabled me to ensure that the same workshop was provided in the same manner to both groups. Moreover, my perspective as a constructionist has emphasized the belief that most observations are "unbiased". According to Crotty (1998), constructionism has taught us that objective and subjective meaning are inextricably connected. We construct meaning through our own interactions with the world and are influenced by our social and cultural world.

CHAPTER 2: REVIEW OF LITERATURE

The literature on retirement has continued to expand. Many of the studies reviewed focused on factors associated with positive or negative retirement adjustment. The following sections provide a review of literature regarding retirement in general and then more specifically attend to the constructs addressed in this study (i.e., retirement self-efficacy, positive affect, and strengths).

Retirement Overview

Numerous aspects of retirement, especially adjustment to and satisfaction with retirement, have been studied over the years. Certain factors have surfaced regularly including health, finances, occupational status, job involvement/commitment, leisure activities, gender, spousal patterns, and pre-retirement education and planning. The following sections provide an overview of various studies involving these variables thus providing a general background of some of the literature surrounding the phenomenon of retirement.

Health

Overview. Over time, numerous studies have pointed to the importance of health and its association with retirement in a variety of ways. Health has been found to be associated with retirement life satisfaction (Dorfman, 1995; Pinquart & Schindler, 2007; Seccombe & Lee, 1986), retirement health planning (Petkoska & Earl, 2009), engagement in retirement activities (Holmes & Dorfman, 2000), and retirement self-

efficacy (Neuhs, 1990). It would appear that physical health is an important resource in terms of adjusting to and planning for retirement as well as for being satisfied with one's life during it. However, when examining literature regarding the association between health and retirement satisfaction, one quickly comes to understand that while health is indeed a related factor, it is often intertwined with numerous other variables, some of which are discussed in this section.

Health and retirement satisfaction. Providing support to the idea that health is related to retirement satisfaction, Seccombe and Lee (1986) examined gender differences in levels of retirement satisfaction and their association with health and other variables. A survey sample of 1,530 retired residents of the state of Washington was used. Results indicated that retirement satisfaction was more strongly correlated to self-rated health for both men ($r = .32$) and women ($r = .33$) than for any other variable studied (i.e., occupational status, income, health, and marital status).

Rather than considering retirement satisfaction as a static concept, Pinquart and Schindler (2007) investigated the possibility of different life satisfaction trajectories during the retirement transition in a longitudinal study. They also examined whether these differing groups would vary in terms of physical health, as well as a variety of other demographic variables. Their sample was taken from the German Socioeconomic Panel (GSP) which was started in 1984 and is a nationally representative study of Germany in terms of household composition, economic circumstances, and work life. Pinquart and Schindler ran various statistical tests and were assured that their subsample of 1,456 participants drawn from the GSP did not differ from those that were excluded in terms of the variables they were measuring. One exception to this was that participants with lower

socioeconomic status (SES) were more often excluded from their subsample (Pinquart & Schindler, 2007), indicating that their subsample may have held a higher SES in general.

Data from the study resulted in Pinquart and Schindler (2007) identifying three differing trajectories in life satisfaction during the retirement transition. The majority of older adults in the study demonstrated a trajectory of a very small, but temporary, increase in life satisfaction after retirement. When compared to this majority group, those that were in the group that experienced a significant decline in satisfaction (but then continued on a slightly increasing trajectory after the initial drop) were more likely to have worse physical health. They were also likely to be older when they retired and female. Individuals in the group that experienced a significant increase in life satisfaction (but then overall declining trajectories) were also more likely to report worse physical health, as well as be men, have a lower socioeconomic status, be unmarried, be unemployed prior to retirement, and live in the Eastern part of Germany, as compared to the majority group. Thus, while it does not stand alone, physical health is apparently a factor associated with retirement life satisfaction trajectories. Pinquart and Schindler (2007) suggested that those in the majority group tended to have “more resources for adapting to retirement (e.g., high SES, being married, good physical health)” (p. 452) than did those in the other two groups, thus their more steady trajectory.

Health planning. Citing numerous studies that emphasized good health as a prerequisite for life satisfaction during retirement, Petkoska and Earl (2009) investigated the influence of several demographic and psychological variables on retirement health planning. They obtained a voluntary sample of 377 participants age 50 and older who were employees of a financial institution. The results of the study indicated that female

gender ($\beta = .29$), income ($\beta = .17$), education ($\beta = .13$), and health goals ($\beta = .23$) were significant predictors of health planning. Thus, being female, more educated, and having more specific health goals were predictive of engagement in more health planning.

Accordingly, if good health is important for life satisfaction in retirement as Petkoska and Earl, and previously-mentioned studies have suggested, then engaging in planning for one's health in retirement would influence one's health in retirement and possibly one's life satisfaction during retirement.

Health and retirement activities. While the aforementioned studies considered health as a single factor, Holmes and Dorfman (2000) examined specific health conditions and their relationships to activities frequently engaged in during retirement. They used a subsample of 502 retired individuals age 60 and older from Wave 1 of the Americans' Changing Lives (ACL) study which was conducted by the Survey Research Center at the University of Michigan (as cited in Holmes & Dorfman, 2000). To control for certain predisposing risk factors (gender, age, marital status, race, education), Holmes and Dorfman utilized multiple regression and entered these variables in first as a block. They then analyzed the relationships between eight chronic health conditions and various retirement activities.

The results from this study indicated that although various health conditions were associated with restricted participation in activities, the effects were not consistent across all activities measured (Holmes & Dorfman, 2000). Overall, lung disease demonstrated consistent associations with decreased participation in activities. Stroke was found to be associated with less frequency of walking as well as decreased frequency in engagement in informal social activities (e.g., visiting with friends, neighbors and relatives). Broken

bones were associated with more kinds of lessened activity than any other health condition in the study. However, arthritis was not significantly associated with any decrease in the activities that were measured. Holmes and Dorman infer that this may suggest an ability to adapt to, or control with medication, the pain arthritis causes or that various devices and modifications made participation in these activities possible.

Additionally, in some cases, associations were not in the expected direction. For example, individuals with hypertension reported more time spent on some informal and formal social activities than did those without hypertension.

In summary, Holmes and Dorman concluded that:

...not all health conditions had a negative effect on time spent on activities, and particular health conditions affect particular activities differently. It appears that retired persons with health problems may not necessarily reduce all their activities, but do so selectively. (p. 61)

Thus, while health has often been measured as a singular concept, this study pointed to the variation that can occur for each individual and the importance of taking into account individual differences. It also suggested that there was obviously more at play than just health when considering time spent on retirement activities.

Health and retirement self-efficacy. Neuhs (1990) focused on self-efficacy about retirement in terms of one's belief that she/he can manage retirement tasks in the following five categories: health, financial, activities, government and pension regulations, and retirement itself. She collected data from two groups (a retired group and a pre-retired group) at a major university in New York to investigate the association of a variety of variables, including self-rated health, with retirement self-efficacy. Of the 127 subjects that participated, 83 were retired and 40 were in pre-retirement. Pearson

correlations between self-rated health and retirement self-efficacy were .336 for the retired group and .504 for the pre-retired group. Thus, it appeared that those with higher self-efficacy in terms of retirement also had better self-rated health (Neuhs, 1990). This finding helped support the idea that retirement self-efficacy is a psychological resource in retirement that warrants attention.

Summary. As can be determined from the studies mentioned in this section, health has been associated in numerous direct and indirect ways with retirement. It has been related to life satisfaction in retirement as well as to how one adjusts to retirement. Health has also been found to limit activities in retirement which can influence how people experience their retirement years. Health has also been associated with retirement self-efficacy. Overall, though, it is critical to remember that there have been multiple variables that factor into and interact with health in terms of retirement.

Finances

Overview. Financial concerns have typically been considered an important component when considering retirement. However, while many individuals indicated the importance of finances and their impact on retirement (Glass & Flynn, 2000), there appeared to be various complexities that interacted with one's financial status. For example, while financial planning was related to less retirement anxiety and to greater expected financial satisfaction, it did not affect overall expectations of retirement well-being (MacEwen, Barling, Kelloway, & Higginbottom, 1995). Additionally, a drop in income appeared to be more related to a decrease in retirement adjustment and satisfaction than was wealth (van Solinge & Henkens, 2008). There also appeared to be gender differences in terms of financial status and its relationship with retirement issues,

with women tending to fair worse than men (Hyde, Ferrie, Higgs, Mien, & Nazroo, 2004).

Importance of finances. Finances were a significant concern in retirement according to a study regarding the retirement needs of rural middle-aged individuals. Glass and Flynn (2000) utilized the North Carolina Extension Homemakers directory to obtain a random sample list of 100 females between 45 and 64 years of age. They sent surveys to these randomly selected homemakers asking them to complete the questionnaire and to obtain a completed survey from a rural North Carolina male between the ages of 45 and 64. Ultimately, they received a total of 66 completed questionnaires.

Of the 28 issues identified as a concern by over 50% of the respondents, nine of them centered on financial issues (Glass & Flynn, 2000). Furthermore, Glass and Flynn reported that respondents indicated income not only affected retirement finances, but also the housing they would have in retirement. Respondents also indicated that income would directly affect the entire family during retirement. Glass and Flynn found that respondents appeared to be taking more action regarding their finances than in other areas they had reported as important (i.e., retirement activities, health, well-being, housing, family). Overall, this study demonstrated that finances were not only a top retirement concern, but were also a concern that appeared to evoke more action.

Financial planning, wealth, and changes in income. Results from another study indicated that while finances were important, their exact impact was difficult to fully ascertain (MacEwen, et al., 1995). Data from 213 employees of a university in Canada indicated that financial planning correlated with expected financial satisfaction in retirement (.41, $p < .01$) and with expected satisfaction with activities during retirement

(.18, $p < .01$). Financial planning was negatively associated with higher levels of retirement anxiety (-.30, $p < .01$). However, after deriving standardized beta weights from hierarchical multiple regression equations for the proposed paths in their model, MacEwen et. al., (1995) found that although participants' own retirement financial planning had a specific effect on their expected financial satisfaction in retirement ($\beta = .39$, $p < .01$), it did not affect their expected overall change in well-being in retirement ($\beta = -.05$). (In their model, effects of age and income were controlled statistically.) These findings demonstrated that while financial planning may have impacted financial satisfaction in retirement and was associated with lower levels of retirement anxiety, its impact on overall well-being in retirement was more complex and less direct.

A study using 778 Dutch employees that examined adjustment to, and satisfaction with, retirement (van Solinge & Henkens, 2008) also demonstrated that financial aspects of retirement were more complex than simply assuming more wealth meant more satisfaction with retirement. In this study, household income was not statistically significantly associated with retirement adjustment, and the correlation with retirement satisfaction was slight (.13, $p < .01$). However, a decrease in income was negatively associated with retirement adjustment (-.20, $p < .05$) and with retirement satisfaction (-.17, $p < .01$). Although these correlations were also somewhat low, it appeared that a drop in income in retirement impacted retirement adjustment and satisfaction more than did wealth.

Finances and gender. It should be noted that gender has been found to be an important factor in regards to finances and retirement. Overall, it appeared that finances more adversely affected women's adjustment to retirement than men's (Hyde, et al., 2004; Seccombe & Lee, 1986). However, this was likely due to the fact that women

tended to have less income in retirement than men for a variety of reasons. Some of these reasons likely included women's more inconsistent work histories due to taking breaks for family caregiving responsibilities, gender segregation at work, and the fact that women tended to earn less than men (Hyde, et al., 2004; Price, 2002).

Summary. While finances have been found to be a critical aspect of retirement, it appeared that they were complex in terms of how they affected one's retirement when considered more closely. Obviously, one's finances has influenced if one can retire, what kind of housing one can afford, and one's retirement activities. However, it appeared that financial planning and resources, and their associations with retirement well-being, satisfaction, and adjustment, were more complex than simply saying one's financial status determined one's retirement satisfaction and well-being.

Occupational Status and Job Involvement

Overview. One's occupational status; level of job involvement, commitment, and work identity; and how well one is prepared for leisure activities have contributed to various outcomes in retirement. Higher job commitment was associated with lower self-efficacy and poorer attitudes about retirement and less planning for it (Fretz, Kluge, Ossana, Jones, & Merikangas, 1989). Lower occupational status was found to be a significant factor associated with diminished well-being (Richardson & Kilty, 1991) and women losing their professional identity reported a decline in social status (Price, 2002). However, women also more readily experienced work as one of many roles in their lives (Hanson & Wapner, 1994; Price, 2002, 2003), and thus may not have had most of their identity tied to work. When leisure time was studied in terms of retirement, it appeared that both increased job involvement and not knowing what to do with one's leisure time

was related to feeling that retirement was an imposed life disruption to be avoided (Gee & Baillie, 1999). Similarly, less satisfaction with current leisure activities was associated with higher levels of anxiety about retirement (Hayslip, Beyerlein, & Nichols, 1997). Taken together, these variables and their relationships to retirement added yet another layer of complexity when considering the phenomenon of retirement.

Job commitment and occupational status. How committed individuals are to their job has been associated to their thoughts about retirement. In a study involving 129 employees from a large technical agency and a major university, Fretz, et al. (1989) explored a range of variables and their association with the anxiety and depression subjects felt in anticipation of retirement. In measuring job commitment, they utilized a nine-item scale that incorporated three areas: loss of status, loss of social support of co-workers, and loss of the work role. The authors determined from the intercorrelations between various dependent variables and psychosocial predictors that those that had a stronger commitment towards their job also tended to have fewer plans for retirement, poorer attitudes towards it, and lower self-efficacy about it (Fretz, et al., 1989).

Richardson and Kilty (1991) conducted a study that focused on, among other factors, occupational status. Their longitudinal study utilized a purposive sample obtained from various organizations, businesses, and institutions in Central Ohio which represented a broad array of workers that had applied for retirement. They found that, rather than income or education, occupational status was the most important variable in distinguishing a group that had a decrease in well-being from a group that improved. The investigators found that the group categorized as having declined in well-being was more likely to have worked in a job classified as low occupational status. It was plausible,

though, that reduction in income was tied closely to this finding because although individuals categorized as declining in well-being after retirement had jobs with low occupational status, they also had high household incomes and had experienced a considerable reduction in income after retirement. Those individuals categorized as improving after retirement had high occupational status jobs with low income, but lost minimal income after retirement (Richardson & Kilty, 1991). Thus, although the study suggested that those with low status jobs had difficulties maintaining status and respect after retiring, the change in income could have played a large role in their retirement adjustment issues.

Gender, occupational status and worker identity. To more deeply inspect the link between women's occupational status and retirement satisfaction, a qualitative study by Price (2002) explored the differences in retirement satisfaction of women that had been in professional versus nonprofessional jobs. Price found that although the women that had held professional roles saw retirement as "*just another step in life*" (p. 47), they also reported that they had lost their professional identities and had experienced a decline in social status. The women in the nonprofessional sample did not experience difficulty in leaving their work roles and some felt that their post-retirement volunteer positions provided a lift in their social status.

Price (2003) went on to delve further into professional women's experience of retirement and again found that retirement was considered to be merely one more step in the life cycle of the 14 retired professional women she interviewed. Furthermore, she found that all of these women substituted alternate roles for the loss of their professional roles and almost all of them continued to utilize their professional skills in these alternate

roles. When considering her previous study, Price concluded that it was possible that these women had been able to counter the negative effects of losing their worker identity. These women also reported that the retirement transition was made with greater ease compared to the many transitions they had already experienced in their lives (Price, 2003).

Some of the findings by Price (2002, 2003) were consistent with a study completed by Hanson and Wapner (1994) in which they found that women were more likely to experience retirement as a continuation of their current life patterns. Originally, Hornstein and Wapner (1985) completed a qualitative study in which they devised four structural descriptions of how individuals coped with retirement. The first of the patterns was *transition to old age* in which the individual left the work role with quiet acceptance and saw retirement as a time to rest, reflect, and prepare for old age. Hornstein and Wapner's second category was a *new beginning* where the person was enthusiastic about taking advantage of new opportunities, embarking on new projects, and living according to their own needs, desires, and goals. *Continuation* was the third structure where the pattern of the individual's life post retirement was much the same as it was before retirement. Hornstein and Wapner indicated that retirement was not considered a critical transition by these people because they planned to continue with their most valued activities in a more satisfying way with less pressure. The last pattern was called *imposed disruption* because retirement was seen as just that, an unwanted disruption where part of the "self" was lost. According to Hornstein and Wapner, individuals that fell into this category attempted to find new activities to replace the work role, but none of these substitutes were felt to be completely adequate.

This study was later replicated by Hanson and Wapner (1994) and advanced by focusing on gender differences. Not only were the original categories replicated with a quantitative study sample size of 94 recent retirees (48 women and 46 men), but significant gender differences emerged as well (Hanson & Wapner, 1994). Among these findings were that significantly more women than men experienced the continuation pattern. The continuation pattern, described as being more or less a continuance of current roles, was consistent with the description of retirement as just another step in life by the women in Price's (2002, 2003) studies.

Leisure and job involvement. Leisure experiences and how closely one's identity was tied to her/his job were also found to be associated with adjustment to retirement. Gee and Baillie (1999) conducted an analytic survey examining a variety of variables, including job involvement, work involvement, and leisure. Kanungo referred to job involvement as the extent to which individuals believe that their identity is wrapped up in their job (as cited in Gee & Baillie, 1999). Work involvement, on the other hand, was described as a normative belief regarding the importance of work in life (as cited in Gee & Baillie, 1999). Consequently, in their study, Gee and Baillie described job involvement as a more personal concept and work involvement as a more general idea. They also utilized the four categories of how people experience retirement created by Hornstein and Wapner (1985) and later replicated by Hanson and Wapner (1994): Transition to Old Age/Rest; New Beginning; Continuity; and Imposed Disruption.

Results indicated that those with higher job involvement and not knowing what to do with their leisure time were associated with the expectation that retirement would be an imposed disruption in their lives (Gee & Baillie, 1999). Even when unsatisfactory

leisure was controlled for, job involvement was still correlated with the imposed disruption score for both a UK sample ($r_p = .24, p < .05$) and an Australian sample ($r_p = .25, p < .05$). Likewise, unsatisfactory leisure was also correlated with the imposed disruption category when controlling for job involvement (UK $r_p = .32, p < .005$; Australian $r_p = .31, p < .005$).

Using multiple regression, Gee and Baillie (1999) also entered the four variables of job involvement, work involvement, not wanting more leisure time, and not knowing what to do with leisure time as independent variables, and the attitude of “avoidance of retirement” as the dependent variable. The four independent variables accounted for 27% of the variance in the avoidance of retirement score. However, only job involvement and not knowing what to do with one’s leisure time were significant contributors in predicting avoidance of retirement (.274 and .289 respectively).

Also supporting the notion that leisure and job involvement are closely related in terms of retirement adjustment were results from a study of 144 university faculty (92 of whom were active faculty and 52 who were retired) (Hayslip, et al., 1997). While exploring the reliability, validity, and construct validity of their newly developed Retirement Anxiety Scale, Hayslip et al. found that job deprivation and job satisfaction contributed the most heavily to predicting overall retirement anxiety for the retirees in the study. For the active employees in the study, the data suggested that less satisfaction with current leisure activities was one factor (along with distance from retirement and reasons for retirement) that contributed most heavily to overall retirement anxiety (Hayslip, et al., 1997).

Summary. It appeared that individuals who were more strongly committed to their jobs and/or had jobs with higher occupational status had more concerns regarding retirement and about the loss of their worker identity and social status (Fretz, et al., 1989; Price, 2002; Richardson & Kilty, 1991). They also were more likely to avoid retirement and have anxiety surrounding the idea of it (Gee & Baillie, 1999; Hayslip, et al., 1997). How one developed their leisure experiences also appeared to be a factor with less leisure satisfaction contributing to retirement concerns (Hayslip, et al., 1997). Additionally, these studies pointed towards complex relationships between income (and the change in income upon retirement), occupational status, job commitment, worker identity, leisure activities, and gender.

Marital Relationships

Overview. Spousal employment and retirement appeared to be related to marital quality in a variety of intricate ways. Some studies focused on these complexities by looking at spousal retirement timing and patterns (Moen, Kim, & Hofmeister, 2001; Smith & Moen, 1998; Szinovacz & Davey, 2004). The findings from these studies were often varied and demonstrated that retirement was a complex transition with multiple influences in terms of marital relationships. For example, a similar finding occurred in two studies where husbands' timing of retirement tended to influence wives more so than the reverse (Smith & Moen, 1998; Szinovacz & Davey, 2004). Also similar were findings that retired men tended to be negatively affected if their wives were still working (Moen, et al., 2001; Szinovacz & Davey, 2004). However, contradictory findings included the result in which Moen et al. found greater marital conflict for retired wives with spouses that were still employed, but Szinovacz and Davey found that retired wives with

employed husbands had fewer depressive symptoms. Also adding to the contradictions were findings that indicated that while the transition to retirement was associated with greater declines in marital quality (Moen, et al., 2001), overall, spousal joint retirement (couples retiring together) was associated with beneficial marital quality outcomes (Moen, et al., 2001; Szinovacz & Davey, 2004).

Spousal retirement patterns. Moen et al. (2001) utilized data from the first (1994-1995) and second (1996-1997) waves of the Cornell Retirement and Well-Being Study to evaluate the interchange between couples' retirement/employment status and marital quality. Although generalization of the findings of their study should be done with caution since the authors were less interested in generalizability than in restricting variability in the baseline population, the findings were noteworthy in many respects. Moen et al. found that the actual transition to retirement was associated with declines in marital quality for both husbands and wives. It was also determined that both married men and women who moved into retirement while their spouses remained employed reported the greatest marital conflict. Women not yet retired reported the highest marital conflict if their husbands were no longer employed.

Szinovacz and Davey (2004) also looked at couples conjointly when examining whether a spouse's employment and length of retirement affected an individual's postretirement depressive symptoms. They utilized data from the Health and Retirement Survey (HRS) with a final subsample of 2,695 married individuals. In obtaining their final sample population, the authors pointed out that, like the aforementioned study, they were more concerned with restricting variability in the baseline population than in attaining full generalizability of results.

Szinovacz and Davey (2004) found some similar results to the study by Moen et al. (2001). They found that recently retired men were negatively affected by their spouses' continuous employment. However, their findings for retired women were contradictory. While Moen et al. reported higher marital conflict for recently retired women whose spouses were still employed, Szinovacz and Davey found that recently retired women whose husbands remained employed reported fewer depressive symptoms.

These two studies indicated that overall, spousal joint retirement appeared to have a beneficial influence on marital quality for both genders (Moen, et al., 2001; Szinovacz & Davey, 2004). Again, though, there were complexities involved. A gender difference occurred in that wives that continued to work after retiring from their primary career reported the highest marital satisfaction, whereas husbands that were retired and had not become reemployed reported the highest marital satisfaction (Moen, et al., 2001). Additionally, Szinovacz and Davey found that the benefit of spousal joint retirement was a stronger effect for men than for women and that this positive effect for husbands was limited to those couples that enjoyed joint activities. When examining joint retirement, it also appeared that the husbands' retirement timing typically influenced wives, but the reverse was not the case (Smith & Moen, 1998; Szinovacz & Davey, 2004). Clearly, considering couples conjointly in terms of the timing and sequencing of their retirement provided a more detailed view of how the marital relationship was associated with retirement adjustment.

Cohabiting and same-sex couples. The studies cited thus far in this section focused primarily on heterosexual couples and did not represent cohabiting, or same-sex couples. Indeed, most of the existing research on couples' retirement has focused on married, heterosexual couples (Mock & Cornelius, 2007). To help address this

shortcoming, Mock and Cornelius investigated the levels of interdependence in respect to retirement planning and timing for married heterosexual couples, cohabiting heterosexual couples, and lesbian couples using data from the Cornell Ecology of Careers (EOC) study. The EOC study primarily drew participants from work-place organizations in central New York State. Results supported the notion that couples tend to be interdependent when engaging in retirement planning. Additionally, using hierarchical linear modeling, Mock and Cornelius found that a lower degree of financial planning was associated with the lesbian couples. They also found that the association of planning for retirement lifestyle with relationship satisfaction was particularly strong for lesbian couples compared to heterosexual couples.

Summary. Researching the retirement experiences of married couples provided a glimpse into the experiences of retirees and how those experiences were related to marital relationships. Research that considered couples conjointly illuminated a variety of factors that added to the complexity and illumination of the retirement experience.

Preretirement Education

Overview. Planning appeared to be a contributing factor in retirement adjustment, well-being, and satisfaction. The significance of preretirement planning had several implications regarding the importance of preretirement education and important topics to cover. In addition to topics covering the financing of retirement, other popular items, such as hobbies and physical health (Gee & Baillie, 1999); purpose in life and renegotiating marital relationships (Slowik, 1991); and leisure activities and social participation (Marcellini, et al., 1997) were identified.

Comparing preretirement interventions, though, has been difficult due to the varying types of measurement instruments, populations, goals, and delivery formats. Preretirement educational formats have varied widely and have included both formal and informal resources, although Hornstein and Wapner (1985) found that many individuals wanted more formal guidance. Individuals attending more formal programs reported more financial planning activities and were more knowledgeable about healthcare (Kamouri & Cavanaugh, 1986). They also had less inflated expectations about their participation in various roles during retirement which may have led to a more stable satisfaction with retirement as time passed (Kamouri & Cavanaugh, 1986). Additionally, preretirement education formats that included more participatory learning appeared to positively influence gains in learning and attitudes about retirement (Connolly, 1992).

Preretirement education topics. Many preretirement educational programs have focused on the financial aspects of retirement, including such topics as benefits, insurance, and investments (Brady, Leighton, Fortinsky, & Crocker, 1996; Sharpley & Layton, 1998; S. R. Siegel, 1994). However, there have been studies showing that other topics are also important to retirees. The three most popular items cited for preretirement education in an investigation of British and Australian retirees were financial management, hobbies, and physical health (Gee & Baillie, 1999). Slowik (1991) found in follow-up interviews of several women that had completed a questionnaire investigating preretirement education experiences that economic factors and health issues were of primary concern. These women also specified issues such as maintaining one's independence (including safe, affordable housing), attaining or increasing one's sense of

purpose in life, and renegotiating marital relationships as being important (Slowik, 1991). Furthermore, in a study completed in Italy, while 85% of participants indicated “much” to “sufficient” interest in financial and management topics, 95% of respondents showed “much” or “sufficient” interest in subjects regarding leisure activities and social participation (Marcellini, et al., 1997). Respondents in this study also revealed widespread interest in topics covering self-care and being psychologically and physically fit. Obviously, there has been a wide-ranging interest in topics not only related to the financial aspects of retirement, but in those that can assist people in multiple venues of their retirement years.

Preretirement education formats. Various formats of delivering preretirement education have been noted and/or investigated. These formats have included one-to-one sessions, printed materials, self-directed learning, and more formal programs. Kamouri and Cavanaugh (1986) asserted that formal preretirement education programs do not necessarily have to be available for individuals to acquire adequate preretirement socialization. They cited informal sources such as retired friends and relatives, private consultations with company advisors, and books and television. However, in Hornstein and Wapner’s (1985) study, respondents indicated that they needed more formal guidance to help them find satisfying ways to live their lives in retirement.

Organizations also seemed to vary in terms of what they consider to be preretirement education, using both formal and informal venues. In a study conducted in New England, variations in types of programs offered in 245 organizations were investigated (Brady, et al., 1996). The investigators used a broad definition of a preretirement education program saying that anything from a personal discussion about

retirement benefits to a full educational course was valid. Based on this definition, 51.8% of the organizations responded that they had a preretirement education program. The most frequent format was one-to-one sessions. The second most frequent were single lectures or films and self-directed preparation. The most frequently reported reason for the choice of a particular format was that it fit the organization's needs. Time, cost, and the need to maximize access to the program were other mentioned factors.

Preretirement education outcomes. Kamouri and Cavanaugh (1986) focused on a more formal preretirement education format when they investigated working attenders and non-attenders of a preretirement education program to compare and contrast the impact of preretirement education. The non-attenders were planning to attend a later scheduled preretirement education program, thus self-selection into a voluntary group was not a confounding issue. These two groups were then compared with currently retired individuals that either had (retired attenders) or had not (retired non-attenders) attended a preretirement educational program during their working years.

Kamouri and Cavanaugh (1986) found that working attenders reported initiating more financial planning activities, and being more knowledgeable about healthcare in retirement and about economics than did working non-attenders. They also appeared to have less inflated expectations about participation in various roles in retirement. Working non-attenders expected to spend much more time participating in social, recreational, community, and household roles than did the working attenders. They also found that retired non-attenders tended to become less satisfied with several aspects of their retired lives with increasing length of retirement, whereas retired attenders tend to be equally or more satisfied with retirement as time continued.

Following these results, Kamouri and Cavanaugh (1986) suggested that those with less inflated role expectations, and that planned for changes in their activities, should continue to be satisfied with retirement, but those with inflated expectations of their activities may be disappointed when they find they cannot fulfill these expectations. This inference should be viewed with caution, though, as it was found that retired attenders tended to report better health than the retired non-attenders. Thus, health issues could have been confounded with less satisfaction in various aspects of retired life for the retired non-attenders.

Also focusing on a more formal educational format, Connolly (1992) investigated if there was an alternative to the lecture/discussion format of preretirement education that would be more effective in preparing employees for retirement. A quasi-experimental design was used to compare the effects of a typical lecture/discussion format and a participatory format. The participatory format included such things as learners interviewing each other, reflecting on unanticipated life accomplishments, group votes on what topics to cover, and small group discussions. The groups were quasi-randomly distributed.

Results indicated that the participatory learner group had higher scores on perceived participation and perceived control than did the lecture/discussion group to which it was compared (Connolly, 1992). These participants also scored highest on the gain scales measuring finance information, proactive behavior, social behavior, and attitudes toward retirement when compared to this same lecture/discussion group, as well as to a nontreatment control group. However, only the gain scale for attitudes toward retirement was found to be statistically significant. Ultimately, Connolly concluded that

the results from this study supported participatory formats as viable alternatives to lecture/discussion formats as there were to be positive associations between perceived employee involvement in preretirement education with gains in attitude, behavior, and certain areas of information. These findings supported the participatory format utilized for the intervention workshop in the current study.

Summary. Preretirement education programming has been highly variable. Individuals and organizations have utilized both formal and informal methods to attain/disseminate information. While there was no singular definition of preretirement education, the ability to engage in some type of preretirement education did appear to be important. Further information regarding what needs to be included in preretirement education programs and what types of formats work best may lead to more realistic expectations and better outcomes for those retiring.

The variables of health, finances, occupational status, job involvement and commitment, leisure activities, gender, spousal patterns, and pre-retirement education and planning have been shown to be related to retirement in a variety of intricate ways. Many of these variables have interacted with each other and have provided layers of complexity to the understanding of how individuals experience retirement. This study has proposed that retirement self-efficacy is another component that needs to be considered as it may be an integral component in helping one successfully negotiate the retirement transition to find purposeful and affirmative life engagement upon entering this new life chapter.

Retirement Self-Efficacy

Self-Efficacy

Bandura's (1986) Social Cognitive Theory provides a self-agency framework for examining individual motivation, thought, and action. This extensive theory utilizes a model in which environmental events, personal factors, and behavior all operate as interacting influences and causes of each other. In other words, there is a dynamic interplay where the whole is greater than the sum of the parts. People are not merely driven by inner forces, nor are they simply shaped by their environment. Indeed, rather than an individual being controlled or shaped by the environment, this theory emphasizes human agency with the belief that "through cognitive self-regulation, humans can create visualized futures that act on the present; construct, evaluate, and modify alternative courses of action to secure valued outcomes; and override environmental influences" (Bandura, 2006, p. 164).

There are numerous mechanisms of human agency and according to Bandura (2005), none of these are more essential or pervasive than one's self-efficacy beliefs. Self-efficacy concerns one's judgment about whether she/he is capable of producing a desired effect or accomplishing a certain level of performance (Bandura, 1986). According to Bandura (2006), these beliefs affect people's goals and aspirations, their motivation levels, and their levels of perseverance when faced with adversity. They help determine how one perceives opportunities and obstacles. They also help shape individuals' outcome expectations, which are judgments of how likely their efforts will produce favorable or undesirable outcomes. Furthermore, Bandura (2006) has strongly asserted that efficacy beliefs affect one's quality of life in terms of emotional well-being

and also determine the choices that individuals will make which can profoundly affect their life course.

According to Bandura (1977, 1986), there are four major sources of efficacy information: 1) performance accomplishments; 2) vicarious experience; 3) verbal persuasion; and 4) physiological arousal. The first, performance accomplishments, is especially powerful because it is based on the individual's own mastery experiences, with successes building efficacy and failures reducing it. However, after strong efficacy expectations are developed, the negative impact of occasional failures is more likely to be diminished (Bandura, 1977).

When individuals form judgments about their abilities to accomplish a certain task based on their experiences of watching others perform it, they are said to be utilizing vicarious experience, the second major source of efficacy information (Bandura, 1977). According to Bandura, this source is less dependable and therefore, efficacy expectations generated by vicarious sources tend to be weaker and more vulnerable to change.

Verbal persuasion as a source of efficacy information is based on influencing human behavior by verbally suggesting a person can be successful with a particular task (Bandura, 1977). Again, this tends to have limits in terms of creating an enduring sense of self-efficacy. However, combining verbal persuasion with aids to improve performance are likely to motivate the individual towards greater effort and perhaps, better outcomes (Bandura, 1977).

Emotional arousal is the physiological basis that serves as the fourth source of efficacy information for individuals. Typically, it is discussed in terms of fear and anxiety surrounding one's performance or coping capabilities which can serve to diminish self

efficacy (Bandura, 1977). However, Bandura also points out that it is one's cognitive appraisal of the physiological arousal which affects their beliefs. Thus, some might appraise their state as being energizing, thus enhancing self-efficacy, whereas others might see it in a more threatening light, thereby diminishing self-efficacy levels.

The construct of self-efficacy (Bandura, 1986) has provided a framework for this study and has supported the importance of one's sense of retirement self-efficacy to her/his overall adjustment and well-being. Bandura has also suggested that self-efficacy is a psychological resource that can be developed, thus helping to justify the study's intervention (a strengths-based workshop) to do just that. Additionally, the workshop was intended to help individual's identify their strengths which tapped into the first source of efficacy, performance accomplishments. The workshop also utilized verbal persuasion by suggesting to participants the possibility of successfully carrying their strengths into retirement.

Retirement Self-Efficacy

Overview. Retirement self-efficacy, for the purposes of this study, has been defined by this author as one's belief, or confidence, in her/his ability to successfully negotiate the retirement transition to find purposeful and affirmative life engagement upon entering this new life chapter. Although limited in number, studies were found that examined the concept of self-efficacy in relation to retirement. Moreover, many of the variables previously discussed in the overview of the retirement literature section were found to be related to retirement self-efficacy. For example, positively related to retirement self-efficacy were financial variables such as income adequacy (Fretz, et al., 1989) and socioeconomic status (Neuhs, 1990), as well as health variables such as better

subjective health ratings (Fretz, et al., 1989; Neuhs, 1990) and positive changes in health behaviors (Wells & Kendig, 1999).

Additional studies indicated that while life satisfaction was positively related to retirement self-efficacy (Harper, 2005; Neuhs, 1990), anxiety and depression were negatively correlated to it (Fretz, et al., 1989). Higher retirement self-efficacy was also positively associated with job commitment and social support (Fretz, et al., 1989), as well as education level (Neuhs, 1990). Furthermore, higher levels of retirement self-efficacy were linked to earlier planned retirement dates (Taylor & Shore, 1995), more retirement readiness (Neuhs, 1990), and better attitudes toward retirement (Fretz, et al., 1989). Also, in an attempt to connect Bandura's (1977) explanation of vicarious sources of efficacy information with retirement self-efficacy, Harper (2005) found that having successful retirement role models, and a variety of them, were correlated to higher levels of retirement self-efficacy.

Retirement self-efficacy research. One study regarding retirement self efficacy used step-wise regression analysis to find that leisure planning was a predictor of retirement self-efficacy both prior to a retirement seminar ($R^2 = .30$, $p < .01$) and after ($R^2 = .36$, $p < .01$) (Taylor-Carter, Cook, & Weinberg, 1997). However, the seminar itself did not apparently affect retirement self efficacy which according to Taylor-Carter et al., may have been partially due to the seminar being primarily a lecture format. As reported earlier, Connolly (1992) indicated that individuals that engaged in a retirement seminar with a more participatory format reported higher levels of participation as well as perceived control over the retirement process than those that engaged in a lecture-

oriented session. Hence, a more participatory format, such as the one used in the current study, may have resulted in better outcomes for the participants.

Fretz et al. (1989) examined whether retirement self-efficacy was related to various feelings about retirement. Self-efficacy level was measured on a 7-point scale that asked whether the participant “thought they had the ability to adjust to retirement” (Fretz, et al., 1989, p. 303). To gauge self-efficacy strength, the investigators asked participants, “What do you believe are the chances, out of 100, that you will be able to adjust to retirement?” (Fretz, et al., 1989, p. 303).

Using a non-random sample of 108 men and 21 women from a large technology agency and major university, Fretz et al. (1989) found negative correlations between self-efficacy level and the variables of anxiety ($r = -.53$), depression ($r = -.51$) and job commitment ($r = -.23$). They also found positive correlations between self-efficacy level and income adequacy ($r = .23$), subjective health ($r = .27$), attitude towards retirement ($r = .42$), retirement planning ($r = .45$) and social support ($r = .30$). Participants’ self-rating of self-efficacy strength followed a similar pattern, but with lower correlations. Although the sample limitations required caution in generalizing results, and the self-efficacy measure was limited, these correlations pointed towards the notion that retirement self-efficacy was a factor related to retirement. The study also supported the idea that retirement self-efficacy interacted with other variables to indirectly influence various outcomes.

Taylor and Shore (1995) examined the contribution of a variety of personal, organizational, and psychological factors that could help predict the age at which one would retire. They used a sample of individuals employed in a large multinational firm in

the southeastern United States, with age, tenure, and retirement eligibility as a basis for selection. Results provided some evidence that more positive self-efficacy regarding retirement was related to earlier planned retirement dates ($r = -.25, p < .05$).

Generalizability of this sample to the greater population was limited as the sample held an over-representation of White individuals (89%) and men (82%).

Wells and Kendig (1999) completed a study that examined the associations between retirement, self-efficacy, and one's sense of coherence on health behaviors and well being. The study's sample pulled subjects from the Health Status of Older People (HSOP) survey of 1000 people, age 65 and over, living in the community. This was a probability sample with a 70% response rate of the eligible population. These investigators found that although there were more positive (and fewer negative) changes in health behaviors and well being associated with higher levels of self-efficacy, the correlation was low .10 ($n = 662, p < .01$). It should be noted, though, that when comparisons were made with comparable community surveys, the HSOP survey appeared to have a slightly higher than expected proportion of healthy and married people. Perhaps since this sample group was already healthier, there were fewer positive changes needed in health behaviors, thus the lower correlation between positive changes in health behaviors and retirement self-efficacy (Wells & Kendig, 1999).

Focusing more exclusively on retirement self-efficacy, Neuhs (1990) completed a study that utilized a more extensive measurement instrument, The Retirement Self-Efficacy Scale, to study retirement self efficacy. This instrument was modified slightly for her study by decreasing the number of questions from 31 to 27 after consulting with experts in the field of retirement studies. It measured self-rated confidence on a scale of 1

(very little) to 5 (quite a lot) in the following categories: 1) health; 2) financial; 3) activities; 4) governmental and pension regulations (e.g., applying for Social Security or pension benefits and Medicare); and 5) retirement itself (Neuhs, 1991). Positive correlations were found between retirement self-efficacy and the variables of educational level, occupation, socioeconomic status, life satisfaction, self-rated health, and readiness for retirement. In spite of the limitations imposed by the use of a non-random sample, the results were persuasive. The combination of these predictor variables (with retirement self-efficacy as the outcome variable) in a multiple regression model for the retired group in the study yielded an R of .60, and for the pre-retired group, an R of .57. These results supported the importance of considering retirement self-efficacy as a valid and possibly influential variable when examining retirement.

Also using the Retirement Self-Efficacy Scale, Harper (2005) conducted a study to examine relationships among retirement role model characteristics, retirement self-efficacy, and current life satisfaction among midlife workers. Her final sample consisted of 208 employees at a university in North Carolina between the ages of 45 and 60 that volunteered for the study. This was only a 23% response rate for the 939 packets that were mailed. Additionally, the participant demographics were only somewhat representative of the University mid-life worker population, and not representative of U.S. mid-life adult demographics (Harper, 2005). Harper found that retirement self-efficacy correlated with current life satisfaction (.52; $p < .01$), with the success of one's retirement role models (.36; $p < .01$), and with having a variety of role models (.18; $p < .01$). These results were viewed with care given the obvious threats to internal validity (e.g., research design) and to external validity (e.g., non-representative sample), and the

fact that the .18 correlation for variety of role models was fairly small. However, these results regarding self-efficacy appeared to be consistent with Bandura's (1986) theory that observing successful models, and a variety of models, can contribute to the development of self-efficacy.

Summary. While no study in this literature review has defined retirement self-efficacy exactly the same as in this proposed study (the belief or confidence in one's ability to successfully negotiate the retirement transition to find purposeful and affirmative life engagement), retirement self-efficacy has been supported as an important concept in terms of life satisfaction. These studies have also indicated that there may be ways to help develop one's retirement self-efficacy. Additionally, a range of variables that have been studied in terms of their relationships to retirement, such as finances and health, have also been associated with differing levels of self-efficacy. This study has proposed that positive affect is yet another variable that may be associated with retirement self-efficacy.

Positive Emotions

Positive Psychology

Positive psychology involves the study of positive emotions and character traits, and what facilitates them (Seligman, et al., 2005). According to Snyder and Lopez (2007, p. 3) it is the "scientific and applied approach to uncovering people's strengths and promoting their positive functioning". Whereas mainstream psychology is often characterized as focusing on dysfunction and negative behaviors, positive psychology concentrates on positive character traits and positive experiences (Linley & Joseph,

2004). The view that psychology focuses on what goes wrong with people rather than what goes right is reflected in the following passage:

... a search of contemporary literature in psychology as a whole found approximately 200,000 published articles on the treatment of mental illness; 80,000 on depression; 65,000 on anxiety; 20,000 on fear; and 10,000 on anger; but only about 1000 on positive concepts and capabilities of people. (Luthans, 2002, p. 697)

There was a time prior to World War II where psychology had three distinct undertakings. These were: “curing mental illness, making the lives of all people more productive and fulfilling, and identifying and nurturing high talent” (Seligman & Csikszentmihalyi, 2000, p. 6). Thus, identifying and nurturing people’s strengths to promote their positive functioning was considered to be a primary focus of mainstream psychology. Seligman and Csikszentmihalyi assert, though, that after World War II, the last two missions were overlooked for the first (curing mental illness) as those in the mental health professions ascertained that treating mental illness and research on pathology could acquire grants and help one earn a living (Seligman & Csikszentmihalyi, 2000).

Although the positive psychology movement appeared to lose influence following World War II, support has been found for it even prior to today’s current positive psychology movement. Lopez et al. (2006) completed a content analysis of four journals that had their foundations within counseling psychology and found that for the past 40 years, 23% or greater of the articles focused on the positive. This finding was consistent across those four decades. However, although these journals were rich with information that encouraged a positive perspective on psychology, there was still little that had been

done to operationalize, measure, or cultivate the various positive psychological constructs and processes that were common in the literature they reviewed (Lopez, et al., 2006).

Although small compared to mainstream psychology, there has been a growing base of research regarding positive psychology. The Character Strengths and Virtues classification book (CSV) developed by Peterson and Seligman (2004) generated three interesting empirical findings (as cited in Seligman, et al., 2005). One of these was that the rankings of the 24 character strengths and virtues were very similar from nation to nation and exhibited correlations ranging in the .80s. Another was that although a comparison of strengths profiles of U.S. adults and U.S. adolescents demonstrated overall agreement on ranking, this agreement was noticeably lower than that which was found between U.S. adults and adults from other nations. According to Seligman et al., this may have suggested that as we mature, we turn our attention to cultivating certain strengths such as beauty, authenticity, leadership, and open-mindedness, which were the strengths more common among adults. Seligman et al. also suggested that we must become more aware of how to keep certain strengths from eroding, such as hope, teamwork, and zest which were more common among U.S. youths than adults. The third finding reported was that strengths “of the heart” (i.e., zest, gratitude, hope, and love) were more strongly associated with life satisfaction than were cerebral strengths such as curiosity and love of learning.

Further testing the power of positive psychology, Seligman et al. (2005) conducted a random assignment, placebo-controlled test of five positive psychology interventions given over the internet to see if they made people lastingly happier. Using a convenience sample recruited through the internet, they found that two of the exercises

increased happiness and decreased depressive symptoms for six months. One exercise caused large positive changes for one month. The other two and the placebo caused positive, but only temporary effects. Seligman et al. also found an interaction effect in that if the exercises were more thoroughly completed and were completed beyond the prescribed one-week period, there were more positive gains for a longer term. Although the use of a convenience sample limited generalizability, using a random-assignment, placebo-controlled study facilitated greater internal validity (Gliner, Morgan, & Leech, 2009) which helped support these findings for the use of positive psychology in treating depression.

Seligman, Rashid, and Parks (2006) built upon the previous study by combining various exercises to create positive psychotherapy (PPT) for treating depression. Overall, they found that individual PPT with severely depressed clients led to greater symptom improvement and to more remission than did the usual treatment and treatment plus antidepressant medication. They also found that group PPT given to mildly to moderately depressed students led to greater symptom reduction and greater increases in life satisfaction than that found in the no-treatment control group. Additionally, this improvement lasted for at least one year.

These studies supported the tradition of positive psychology and its beneficial impact on counseling individuals and helping them to gain greater mental health and wellness. Additionally, there have been suggestions that the prevention of mental illness has much to gain from a positive psychology perspective.

Prevention researchers have discovered that there are human strengths that act as buffers against mental illness: courage, future mindedness, optimism, interpersonal skill, faith, work ethic, hope, honesty, perseverance, and the

capacity for flow and insight, to name several. Much of the task of prevention in this new century will be to create a science of human strength whose mission will be to understand and learn how to foster these virtues in young people. (Seligman & Csikszentmihalyi, 2000, p. 7)

Evidence of positive psychology's ability to facilitate growth and remediate and/or prevent mental illness has indicated that it may have great utility for those entering retirement. Positive psychology models may help individuals construct their next life chapter in ways that prevent negative outcomes while promoting positive ones.

Positive psychology has numerous theories and models for helping people. In an effort to narrow the scope towards the specific theories and constructs utilized in this study, Fredrickson's Broaden-and-Build Theory (Fredrickson, 2006) is introduced next. This theory and research supporting it, provide reinforcement for the psychological resource of retirement self-efficacy and its possible relationship to positive affect.

The Broaden-and-Build Theory

Within the field of psychology, much of the research on emotions has centered on negative emotions. One reason for this has been that negative emotions have tended to pose more problems for individuals and society (Fredrickson, 2006). Another reason, according to Fredrickson (2006), has to do with the research models of emotions that have generally centered on negative emotions. Negative emotions have been found to evoke specific action tendencies (e.g., fight or flight). However, the action tendencies evoked by positive emotions have typically been vague (Fredrickson, 2006, 2009).

In response to this, Fredrickson (2006) proposed the Broaden-and-Build Theory of positive emotions. In this theory, positive emotions serve to widen one's focus in terms of attention, cognition, and action. This allows one to take in new information and widen

her/his array of thoughts and actions (Fredrickson, 2006; Fredrickson & Branigan, 2005). This is the broadening effect. The theory goes on to indicate that the new flow of ideas that come from broadening then allows one to build upon physical, cognitive, social, and psychological resources. Additionally, broadening contributes to an upward spiral effect by facilitating more positive emotions, which then allow for more broadening and subsequently continued building of personal resources.

Following the idea that positive emotions engender cognitive broadening and the building of personal resources, it appears that this could influence individuals' perceptions of retirement and their self-efficacy in managing it. Having greater positivity may allow one to be more open to the possibilities that come with retirement. Also, with greater positivity comes the possibility of having more personal resources with which to negotiate retirement and the retirement transition. Although no research was found that connected positivity (a.k.a. positive affect in the current study) with retirement self-efficacy, it was conceivable that these two concepts were associated, and thus were examined in this study.

Positive Emotions Research

Overview. Although studies regarding the association of positivity with retirement were not found, research in support of positive emotions provided a compelling argument for its inclusion in investigating retirement and ways to make it a constructive part of people's lives. There were intriguing findings linking positivity to the ability for people to think more broadly about actions they would like to take (Fredrickson & Branigan, 2005) and have greater breadth of attention (Fredrickson & Branigan, 2005; Vermeulen, 2010; Wadlinger & Isaacowitz, 2006). In terms of

retirement, these findings were intriguing. If positive affect is linked to the broadening of one's ability to think of possibilities and engage in a greater repertoire of behaviors, then positive affect could allow a potential retiree to develop more options for negotiating retirement and generate more possibilities for purposeful and affirmative retirement activities.

There were also findings that demonstrated a connection between positivity and increased longevity (Danner, Snowdon, & Friesen, 2001) as well as greater resilience and the ability to thrive (Fredrickson, Tugade, Waugh, & Larkin, 2003). Additionally, there was evidence that a critical threshold of three positive emotions to one negative emotion was associated with individuals that seemed to flourish (Fredrickson & Losada, 2005). These findings supported the possibility that broadening engendered the building of psychological resources that allowed one to thrive. Retirement self-efficacy may be one such psychological resource.

Positivity and broadening. In a study conducted by Fredrickson and Branigan (2005), experiments were conducted with the purpose of determining if certain positive emotions (amusement and serenity) would widen individuals' breadth of attention and their thought-action repertoires relative to neutral emotional states. A nonprobability sample of 104 university students enrolled in an entry-level psychology course was used. Although the majority of participants were women and European American, tests for group differences were conducted with no statistically significant results encountered for either gender or ethnicity.

In randomly assigned groups, participants viewed film clips eliciting positive, negative, or neutral emotional states. Their breadth of attention was then measured using

a global-local visual processing task, “with high scores reflecting a global bias, which has been linked to a broadened scope of attention” (Fredrickson & Branigan, 2005, p. 319). It was found that the two positive emotion film clips combined yielded higher global bias scores compared to the neutral film and compared to the negative emotion films combined. Additionally, combined positive emotion film clips generated larger thought-action repertoires than did the neutral film and the combined negative emotion films. Overall, these results led Fredrickson and Branigan to suggest that people who experienced positive emotions tended to have greater breadth of attention as well as more thought-action desires than did individuals who experienced either negative or neutral emotions.

Another study probing the effects of positive emotions on broadening was conducted by Wadlinger and Isaacowitz (2006). Using eye tracking technology in a randomized experiment, they investigated if positive emotions increased the breadth of visual attention. Their sample consisted of 58 undergraduate students with a fairly equal proportion of males and females. The randomly assigned experimental group was induced into a positive mood before viewing a series of slides. Each slide had three images that were of similar intensity in terms of positive, negative, or neutral emotion. However, the intensity of the images between slides varied throughout the presentation.

The results from this study indicated that the experimental group, which had been provoked into a positive mood, tended to look more at the peripheral images of slides that were highly positive than did the control group. Additionally, participants in the experimental group also made more frequent visual saccades (rapid eye movements) than did the control group participants for almost all of the neutral, low positive, and medium

positive emotional slides. These results suggested that the experimental group generally displayed greater attentional breadth to positive and neutral visual images than did the control group, thus lending support to the broadening effect of positive emotions (Wadlinger & Isaacowitz, 2006).

Vermeulen (2010) also sought to examine the influence of positive and negative affect states on attentional processes. The study utilized pairs of words as visual targets and also introduced visual distractors (random strings of symbols or digits). Participants were instructed to type the first word they saw and then the second word. The idea was to see if one's positive or negative affectivity influenced their ability to report the second word.

Vermeulen (2010) hypothesized that because negative affect should have enhanced inhibition of distractors (as well as the second word), it would be negatively related to reporting of the second word. Positive affect, though, which favors a more holistic or broad processing style, should have reduced inhibitory responses to distractors (and the second word), and thus be positively related to increased efficiency of reporting the second word. Results indicated that participants with greater levels of negative affect were less efficient in reporting the second word and those with higher positive affect performed better (Vermeulen, 2010).

The studies by Fredrickson and Branigan (2005), Wadlinger and Isaacowitz (2006), and Vermeulen (2010) reinforced the assertion that positive emotions have a broadening effect. If one extrapolates this to retirement, it is possible that positive emotions may bring about more thought-action repertoires for those contemplating retirement. In other words, it may allow one to be more open to the possibilities that can

come with retirement. In terms of this study, then, it may have allowed those that participated in a workshop designed to build retirement self-efficacy to receive even greater benefit since they may have been more open to the process of discovery encountered during the workshop.

Positivity and building. It has been suggested that positivity not only holds the potential for broadening one's thought-action repertoires, but that it also can build upon one's psychological resources (Fredrickson, 2006) which may mitigate psychological distress and facilitate greater mental, and perhaps physical, health. From the Nun Study, Danner et al. (2001) utilized 180 autobiographies from sisters in two convents to examine if there was an association between emotional content in their writings and mortality risk in later life. The participants took their final vows and formally joined their congregations between the years of 1931 and 1943. They had been instructed to compose short autobiographies prior to their final vows when they were between the ages of 18 and 32 ($M = 22$). Coding for positive, negative, and neutral content was completed without any knowledge of the health or functional abilities of the participants in their later years.

Results indicated a strong association between positive emotional content included in the young-adulthood autobiographies and participant longevity six decades later (Danner, et al., 2001). One analysis created survival curves adjusted for age and education. These survival curves revealed that the median age for death was 86.6 years for participants that had scored in the lowest quartile for number of positive emotional sentences and 93.5 for those in the highest quartile, a difference of almost 7 years.

Unfortunately, in this study there were many unanswered questions about the temperaments, personalities, and emotional tendencies of participants since there were no

measures available of these in the Nun Study (Danner, et al., 2001). Information on these variables may have provided a clearer picture about why the positive emotion content written in the participants' earlier lives had such a strong relationship to their longevity. In the absence of this information, Danner et al. speculated "that individual differences in emotional content in the autobiographies reflect life-long patterns of emotional responses to life events" (p. 811). This conjecture was compatible with the Broaden-and-Build Theory (Fredrickson, 2006) in that the nuns' positive emotions may have helped to build psychological resources which in turn may have helped to promote positive emotions.

To further support the connection between positive emotions and enhanced psychological resources, Fredrickson et al. (2003) completed a study to assess the benefits of trait resilience and positive emotions following the September 11th attacks in the U. S. They hypothesized that positive emotions (a) buffered resilient people from depression, and (b) helped resilient people to thrive. Although a nonprobability sample was utilized, thus limiting the study's generalizability, interesting information arose.

Using Kenny, Kashy, and Bolger's (as cited in Fredrickson, et al., 2003) four steps to determine whether mediation occurred, Fredrickson et al. (2003) first found appropriate negative correlations between trait resilience and depressive symptoms and positive correlations between trait resilience and positive emotions. Following this, they then completed computations that determined that positive emotions were negatively associated with depressive symptoms even when controlling for trait resilience ($\beta = -.45$, $p < .01$). They further went on to conclude that positive emotions were indeed a mediator between resilience and depressive symptoms because trait resilience was no longer a significant predictor of depressive symptoms when controlling for positive emotions.

These findings suggested that positive emotions may have acted as a buffer for resilient individuals against depression (Fredrickson, et al., 2003).

Using the same procedures, Fredrickson et al. (2003) also supported their hypothesis that resilient individuals' ability to thrive during crises would be mediated by the experience of positive emotions. They found positive correlations between trait resilience and residual resources (a composite score of pre and post crisis psychological resources), and between trait resilience and positive emotions. Next, it was found that positive emotions were associated with increases in psychological resources when trait resilience was controlled ($\beta = .48, p < .01$). And finally, the results demonstrated that trait resilience was no longer a statistically significant predictor when positive emotions were controlled, thus indicating that positive emotions were a mediator. These findings supported the "build" part of the Broaden-and-Build Theory in that positive emotions were a mediator in thriving after a crisis (Fredrickson, et al., 2003).

These studies supported the assertion that positive psychology can help with the prevention of mental illness as well as the promotion of greater mental health (Seligman & Csikszentmihalyi, 2000). In terms of the current study, then, it was proposed that higher levels of positive affect may be associated with greater development of the psychological resource of retirement self-efficacy. Additionally, using an intervention that emphasized strengths, and was based within the positive psychology framework, could have further developed retirement self-efficacy and facilitated the upward spiral of positive emotions and psychological resources as predicted in the Broaden-and-Build Theory (Fredrickson, 2006).

Positivity and flourishing. Connecting the ideas of positivity, building of psychological resources, and human flourishing, Fredrickson and Losada (2005) introduced the idea of a positivity ratio, which is the ratio of pleasant feelings/emotions to unpleasant ones. They then investigated if there was a threshold in the positivity ratio necessary for humans to flourish. “To *flourish* means to live within an optimal range of human functioning, one that connotes goodness, generativity, growth, and resilience” (Fredrickson & Losada, 2005, p. 678). According to Keyes, less than 20% of adults in the United States have been found to flourish (as cited in Fredrickson & Losada, 2005).

Extending upon the Broaden-and-Build Theory and upon Losada’s non-linear dynamics model of team performance, Fredrickson and Losada (2005) predicted that a positive to negative emotions ratio of 2.9 or above would characterize individuals that flourished. They utilized two separate samples to test their hypothesis. The first sample (N = 87) was composed of first and second-year students from a large Midwest university; 60% were female and 40% were male. The second sample (N = 101) consisted of first year students from the same university; 54% were female and 46% were male. Sample one was screened for depression resulting in the exclusion of half of them.

Flourishing mental health was calculated via a measure of positive psychological and social functioning, and the frequency of positive and negative emotions experienced daily by the participants were tallied to determine the positivity ratio for the month (Fredrickson & Losada, 2005). It should be noted that different thresholds for positive and negative emotions were used to help mitigate negativity bias (the idea that bad is stronger than good) and positivity offset (the principle that most people feel at least a mild level of positive affect much of the time) (see Fredrickson & Losada, 2005, pp. 683-

684). The mean positivity ratios for flourishing versus nonflourishing individuals were then compared. The sample one positivity ratio mean for flourishing individuals was 3.2 positive emotions to one negative emotion, and for non-flourishing, it was 2.3 to 1. For sample two, the positivity ratio was 3.4 and 2.1, respectively. Not only was the positivity ratio different for the flourishing versus non-flourishing groups in traditional linear terms, but it also supported the dynamic systems approach taken that determined that a 2.9 or above ratio of positive to negative emotions was necessary for humans to flourish (Fredrickson & Losada, 2005).

Summary. Positive psychology has demonstrated promise in the facilitation of mental health and wellness. The previously discussed studies exhibited support for the field of positive psychology, including Fredrickson's Broaden-and-Build Theory (2006). Following the view that positive emotions broaden one's thought-action repertoires and can build one's personal psychological resources, this study proposed that positive affect may be associated with retirement self-efficacy. For example, those participants with higher levels of positive affect may have been able to conceive of more and better retirement possibilities which in turn may have had an effect on, and been affected by, the psychological resource of self-efficacy.

Strengths-Based Approaches

Strengths

Positive psychology foundation. In his model of positive psychology, Seligman (2002) proposed that the concept of "happiness" can be separated into three components: (a) positive emotion (the pleasant life); (b) engagement (the engaged life); and (c) meaning (the meaningful life). The pleasant life consists of past, present, and future

positive emotions as well as learning the necessary skills to intensify these emotions and increase their duration. The engaged life is one that “pursues engagement, involvement and absorption in work, intimate relations, and leisure” (Seligman, 2002, p. 777). The intense psychological state that is associated with highly engaging activities is commonly referred to as flow (Csikszentmihalyi, 1997). With flow, time passes without notice and the individual is completely immersed in the activity. One way to enhance flow is to identify one’s top talents and strengths, and find ways to use them more (Seligman, et al., 2006). The meaningful life involves just that; pursuing meaning in one’s life. To do this, individuals must use their strengths and talents to be a part of, and contribute to, something that is bigger than themselves (Seligman, et al., 2006). These “bigger” institutions can be religion, politics, family, community, nation, or some other positive societal or cultural establishment. While broken down into these three categories in order to provide a more operational definition of happiness, it is obvious that they overlap. Additionally, based on Seligman’s (2002) model, it appears that an individual’s strengths play a role in life engagement and meaning.

Strengths defined. This leads one to the need for a more in-depth understanding of strengths. Clifton and Anderson (2002) defined a strength as “the ability to provide consistent, near-perfect performance in a given activity” (p. 8). It is important to note not only the *near-perfect* portion of this definition, but also the *consistent* aspect of it. If one cannot do something very well, and do it consistently, then it is not a strength (Clifton & Anderson, 2002).

Buckingham (2001, 2005, 2006) also utilized this definition and then expanded upon it. He indicated that a strength is simply that (an activity) which makes you feel

strong. Feeling strong may mean different things to different people, but it often includes a sense of exhilaration and deep satisfaction, whereas feeling weak leaves one feeling drained or depleted (Buckingham & Clifton, 2001). By using this definition, it becomes apparent how a strength differs from a skill or those things that you do well. Obviously, there are things that an individual can do well, but they cannot be considered strengths if they do not make the person feel strong. This also draws in the consistency aspect of the definition because if one can do something well, but it is not something she/he likes to do, or perhaps it even weakens her/him, then most likely one's performance will not be consistently excellent.

Another term that is often confused with strengths is talent. Talent is the raw material behind a strength and is any recurring pattern of thought, feeling, or behavior that can be productively applied (Buckingham & Clifton, 2001; Clifton & Anderson, 2002). These recurring patterns are thought to be "natural" and this assertion is supported and clarified by the field of neuroscience in which it is held that the human brain organizes itself by strengthening frequently used synaptic connections (Hodges & Clifton, 2004). As these connections strengthen, lesser-used (weaker) connections fade away. This is not meant to imply that one cannot change. It just means that developing weaker connections takes an enormous amount of time, effort, and energy, whereas spending time and energy on further developing already strong connections (e.g., strengths) can provide a greater return on investment. In other words, by developing and concentrating on those talent areas that make one feel strong, strengths can be developed and excellence can follow (Buckingham & Clifton, 2001; Clifton & Anderson, 2002). Additionally, since strengths play a role in engagement and meaning in life (Seligman,

2002), it follows that as strengths are developed and utilized, greater engagement and meaning in life can occur.

To develop one's talents into strengths and then best utilize them, individuals must first be able to identify their talents and then integrate them into their self-concepts (Hodges & Clifton, 2004). Detection of talents can be done in a variety of ways, including tracing them back to spontaneous reactions, yearnings, rapid learning, and deep satisfactions (Buckingham & Clifton, 2001; Hodges & Clifton, 2004). Spontaneous reactions are those subconscious, immediate reactions to a given situation. For example, there are those who display traces of talents to take charge in certain situations, or those that immediately volunteer to help someone in need. Yearnings may include those childhood passions that never went away. Rapid learning reveals traces of talents when one learns new skills incredible quickly and relatively easily in certain areas. Finally, deep satisfactions provide clues to talents because when one uses her/his strengths or talents (those strongest synaptic connections), it feels good. Of course, all of these must be remembered within the context of what a talent is; a naturally recurring pattern that is productively applied. Thus, if something feels good but is not productive, such as feeling good when someone else fails, then it is not a talent (Buckingham & Clifton, 2001; Clifton & Anderson, 2002).

Another excellent way to pinpoint strengths is to think about an activity done recently or in the past, which made one feel strong (Buckingham, 2006). Zeroing in on this, and providing rich details around it, puts the identification of a strength into a contextual framework. Repeating this with multiple activities that make one feel strong will help to expose patterns or themes of strengths. Additionally, the Clifton

StrengthsFinder 2.0 is another way to narrow down patterns of strengths. This assessment provides an individual with her/his top five strength themes (actually “talent themes”) as well as strategies for affirming and developing them into strengths.

This study utilized a strengths-based workshop in an effort to improve retirement self-efficacy by facilitating individuals’ identification of strengths and promoting the continued use of those strengths as guiding considerations in the retirement transition. Both the Clifton StrengthsFinder 2.0 as well as additional interactive activities were utilized to help participants identify their top strengths. Throughout the workshop, participants identified and clarified their strengths, and gained more language for describing them. They were urged to use this language to share their strengths with others to help them to discover more possibilities for purposeful and affirmative activities in retirement. It was anticipated that armed with more insights regarding their strengths, participants would develop greater retirement self-efficacy.

Strengths-based intervention research. There has been an emerging body of empirical support for the utility of strengths-based approaches as discussed earlier with Buckingham’s work and with the Clifton StrengthsFinder 2.0. One area, employee engagement, has appeared to be strongly linked to strengths-based practices. The relationship between employee engagement and various business outcomes has been so relevant that the Gallup Organization developed the Q¹² which is composed of twelve questions (including an item regarding employee opportunities to do what she/he does best) that measure various dimensions of employee engagement (Gallup, 2008). Gallup has also maintained the Q¹² database which links employee engagement to relevant business outcomes like retention, productivity, profitability, customer engagement, and

safety. Data included in this database has come from 137 countries in seven major world regions.

Harter, Schmidt, and Hayes (2002) completed a meta-analysis that examined the relationship between employee satisfaction and engagement and the business-unit outcomes of customer satisfaction, productivity, profit, employee turnover, and accidents at a business-unit level. They found relationships that were substantial enough to have practical value. One employee engagement item in particular, where participants indicated if they had the opportunity to do what they do best, had a strong conceptual link to strengths-based development.

A study that helped illustrate this link was conducted by Connelly (2002) utilizing a strengths-based intervention with the objective of building effective work teams in an auto parts warehouse in southern California. Within a year of the intervention, there was a 6% increase in per-person-productivity at the warehouse. These results were in contrast to the previous three years where quarterly productivity varied by less than 1% positively or negatively.

Another study utilizing 65 organizations that were all using employee engagement interventions was completed by Clifton and Harter (2003). They utilized four companies that used strengths-based development as their intervention group. The control group consisted of the other 61 organizations that had not used strengths-based development. From year one to year two, the intervention group exceeded the control group on employee engagement ($d = .65$), and from year one to year three the results were even more dramatic ($d = 1.15$). Utility analyses were also conducted and showed an increase in annual per employee productivity of more than \$1,000. This equated to more than \$1

million for an organization of 1,000 employees. Although the lack of random assignment interfered with internal validity, and thus causation was restricted, the practical significance of this study was considerable.

Another example of the connection between employee engagement and strengths-based practices was seen in a study by Black (2001) which utilized a strengths-based intervention at a hospital in Florida. In 1998, this hospital ranked in the bottom quartile of Gallup's database that tracks employee engagement. Following the hospital's implementation of strengths-based practices that allowed employees to thrive according to their top talents, the employee turnover rate declined by almost 50% in two years. Furthermore, the employee engagement scores had caused the hospital to rise to the top quartile of the Gallup database. Additionally, the hospital's percentile ranking in patient satisfaction, as ranked amongst peers, had improved by 160%.

While not addressing employee engagement, a quasi-experimental, pretest-posttest study by Cantwell (2005) investigated whether a strengths-based approach (versus a traditional approach) to teaching an introductory college-level public speaking course resulted in different levels of academic engagement among students. The experimental group had four class sessions that were devoted to the strengths-based intervention which included use of the Clifton StrengthsFinder and the *StrengthsQuest* textbook (Clifton & Anderson, 2002). Furthermore, the instructor provided strengths-based feedback and encouraged students to consider ways to take advantage of their strengths in completing course assignments.

While results were interpreted cautiously due to the quasi-experimental nature of the study, they indicated that students in the strengths-based course reported significantly

higher levels of academic engagement at semester's end as compared to the students in the course that was taught using traditional methods (Cantwell, 2005). These students also had higher levels of proficiency in course-related outcomes.

Summary. Although strengths-based approaches have been applied in numerous ways, and there was evidence of its association with employee engagement as well as academic engagement, its application in terms of retirement planning appeared to be absent. However, the beauty of strengths is that they are not job or role specific (Buckingham & Clifton, 2001; Clifton & Anderson, 2002). They can be applied in innumerable ways and in a variety of roles, including activities and roles one turns to in retirement. It is expected that if using one's strengths can lend itself to greater engagement in one's employment, then utilizing one's strengths in retirement could also lead to better life engagement. First, though, clarity regarding what one's strengths are and how to apply them in a variety of capacities must be attained. This, then, may lead to greater confidence in one's ability to successfully negotiate retirement.

Literature Review Summary

The construct of retirement has been increasingly studied, possibly due to an increasing aging population. Certain factors, such as health, financial status, occupational status, job involvement/commitment, leisure activities, gender, spousal patterns, and pre-retirement education and planning have appeared regularly in the literature and have demonstrated varying associations with retirement. These variables and their associations with each other have provided a layered complexity to the understanding of retirement. Apparently less studied in relation to retirement have been the variables of retirement self-efficacy and positive affect.

While limited in number, there have been studies regarding retirement self-efficacy that have supported its inclusion in the study of retirement. Bandura's (1986) construct of self-efficacy has provided a well-known framework for examining one's retirement self-efficacy as well ideas for implementing ways to develop self-efficacy. Further research in the area of retirement self-efficacy and its relation to other variables, as well as the facilitation of retirement self-efficacy is needed.

Within the field of positive psychology, Fredrickson's concept of positivity and her Broaden-and-Build Theory (2006) have held promise in the facilitation of mental health and wellness. The basis of her theory has been that positive emotions can broaden one's thought-action repertoires and can build upon one's personal psychological resources. Consequently, this study proposed that positivity may be associated with psychological resource of retirement self-efficacy. Furthermore, it posited that utilizing strengths-based approaches inspired by the field of positive psychology could develop and enhance the psychological resource of retirement self-efficacy.

Currently, the literature regarding retirement has revealed little information regarding ways to improve retirement self-efficacy. Additionally, no literature was found that contained information on if identifying and learning how to apply one's strengths could facilitate higher levels of retirement self-efficacy. Furthermore, positive affect has apparently not been studied in terms of retirement or retirement self-efficacy. Consequently, this study provided an intervention to facilitate the identification and clarification of strengths in the hopes of developing greater retirement self-efficacy. Additionally, this study examined the relationship between retirement self-efficacy and

positive affect and evaluated if certain combinations of factors predicted gains in post-workshop retirement self-efficacy levels.

CHAPTER 3: METHOD

Research Approach and Rationale

Quantitative research allows for collecting data about relationships and differences between various human variables and can be helpful in pointing towards useful interventions. The research questions addressed in this study not only added to the knowledge base surrounding retirement, positive psychology, and retirement self-efficacy, but they possibly facilitated the forward progress of individuals as they began to construct the next chapter of their lives in retirement. The research questions for this study looked to examine the results of an intervention as well as find associations between an assortment of variables.

The following sections in this chapter provide clarity regarding specific research questions and hypotheses. Additionally, the research design is provided, both in terms of experimental and associational designs. The sample, measures used, study validity and reliability, study procedures, and data analysis procedures are also described.

Research Questions

Difference Question

Is there a difference between groups receiving and not receiving the workshop in regard to the average retirement self-efficacy gain scores as measured by a revised confidence subscale of the Career Transitions Inventory (CTI) (Heppner, 1991)?

Associational Questions

Are there associations between retirement self-efficacy and trait positive affect?

- a) Is there an association between trait positive affect [as measured by the Positive Affect (PA) scale of the PANAS (Watson, Clark, & Tellegen, 1988)] and *pre-workshop* retirement self-efficacy [as measured by the revised confidence subscale of the CTI (Heppner, 1991)]?
- b) Is there an association between trait positive affect (as measured by the PA scale of the PANAS) and *post-workshop* retirement self-efficacy (as measured by the revised confidence subscale of the CTI)?

Complex Associational Question

Is there a combination of intervention (workshop or no workshop), trait positive affect (as measured by the PA scale of the PANAS; Watson, et al., 1988), gender, and self-rated health that predicts retirement self-efficacy gain scores (as measured by a revised confidence subscale of the CTI; Heppner, 1991) better than any one predictor variable alone?

Research Design

The general research design used in this study was a quasi-experimental design that examined if a workshop utilizing activities to identify, clarify, and make meaning of one's strengths influenced changes in retirement self-efficacy scores based on a revised confidence subscale of the CTI (Heppner, 1991). More specifically, a waitlist comparison group design was utilized (Gliner, et al., 2009). By using this design, all participants were able to receive the workshop, but half were in a waitlist group. The waitlist group initially served as the control group, but received the same workshop at a later date. This design

was considered practical because the intervention was brief and it was ethical and practical to expect participants to wait for the treatment (Gliner, et al., 2009).

Accordingly, the intervention was an approximately 4-hour workshop and the waitlist group received the workshop three weeks after the first group, which mitigated the possibility of participant attrition. Both groups were assessed in terms of retirement self-efficacy (using a revised version of the confidence subscale of the CTI) and trait positive affect and negative affect (based on the PANAS) prior to the workshop. After the initial treatment group received the workshop, both groups were assessed again for retirement self-efficacy (one week post-workshop). Later, the waitlist group was given the intervention, a sound ethical practice and in line with counseling ethics, and then measured again for retirement self-efficacy (one week post-workshop). These additional post-workshop measures allowed the waitlist group to also serve as a treatment group, and allowed for a larger sample size for the associational questions described earlier. The waitlist comparison group design has been diagrammed as follows (O₁, O₂, O₃ indicate measurement of retirement self-efficacy. X indicates intervention. ~X indicates no intervention):

Experimental group (receiving workshop first) O₁ X O₂

Waitlist group (receiving workshop later) O₁ ~X O₂ X O₃

(Please note that the PANAS was only given once, at O₁ using a general time frame instruction to measure trait positive and negative affect. Further details have been provided regarding this instrument later in this chapter.)

This study also used an associational approach to consider the construct of positive affect and how it was related to retirement self-efficacy. The associational

approach also examined predictor variables of retirement self-efficacy. The predictor variables included: the intervention, positive affect scores (as measured by the PA scale of the PANAS), gender, and self-rated health.

Internal Validity

It was hoped that the participants in this study could be randomly assigned to the experimental and waitlist groups. According to Gliner and Morgan (2000), this would have been the best way to assure equivalence of groups prior to introducing the independent variable (i.e., the treatment). While random assignment was attempted, it was not possible to achieve enough recruits, thus this aspect was dropped and participants were allowed to sign up for the workshop date of their choice. This allowed for the recruitment of at least 30 participants for each group.

One possible threat to the equivalence of groups was attrition, especially of members in the waitlist group since they had to wait for their workshop. To mitigate this possibility, the following steps were taken: (a) both groups received the same content in the workshop and were informed this would happen, (b) the time between workshops was minimized, and (c) the length of the workshop was kept to a 4-hour maximum as longer than this might have caused participants to opt out.

Attrition of participants was minimal. Only one participant in the initial treatment group was unable to attend the workshop. All participants in the waitlist group completed all measures up through the second observation, and five waitlist members did not participate in the workshop.

Another possible threat to internal validity for this study was repeated testing. This was a possibility because an identical pretest and posttest was used to measure

retirement self-efficacy and thus there was the chance it would “alert participants about the study and how they might behave” (Gliner & Morgan, 2000, p. 89). Consequently, participant scores may have increased simply because they were more familiar with the assessment and because they thought they “should” be better. Thus, they may have rated themselves higher.

Sample

The target population for this study was individuals considering retirement and in the process of exploring what they wanted to do after leaving their current occupation. The sampling frame chosen for this study was comprised of individuals that had made the decision to retire within the next three years and were beginning to explore what they wanted do in their next life chapter. The sample was also delimited to those individuals self-reporting enough financial security to not need to find full-time employment upon leaving their current position. The actual sample was composed of those individuals that followed through with their participation in the study. Data from participants that did not complete both O₁ and O₂ assessments were fully excluded from the study. Further details regarding the sample in terms of control, initial treatment, and waitlist treatment groups has been provided in chapters four and five. See the procedures section in this chapter for further details on subject selection.

External Validity

Recruitment for the sample pulled from a wide variety of organizations in northern Colorado, including a university, school districts, and county organizations, thus allowing for the possibility of having a wide range of professions represented. However, the group attained for this study exhibited more homogeneity as most were employed by

the university and because of the previously mentioned delimitations regarding financial security and retirement time frame. Additionally, this was a convenience sample of voluntary participants which, in addition to the expected homogeneity of the group, lowered the population external validity of the study and thus the ability to generalize beyond the sample. Towards that end, demographic data was gathered to help determine some characteristics of the sample and to provide that information to consumers of the study.

Outcome Measures

Two assessments and one questionnaire were utilized to collect data from the participants (see Appendix A). Prior to the first workshop, all participants received an adapted version of the confidence subscale of the CTI (Heppner, 1991) and the Positive and Negative Affect Schedule (PANAS) (Watson, et al., 1988) via an internet data collection system. Additionally, included on the internet survey were questions to collect demographic information as well as a self-rating of health. Prior to the workshop, participants were e-mailed instructions on how to access the Clifton StrengthsFinder 2.0, which was an online assessment. This particular assessment identified themes of strengths for individuals and its results were later used in the workshop.

One-week after the workshop, the experimental and waitlist groups took the adapted confidence subscale of the CTI again. After the participants in the waitlist group received their workshop, they again completed the adapted confidence subscale of the CTI one week post-workshop.

Measurement Reliability and Validity

Career Transitions Inventory. Important factors that had the potential to affect the internal validity of the study were the reliability and validity of the measurement instruments used. To obtain a measure of retirement self-efficacy, a minimally adapted version of the confidence subscale of the CTI was utilized. The CTI, a 40-item Likert-type instrument, was created to assess an individual's resources and barriers in making a career transition (Heppner, Multon, & Johnston, 1994). Career transition was defined by Heppner et al. as any of the following types of changes: (a) task change, whereby one shifts from one set of tasks to another within the same job and location; (b) position change, in which one changes jobs, but only has a slight alteration in job tasks; and (c) occupation change, whereby one transitions from one set of duties to a new set of duties. Of these three definitions, retirement fit into the third type of career transition where the individual was giving up their previous work duties for new tasks in a new setting.

The initial norming sample for the CTI involved 300 adults that met the defined criteria of being in career transition. Although a wide range of ages and educational levels were included, it was primarily composed of individuals from the Midwest that were Caucasian (Heppner, et al., 1994; Kirnan, 2009). The CTI originally had six constructs: (a) self-efficacy, (b) self-versus-relational focus, (c) motivation, (d) rational beliefs, (e) risk-taking, and (f) control. The original construct of self-efficacy centered on "belief in one's ability to actually make a career transition successfully" (Heppner, et al., 1994, p. 56). Following factor analysis, this construct was renamed as confidence to better describe the meaning of the construct for the person taking the inventory, but was very similar in content to the original category of self-efficacy (Heppner, et al., 1994).

Higher scores on this factor indicated more confidence in one's abilities to make a successful career change.

This subscale was adapted, with permission from the author, primarily by substituting the word "retirement" for "career" as appropriate (see Appendix A). There were 11 questions with a 6-item Likert-type scale that ranged from strongly disagree to strongly agree. The lowest possible subscale score was 11 and the highest was 66.

CTI reliability. Two forms of support were identified by Heppner et al. (1994) for the reliability of the CTI. Cronbach's coefficients α and test-retest coefficients were calculated for each of the subscales obtained through factor analysis as well as for the total score. Cronbach's alpha for the confidence subscale was .83. The confidence scale test-retest reliability was .79. It was noted that the sample used for test-retest reliability was not the same as the original sample. Instead, test-retest reliability estimates across a 3-week time interval were obtained by administering the CTI to 43 masters' students in counseling psychology (ages 29-57) (Heppner, et al., 1994).

CTI validity. There were also various forms of validity evidence for the CTI. Evidence for content validity included the grounding of the construction of this assessment in theory while also utilizing outside expert analysis of the assessment items (Heppner, et al., 1994; Kirnan, 2003). In addition, factor analyses were completed and according to Morgan, Gliner, and Harmon (2006), evidence based on internal structure (previously considered a part of construct validity) can be supported by factor analysis. The five-factor solution that was obtained by factor analyses accounted for 44.5% of the variance of the final 40-item CTI version. Convergent and discriminant construct validity evidence were also supported by the administration of the CTI, the Hope Scale, and the

MVS (My Vocational Situation) to a third sample of adults that were in career transition (Heppner, et al., 1994). This sample (n = 104) was largely composed of females and the participants were involved in involuntary layoffs from manufacturing firms. Correlations between subscales and total scores were in expected directions. In particular, the CTI confidence subscale correlated to the barriers MVS subscale ($r = .53$; $p < .01$) and the agency subscale of the Hope Scale ($r = .36$; $p < .01$).

Positive and Negative Affect Schedule. The PANAS, a 20-item self-report Likert-type measure, was used to measure positive affect and negative affect. It was developed by Watson, Clark, and Tellegen (1988) with 10 items (emotions) for each scale (positive affect and negative affect). Individuals were asked to rate the extent to which they had experienced that emotion from 1 (not at all) to 5 (extremely) using the general time frame instructions (i.e., to what extent they generally felt that way). Different time-frame instructions can be used with the PANAS.

It was posited by Watson et al. (1988) that positive affect and negative affect were distinct dimensions. According to the authors, high positive affect was characterized by high energy, concentration, and pleasurable engagement, while low positive affect was depicted by feelings of lethargy or sadness. High negative affect reflected distress and was accompanied by aversive mood states, whereas low negative affect included calmness and serenity (Watson, et al., 1988).

PANAS reliability. The following information on reliability and validity came from Watson et al. (1988) unless otherwise noted. The PANAS has been used with the various time instructions of: moment, today, past few days, week, past few weeks, year, and general. Since this study measured trait positive affect, the instructions for the

“general” time frame were utilized. The PANAS had internal consistency reliabilities (coefficient alphas) ranging from .86 to .90 for the PA scale (.88 for the general time instruction) and .84 to .87 for the NA scale (.87 for the general time instruction). Additionally, correlations between the PA and NA scales were low for each of the time instructions and ranged from -.12 to -.23 (-.17 for the general time instruction), thus giving support to quasi-independence of the scales. Test-retest reliability over an 8-week interval was also measured using 101 undergraduates from Southern Methodist University in Texas. Stability tended to increase when higher time frames were used (e.g., year and general) as shown in Table 3.1. Watson et al. suggested that “the stability coefficients of the general ratings are high enough to suggest that they may in fact be used as trait measures of affect” (p. 1065), hence the use of the general time instructions in this study to measure trait positive affect.

Table 3.1

PANAS Test-Retest Correlations According to Time Instructions

Time instructions	PANAS PA Scale	PANAS NA Scale
Moment (you feel this way right now, at the present moment)	.54	.45
Today (you have felt this way today)	.47	.39
Past few days (you have felt this way during the past few days)	.48	.42
Week (you have felt this way during the past week)	.47	.47
Past few weeks (you have felt this way during the past few weeks)	.58	.48
Year (you have felt this way during the past year)	.63	.60
General (you generally feel this way, how you feel on the average)	.68	.71

Note. Adapted from “Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales” by D. Watson, L. A. Clark and A. Tellegen, 1988, *Journal of Personality and Social Psychology*, 54, p. 1066.

PANAS validity. Various types of evidence for validity for the PANAS were also presented by Watson et al. (1988). Evidence for scale validity used factor analyses based on the set of 60 mood terms reported by Zevon and Tellegen (as cited in Watson, et al., 1988). Results indicated that the convergent correlations ranged from .89 to .95 (depending on time instructions), and the discriminant correlations ranged from -.02 to -.18 (depending on time instructions). Item validity was also discussed and utilizing factor analyses, it was determined that all of the PANAS items had strong primary loadings on the appropriate PA or NA factor (.50 and above) and thus were “good markers of their corresponding factors” (Watson, et al., 1988, p. 1066).

Additional evidence for construct validity was provided through the examination of correlations between the PANAS scales and measures of related constructs, specifically the Hopkins Symptom Checklist (HSCL), the Beck Depression Inventory (BDI), and the State-Trait Anxiety Inventory State Anxiety Scale (A-State). Correlations between the PANAS NA and these measures indicated correlations of .51 and upwards (Watson, et al., 1988). Since PA was not considered to be the opposite of NA, negative correlations were not necessarily expected. However, some were found as shown in Table 3.2.

Table 3.2

Correlations between PANAS, HSCL, BDI and A-State

Measure	PANAS	n	Correlations with PANAS NA	Correlations with PANAS PA
	Time Instructions			
HSCL	Today	398	.74	-.19
	Past few weeks	53	.65	-.29
BDI	Past few weeks	880	.56	-.35
	Past few days	208	.58	-.36
A-State	Past few weeks	203	.51	-.35

Note. From “Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales” by D. Watson, L. A. Clark and A. Tellegen, 1988, *Journal of Personality and Social Psychology*, 54, p. 1068.

All subjects were college students except for the HSCL “Today” group which was an adult sample.

Watson et al. (1988) posited that these negative correlations indicated the complexity of depressive and anxiety symptoms that the BDI and A-State measured. Further evidence was discovered for this complexity in a study by Crawford and Henry (2004), where they found negative relationships between positive affect (as measured by the PANAS) and depression and anxiety. Positive affect was found to be even more strongly (negatively) correlated to depression than anxiety. Additionally, although both positive and negative affect each explained a proportion of the variance unique to depression, positive affect explained even more.

There was concern about the usability of this assessment with non-student populations since the primary norming sample involved college students. Watson et al. (1988) attempted to address this shortcoming by including adult and clinical samples. Although they found comparable results, they suggested further data were desirable. Towards that end, Crawford and Henry (2004) included reliability testing in their study. They utilized a non-clinical sample that was broadly representative of the general adult

population in the United Kingdom ($n = 1,003$). Although this was not a random sample, they did recruit participants from a wide variety of sources including commercial and public service organizations, community centers, and recreational clubs. The mean age of the sample was 42.9 years, with a range of 18-91 years. The mean number of years of education was 13.7. It was found that the internal consistencies using Cronbach's alpha were .89 for the PA scale and .85 for the NA scale, which lent further support for the reliability of this instrument with adult populations.

Intervention Assessment Reliability and Validity

Clifton StrengthsFinder. The Clifton StrengthsFinder (CSF) was developed by the Gallup Organization under the guidance of Donald Clifton and was grounded in over 30 years of studying success in business and educational functions (Lopez & Tree, 2009). It was not designed for employee selection purposes or for mental health screening. Rather, it was created to be used as a developmental tool to help individuals identify innate talents that could be developed into strengths (Asplund, Lopez, Hodges, & Harter, 2007). The CSF underwent a recent revision (Clifton StrengthsFinder 2.0) in which the number of item pairs on the questionnaire was reduced from 180 to 177 (Lopez & Tree, 2009).

The CSF, an online assessment, has been considered to be appropriate for adolescents and adults with at least a tenth-grade reading level (Lopez & Tree, 2009). Following completion of the assessment, study participants received a report listing their top five themes of raw talent in rank order, as well as suggestions for possible actions that could be undertaken to help develop the themes into strengths. Summary scores were not

provided. However, Lopez and Tree (2009) reported that a listing of all 34 themes in rank order can be requested through a personal feedback session with a Gallup consultant.

Evidence for measurement reliability and validity for the CSF have been provided in the following sections. However, it is important to keep in mind that this assessment was not used as a measurement tool in this study. Instead, it was used as an instrument for identifying and defining participants' strengths as part of the workshop.

CSF reliability. Lopez and Tree (2009) stated that the reliability of the CSF was adequate for its intended purpose of identifying and helping with the development of strengths. They indicated that internal consistency coefficient alphas were at or above .70 for 23 of the 34 themes, and only 3 themes had alphas below .65. Additionally, test-retest reliability of the 34 themes were between .60 and .80 for a 6-month interval (Lopez & Tree, 2009).

The stability of one's themes over time was considered an important issue since those that take the assessment were only provided their top five themes with no scores. Theme stability has been complicated because of the 278,256 possible unique top five theme combinations and a change in response to one item on certain scales can move them in or out of the top five (Lopez & Tree, 2009). Obviously, retaining one's top five themes in the same order would be an unlikely prospect. Lopez and Tree reported, though, that 52% of the students in a college sample retained at least three themes in their top five and 35% retained two. They also reported that only 11% retained just one of their top five themes and a meager 2% did not retain any of their same themes from the first measurement to the second.

CSF validity. Donald Clifton and other researchers at Gallup spent over three decades studying traits that led to excellence in an assortment of areas, including schools and a wide variety of work environments, and it was their research that provided the foundation for this assessment (Lopez & Tree, 2009). It also provided evidence for content validity due to their expertness in the area of strengths.

To support evidence for construct validity, Asplund, et al. (2007) reported that average item correlations were computed for each theme using 601,049 respondents in the CSF database. The results from these computations indicated that items positively related to their corresponding themes in a consistent manner (Asplund, et al., 2007). Lopez and Tree (2009) further indicated that the average item cross-total correlations had higher positive relationships with their respective themes than they did with other themes, which suggested a lack of redundancy among themes.

Schreiner (2006) conducted a study providing evidence for construct validity of the CSF. In this study, Schreiner found numerous positive relationships between various CSF themes and scales on the California Personality Inventory (CPI-260) as well as the 16PF. For example, the CSF theme of Achiever was related to the Achievement scales of the CPI-260 ($r = .47$) and the Woo theme was correlated to Extraversion on the 16PF ($r = .62$). Additionally, 137 other predicted relationships between CSF themes and their counterparts on the CPI-260 and 16PF were also found and 93.4% of these predictions had statistically significant correlations (Lopez & Tree, 2009; Schreiner, 2006). Furthermore, Harter and Hodges found numerous expected correlations between various CSF themes and McCrae and Costa's Big 5 constructs (as cited in Asplund, et al., 2007).

Summary of Measurement Reliability and Validity

All assessments used in this study were self-report measures. Thus, getting accurate measures of positive affect and retirement self-efficacy could have been compromised, especially if participants leaned toward socially desirable responses. Overall, though, there was adequate reliability and validity evidence for both the confidence subscale of the CTI and the PANAS. Additionally, there was also adequate evidence of reliability and validity for the CSF for its intended purpose, which was to help individuals with the identification and development of their themes of strengths (Asplund, et al., 2007).

Procedures

Subject Selection

An adult volunteer sample of participants was recruited through a variety of organizations. Participants in the study were delimited to those individuals proposing to retire within three years and indicating that they did not have financial security needs that would require them to work full-time upon leaving their current position. Furthermore, participants needed to be able to independently access the internet.

Human resources offices and other appropriate individuals in northern Colorado were contacted to receive permission to distribute fliers regarding the study and intervention workshop. Where possible, information was also included in organizational communication streams (e.g., electronic listservs). Information distributed included the following: title of the workshop, title of the research study, eligibility requirements for participation in the study, study timelines, and appropriate contact information. Potential

participants were encouraged to share information about the workshop with other pre-retirees.

Participants that meet the inclusion criteria were assigned to the workshop date they preferred with the first workshop group designated as the experimental group and the later workshop group as the waitlist group. The waitlist group initially served as the control group, but was provided the same workshop three weeks later. No compensation was provided for participants, and the workshop and all assessments were delivered at no cost to the participants. Prior to entering the study, all participants signed a consent form to participate in a research study (see Appendix B). No deception was used in the study. Data from participants that dropped out of the study or did not complete at least all measurements up through the second administration of the adapted confidence subscale of the CTI were fully excluded from the final results of the study.

Data Collection

Two assessments were utilized to collect data from the participants. Prior to the first workshop, all participants in both the experimental and waitlist groups received an adapted version of the confidence subscale of the CTI (Heppner, 1991) containing 11 Likert-type scale questions. They also received the PANAS (Watson, et al., 1988) containing 20 Likert-type scale questions, and a short questionnaire regarding demographic information and self-rated health questions. All of these instruments were provided via an online survey tool. One week following the workshop, the experimental and waitlist groups again took the adapted confidence subscale of the CTI. When the participants in the waitlist group received the workshop at a later date, they again

completed the adapted confidence subscale of the CTI one week following their workshop.

The duration of participant involvement in the study was four to six weeks. Completion of all assessments, including the Clifton StrengthsFinder 2.0, took individuals up to 1 to 2 hours and the workshop was approximately 4 hours. Total approximate time commitment for individual participants was at most, 5 to 6 hours.

Intervention

A workshop with the goal of helping participants identify, explore, and clarify their strengths (those activities that made them feel strong/gave them passion or purpose) was the study intervention utilized to facilitate retirement self-efficacy. Participant results from the Clifton StrengthsFinder 2.0 (CSF 2.0) were reviewed and integrated into the workshop. Prior to the workshop, but after completing requisite measurement assessments, participants received a code to take the CSF 2.0 online. This instrument has been reported to take approximately 30-45 minutes to complete (Lopez & Tree, 2009). Participants then printed out and brought their results to the workshop. The waitlist group participants did not receive a code for the CSF 2.0 until they had completed the second measurement of the adapted subscale of the CTI. This was done to avoid any influence taking the CSF 2.0 would have had on the retirement self-efficacy measurement.

The workshop was four hours in length. During the workshop, the concept of strengths was defined and discussed to help participants better understand strengths as those activities that make one feel strong, rather than just as activities at which one does well. Participants were encouraged to identify and use language that worked best for them in lieu of “strong”, such as those activities that made them feel most alive,

passionate, purposeful, etc. Discussions were also included regarding the paradigm shift of focusing on and developing strengths versus concentrating on the remediation of weaknesses.

Information regarding the CSF 2.0 and the results that participants received was reviewed and discussed in both large and small task groups. Various individual and interactive activities and discussions were incorporated throughout the workshop to assist individuals in further identifying, defining, clarifying, and exploring their strengths. Additionally, structured activities were provided that assisted participants in developing their strength themes into more personalized statements that better defined and/or clarified activities that made them feel strong.

Consequently, during the workshop, participants were provided with stimuli to explore and clarify their strengths, develop more language around those strengths, and give voice to their individual strengths. They were provided with avenues to practice talking about their strengths and find ways in which they had previously applied them, as well as stimulated to think about ways in which they would like to move forward and apply those strengths in their next life chapter of retirement.

Risks and Benefits

Any risks involved in this study were minimal. However, because participants took assessments involving psychological constructs, there was a slight potential for psycho-emotional harm. Participants were informed that they could contact the primary investigator and/or co-investigator for helping services resources should they have any concerns for their psychological health. Participants were made aware, both through the

consent form, and as appropriate throughout the duration of the study, that participation was entirely voluntary and they could withdraw at any time without consequence.

There were also potential, and intended, benefits for participants. By taking the CSF 2.0, participants were provided with their top five themes of strengths/talents. Their CSF 2.0 results also included ways to further develop these themes. Additionally, the workshop facilitated further identification, definition, clarification, and exploration of strengths. Through the workshop, it was hoped that greater retirement self-efficacy would be developed by participants, which would then have the potential to positively impact their retirement transition.

Confidentiality

Precautions were taken to facilitate confidentiality of the data. However, because the intervention involved a group workshop, no guarantees were made that information brought up in the workshop would be kept confidential by other participants. Participants were made aware of this in the consent form. Additionally, at the start of the workshop and during the workshop, attention was brought to the confidential and personal nature of the information being discussed and the importance of not sharing identities or personal information of others outside of the confines of the workshop. During the consent form process, participants were also made aware that any instances of child abuse or neglect, or threats of harm to self or others, would be reported.

To help ensure confidentiality of data, a variety of methods were employed. Each participant was given a study code to utilize on the measurement instruments and questionnaires which allowed for their names, e-mails, and any other identifying information to not be connected to the data gathered. If a participant lost their code over

the course of the study, they were instructed to contact the co-investigator for it. These codes were kept with the participants' signed consent forms. The information connecting the person with their code was kept in a locked site separate from all data gathered. This locked site was only made accessible to the primary investigator and the co-investigator.

The online survey instrument used to gather data was a secured and encrypted tool. All data collected online was kept on a password protected computer. No individual participant's information was shared with anyone.

Data Analysis

The data from this study can be used to inform individuals contemplating retirement as well as those that may work with these individuals. These may include, but are not limited to: counselors, career counselors, human developmentalists, and others in the human services fields. Additionally, the results from this study added additional material to inform the areas of retirement self-efficacy, positive psychology, and strengths-based approaches. Tables, figures and text were utilized as appropriate in disseminating the information gained from this study and effect sizes were reported.

Analysis of Difference Question

To help assess the effects of the strengths workshop on retirement self-efficacy, a gain score approach was utilized. Per Morgan et al. (2006), this was the most straightforward approach for a mixed design with a between groups independent variable (the intervention) and a repeated measures independent variable. Gain scores were created by subtracting the pre-workshop retirement self-efficacy scores (as measured by the CTI; Heppner, 1991) from the post-workshop retirement self-efficacy scores within each group. This then created just one independent variable with two levels (the treatment

and waitlist group). The gain scores became the dependent variable. It was noted that this approach should be used with caution, especially if there was not evidence of reliability of the measurement instrument, which would affect the reliability of the gain scores (Morgan, et al., 2006). However, as discussed previously, there was sufficient evidence for reliability of both the PANAS and the CTI.

Per Morgan, Gliner, and Harmon (2006), the proper analysis for the gain scores approach was an independent samples *t*-test which tested whether the two groups' mean gain scores were equal. The three assumptions of the *t*-test were (a) independence, (b) homogeneity of variance, and (c) normality. Since the data recorded from the participants was not affected by the performance of other participants, the first assumption was met. This was considered to be the most serious assumption (Gliner & Morgan, 2000). The Levene test helped to determine homogeneity of variance and skewness was checked for normality, with no apparent violations. Additionally, the *t*-test has been noted to be very robust to violations of normality and homogeneity of variance (Gliner & Morgan, 2000).

Analysis of Basic Associational Questions

Both the PANAS and the CTI utilized Likert-type scales that provided interval data. Thus, to analyze the associations between retirement self-efficacy and positive affect, Pearson's product-moment correlations were utilized. Assumptions for the Pearson correlation were (a) the two variables have a linear relationship; (b) scores on one variable are approximately normally distributed for each value of the other variable and vice versa; and (c) outliers can have a big effect (Morgan, Leech, Gloeckner, & Barrett, 2004). Upon exploring the data, there were no apparent violations of these assumptions. Correlations of interest included the associations of: (a) positive affect and

pre-workshop retirement self-efficacy and (b) positive affect and post-workshop retirement self-efficacy.

Analysis of Complex Associational Question

Unfortunately, bivariate correlations do not tell the larger story of how variables may combine to predict possible outcomes. Accordingly, to investigate if there was a combination of variables that predicted retirement self-efficacy gains better than any one predictor variable alone, multiple regression was utilized. Assumptions for multiple regression included: (a) there is a linear relationship between each predictor variable and the dependent variable; (b) errors are normally distributed; (c) variance of residuals is constant; and (d) there is minimal multicollinearity (Morgan et al., 2004). No violations of these assumptions were apparent. While there were some intercorrelations between predictor variables, they were not large, thus multicollinearity was not a concern.

Multiple regression was desirable because it made it possible to combine independent variables to produce predictions of a dependent variable and because it helped to separate the effects of those independent variables (Allison, 1999). Specifically, the predictor variables of type of treatment (workshop or no workshop), trait positive affect scores, gender, and self-rated health were evaluated and combined to produce the best prediction of retirement self-efficacy gains.

Summary

This study proposed that development of retirement self-efficacy was an important process for the retirement transition. It also purported that retirement self-efficacy was possibly related to an individual's level of positive affect. Moreover, by

helping individuals identify and define their strengths, it was believed that greater feelings of retirement self-efficacy would ensue.

This study sought to discover if a workshop that utilized an approach to help individuals identify, clarify, and explore those activities that provided them with feelings of strength and passion helped to develop their retirement self-efficacy. This study also examined the relationship between retirement self-efficacy and positive affect, and evaluated if some combination of factors (intervention, positive affect, gender, and self-rated health) helped to predict post-workshop retirement self-efficacy gains.

Due to the variety of areas being addressed, and to obtain as rich of a picture as possible, quasi-experimental and associational research approaches were used within the quantitative tradition. A quasi-experimental waitlist comparison group design was used to evaluate if a strengths-based workshop facilitated higher ratings of retirement self-efficacy. Associational approaches utilizing Pearson's product-moment correlations were used to help address the relationships between retirement self-efficacy and positive affect. Additionally, multiple regression was utilized to allow for a richer picture of the data in terms of possible combinations of variables that predicted gains in retirement self-efficacy.

CHAPTER 4: RESULTS

Introduction

A variety of statistical analysis procedures were utilized to investigate the data obtained in terms of the difference and associational questions asked. Within this chapter, a description of the participants is provided, followed by analysis of each research question.

Description of Participants

The participants in this study were individuals that had made the decision to retire within the next three years and were beginning to explore what they wanted to do in their next life chapter of retirement. These individuals self-reported they were comfortable enough with their level of financial security to not need to find full-time employment following retirement. Since a waitlist experimental design was used, the breakdown of participant numbers has been explained in careful detail and a visual representation has been provided in Figure 4.1.

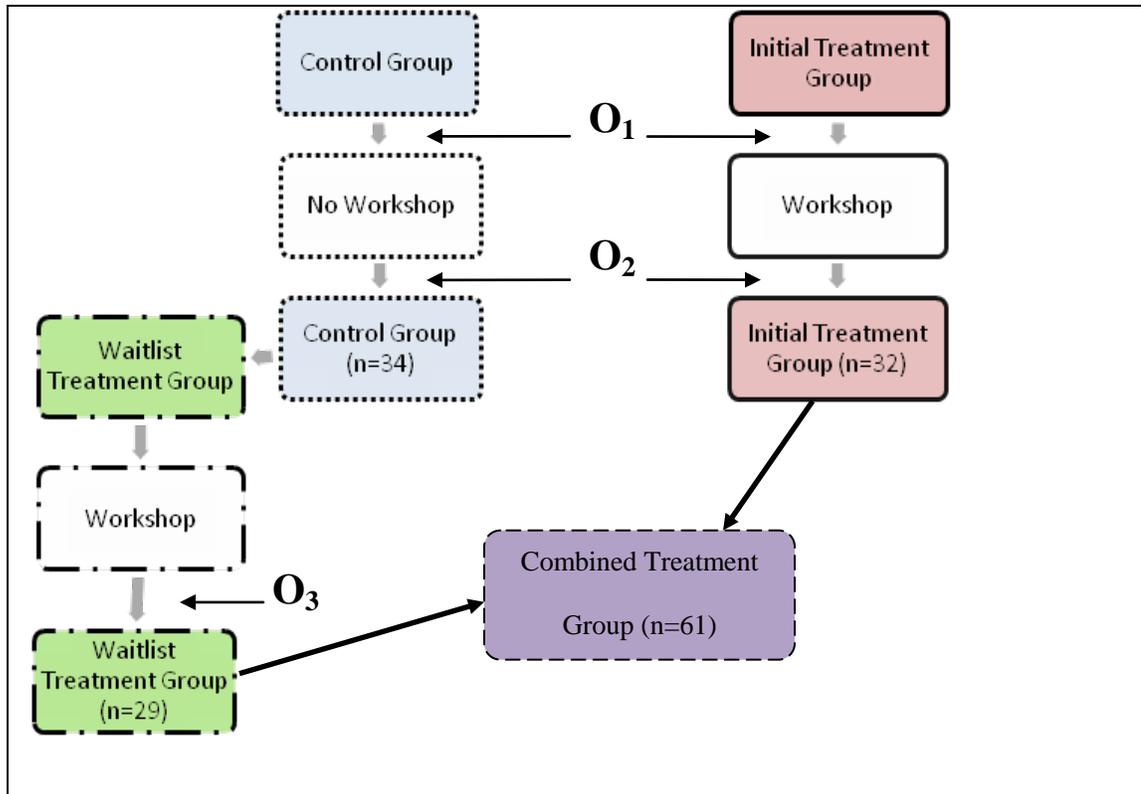


Figure 4.1 Flow chart of study procedures and data analysis groupings with sample sizes. O_1 = first measurement, O_2 = second measurement, O_3 = third measurement. Control group became waitlist group following second measurement and prior to waitlist group workshop.

There were 34 participants that served as the control group. All of the participants in the control group completed the initial measurements for retirement self-efficacy (adapted confidence subscale of the CTI; Heppner, 1991), positive and negative affect (PANAS; Watson, Clark, & Tellegen, 1988), demographics, and self-rated health, as well as the retirement self-efficacy measure given after the initial treatment group's workshop. Those in the control group that continued on in the study and attended the retirement workshop given at a later date as well as completed the post-workshop retirement self-efficacy measure following their workshop, comprised the waitlist treatment group ($n = 29$).

There were 32 participants in the group receiving the first workshop (hereafter referred to as initial treatment group). These participants completed the pre and post-workshop retirement self-efficacy scales, the PANAS, and measures regarding demographics and self-rated health.

Since this was a waitlist comparison group design, the participants in the first and second workshop were combined in some analyses to form a combined treatment sample group. There were 61 participants in the combined treatment group (34 from the initial treatment group and 29 from the waitlist treatment group). The demographic breakdown of participants has been provided for all groups (control, waitlist treatment, initial treatment, and combined treatment) in Table 4.1.

Table 4.1

Demographic Frequencies and Percentages by Group

Variable	Control Group (n=34)		Initial Trmt. Group (n=32)		Waitlist Trmt. Group (n=29)		Combined Trmt. Group (n=61)	
	Freq	%	Freq	%	Freq	%	Freq	%
Gender								
Male	14	41.2	15	46.9	12	41.4	27	44.3
Female	20	58.8	17	53.1	17	58.6	34	55.7
Race/Ethnicity								
Asian	1	2.9	1	3.1	1	3.4	2	3.3
Hispanic or Latino/a	0	0	1	3.1	0	0	1	1.6
White	33	97.1	30	93.8	28	96.6	58	95.1
Education								
High school or GED	3	8.8	1	3.1	2	6.9	3	4.9
Some college	3	8.8	3	9.4	2	6.9	5	8.2
2-year degree	0	0	1	3.1	0	0	1	1.6
4-year degree	3	8.8	8	25	3	10.3	11	18.0
Graduate degree	25	73.5	19	59.4	22	75.9	41	67.2

Note. The waitlist treatment and control groups were composed of the same individuals. There were five fewer participants, though, in the waitlist treatment group due to attrition. The combined treatment group was a combination of the initial and waitlist treatment groups.

The control group (n = 34) consisted of 41% males and 59% females. Ninety-five percent of the participants self-identified as White. This was a highly educated group with approximately 73.5% of participants holding a graduate degree and only 9% of this group holding a high school diploma or GED. The mean age was 59 years with participants ranging from 47 to 66 years of age. The breakdown of the demographics for the waitlist treatment group, which was comprised of the same individuals in the control group (minus the loss of five participants), was considerably similar to the control group.

The initial treatment group (n = 32) consisted of approximately 47% males and about 53% females. All but two participants self-identified as White. Again, this was a well-educated group, with approximately 59% holding graduate degrees and 25% holding undergraduate degrees. The mean age of this group was about 61 years with a range of 48 to 70 years.

As can be seen from the previous information, these two groups did not appear to differ greatly. When combining the two groups to form the combined treatment group (excluding those not participating in the workshop and/or not completing the post-workshop retirement self-efficacy measure; n = 61), the breakdown of the demographics remained similar. Males composed 44% of this combined treatment group and females composed 56% of it. In terms of race/ethnicity, the vast majority self-identified as White (95%). Approximately 67% of this group held graduate degrees and 18% held undergraduate degrees. The mean age of the final treatment group was approximately 60 years with a range of 47 to 70 years.

Measurement Scores by Gender

Descriptive statistics based on the sample consisting of all individuals completing all study assessments and the workshop intervention (n = 61) have been provided by gender for self-rated health, positive affect, negative affect, and pre and post-workshop retirement self-efficacy in Table 4.2. Males and females both scored an average of 13 out of 15 possible points in terms of self-rated health. Self-rated health scores were an aggregate based on three Likert scale items ranging from one to five points, with higher scores indicating better self-ratings of health. Men scored only two points lower on positive affect overall (M = 36) and less than one point lower on negative affect (M =

15.6) than women ($M = 38$ and 16.4 , respectively). Males and females had almost identical means on pre-workshop retirement self-efficacy (49.9 and 50 , respectively) and on post-workshop retirement self-efficacy (53 and 53.2).

Table 4.2

Measurement Mean Scores by Gender

Assessment	Female (n = 27)		Male (n = 34)	
	Mean	SD	Mean	SD
Self-Rated Health	13.47	1.58	13.26	1.40
Positive Affect	38.06	4.94	35.67	6.15
Negative Affect	16.44	5.03	15.63	4.12
Pre-Workshop RSE	50.03	7.56	49.89	8.21
Post-Workshop RSE	53.24	7.52	52.96	7.35

Note. RSE denotes Retirement Self-Efficacy.

Measurement Scores by Group

Table 4.3 provides information regarding mean scores on self-rated health, positive affect, negative affect, and pre and post-workshop retirement self-efficacy for the control, initial treatment, waitlist treatment, and combined treatment groups. Self-reported health, positive affect, and negative affect mean scores were very similar across groups. However, the control group had a lower average score ($M = 48$) on the pre-workshop retirement self-efficacy measure than did the initial treatment group ($M = 50$) and the waitlist treatment group ($M = 49$). The waitlist treatment group also made greater gains following their workshop ($M = 54$) than did the initial treatment group ($M = 52$). This has been discussed further in this chapter in the sections addressing the research questions, as well as in the next chapter.

Table 4.3

Measurement Mean Scores by Group

Measure	Control/(Waitlist) ^a Group (n=34; 29)		Initial Trtmt Group (n=32)		Combined Trtmt Group (n=61)	
	M	SD	M	SD	M	SD
Self-Reported Health	13.74(13.69)	1.26(1.26)	13.09	1.65	13.38	1.50
PA	36.44(36.83)	5.49(5.71)	37.16	5.56	37.00	5.59
NA	15.53(15.10)	3.79(3.61)	16.97	5.29	16.08	4.63
Pre-Workshop RSE	48.44(49.48)	7.90(7.33)	50.41	8.27	49.97	7.79
Post-Workshop RSE	(54.17) ^a	(7.10) ^a	52.16	7.62	53.11	7.39

^a Means and SDs in parentheses are for the waitlist treatment group. The Post-Workshop Retirement Self-Efficacy (RSE) Mean and Standard Deviation are based on measurement after the group had received the workshop (n = 29). PA denotes positive affect. NA denotes negative affect.

Results Analysis of Research Questions

Research Question One

Research question one asked if there was a difference between groups receiving and not receiving the workshop in regard to the average retirement self-efficacy gain scores as measured by an adapted confidence subscale of the CTI (Heppner, 1991).

Initial analysis. In testing for differences between the control group and the initial treatment group, an independent samples *t*-test was utilized using gain scores following the first post-test of retirement self-efficacy as the dependent variable. As can be seen in Table 4.4, no significant difference was found in the mean gain scores between the control and treatment groups ($p = .13$). However, since a waitlist comparison group design was utilized, the treatment sample group was enlarged by adding the posttest scores of the waitlist participants following their workshop. Subsequently, the control

group had $n = 34$ and the combined treatment group had $n = 61$. This comparison indicated a statistically significant difference between the groups, $t(93) = 2.58$, $p = .012$, $d = .55$. Inspection of the two group means indicated that the average gain score for the control group ($M = -.09$) was significantly lower than the average gain score for the combined treatment group ($M = 3.15$). The effect size, $d = .55$, was considered to be a typical, or medium, effect size in the behavioral sciences (Cohen, 1988).

Table 4.4

Contrast of Retirement Self-Efficacy Gain Scores for Control and Treatment Groups

Group	n	Mean	SD	t(df)	p	Cohen's d	95% CI	
							LL	UL
Initial Trtmt Control	32 34	1.75 -.09	5.24 4.52	1.53(64)	0.13	0.38	-0.56	4.24
Combined Trtmt Control	61 34	3.15 -.09	6.5 4.52					

Note. CI = confidence interval; LL = lower limit, UL = upper limit.

Additional analysis with paired t -test. To further analyze and investigate differences between pre- and post-workshop retirement self-efficacy, a paired samples t -test was utilized. The paired, or correlated, t -test compared each individual's pre-workshop retirement self-efficacy scores with their post-workshop retirement self-efficacy scores to determine if there were significant differences. It was determined that this test was appropriate to run since pre and post-workshop retirement self-efficacy scores were correlated at 0.64 for the combined treatment group.

As can be seen in Table 4.5, the paired samples t -test indicated that the post-workshop retirement self-efficacy scores were on average significantly higher than the pre-workshop scores for the combined treatment group, $t(60) = 3.78$, $p < .001$, $d = .41$.

However, while the waitlist treatment group had a significant difference in pre and post-workshop retirement self-efficacy scores, $t(28) = 3.4, p = .002, d = .65$, the initial treatment group did not quite reach statistical significance, $t(31) = 1.89, p = .068, d = .22$.

Table 4.5

Paired Samples t-Test of Retirement Self-Efficacy Scores (RSE) Pre and Post-Workshop

Pair	Mean	SD	Paired Differences				Cohen's d	95% CI	
			Mean	SD	t (df)	p		LL	UL
Pair 1									
post-workshop RSE (n=61)	53.11	7.39							
			3.15	6.50	3.78(60)	<.001	.41	1.48	4.81
pre-workshop RSE (n=61)	49.97	7.79							
Pair 2									
post-workshop RSE (n=29)	54.17	7.1							
			4.69	7.44	3.4(28)	.002	0.65	1.86	7.52
pre-workshop RSE (n=29)	49.48	7.33							
Pair 3									
pre-workshop RSE (n=32)	52.16	7.62							
			1.75	5.24	1.89(31)	.068	0.22	-.14	3.64
post-workshop RSE (n=32)	50.41	8.27							

Note. Pair 1 is the combined treatment group. Pair 2 is the waitlist treatment group. Pair 3 is the initial treatment group.

Additional analysis with Mixed ANOVA. Due to the differences in post-workshop retirement self-efficacy scores of the waitlist group ($M = 54$) versus the initial

treatment group ($M = 52$), Mixed ANOVA was run to further investigate differences and possible interactions between the control, initial treatment, and waitlist treatment groups in terms of post-workshop retirement self-efficacy scores. Results indicated a significant main effect of time (pre to post-workshop retirement self-efficacy scores), $F(1, 92) = 12.69$, $p < .001$, partial $\eta^2 = .12$. This effect was qualified, however, by a significant interaction between time and group, $F(2, 92) = 5.39$, $p = .006$, partial $\eta^2 = .105$. This indicated that differences in pre and post-workshop retirement self-efficacy scores were influenced by whether the participant was in the control, initial treatment, or waitlist treatment group. Specifically, as indicated in Figure 4.2, those in the waitlist treatment group made greater retirement self-efficacy gains following their workshop than did the initial treatment group. The control group made no gains, on average ($M = -.09$).

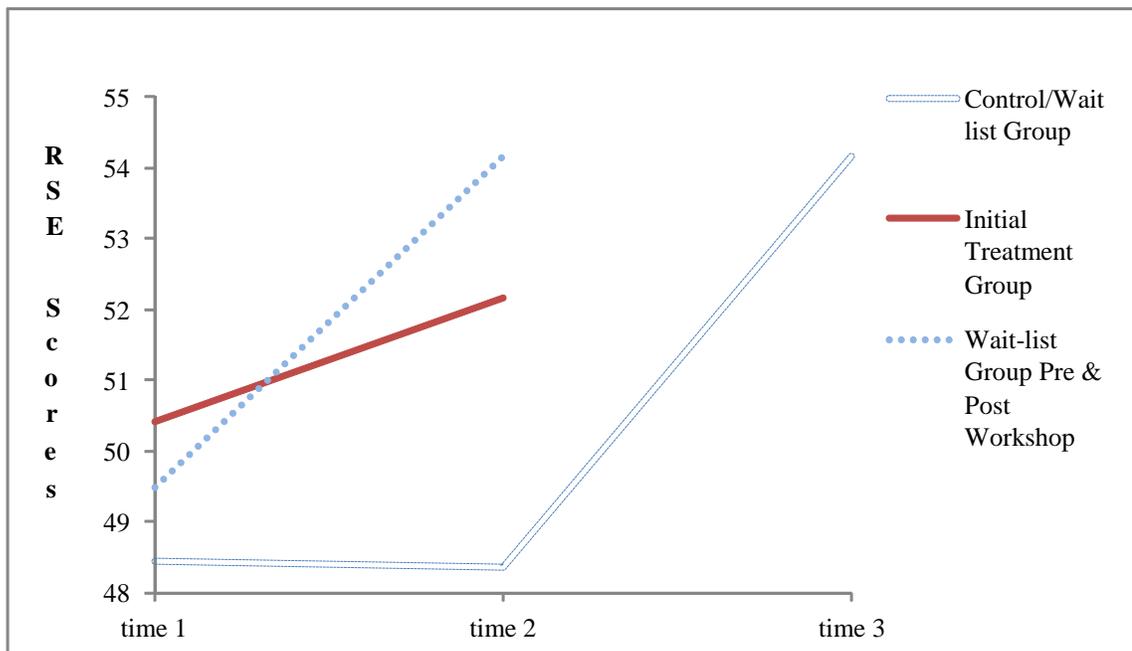


Figure 4.2. Interaction effects between initial treatment group and waitlist group. Time 1 measurement was initial Retirement Self-Efficacy (RSE) prior to any workshops. Time 2 measurement was RSE following initial treatment group's workshop (control did not receive workshop). Time 3 measurement was RSE following the waitlist treatment group's workshop and was only given to this group. The blue-dotted line represents pre-workshop/post-workshop RSE for the waitlist group as it would look transposed over the pre-workshop/post-workshop RSE for the initial treatment group.

Summary. A variety of statistical analysis procedures were utilized to more thoroughly investigate differences between groups receiving and not receiving a strengths-based workshop in regard to their average retirement self-efficacy gain scores. There was partial support for the idea that those participating in a strengths-based workshop made better gains in retirement self-efficacy than those that did not. However, these results were viewed with caution since there were significant differences in retirement self-efficacy gain scores between the initial treatment group and the waitlist treatment group.

Research Question Two

Research question two sought to explore possible associations between retirement self-efficacy and trait positive affect. More specifically the following questions were asked:

- a) Is there an association between trait positive affect [as measured by the PA scale of the PANAS (Watson, et al., 1988)] and *pre-workshop* retirement self-efficacy [as measured by the revised confidence subscale of the CTI (Heppner, 1991)]?
- b) Is there an association between trait positive affect (as measured by the PA scale of the PANAS) and *post-workshop* retirement self-efficacy (as measured by the revised confidence subscale of the CTI)?

Initial analysis. When looking at correlations between positive affect and retirement self-efficacy, the combined treatment group was utilized (n = 61) which provided a larger sample size and more statistical power. When comparing the pre-

workshop means for retirement self-efficacy, there was a statistically significant positive correlation between positive affect and retirement self-efficacy, $r(59) = .257, p < .05$. This indicated that about 6.6% ($r^2 = .066$) of the variance in pre-workshop retirement self-efficacy was predicted from positive affect. There was also a positive correlation between post-workshop retirement self-efficacy and positive affect, $r(59) = .29, p < .05$. This indicated that about 8.4% ($r^2 = .084$) of the variance in post-workshop retirement self-efficacy was predicted from positive affect.

Since the waitlist group demonstrated a greater gain in retirement self-efficacy following the workshop, results were again broken down by group which resulted in mixed results (see Table 4.6). When looking at the correlations by group, neither the initial treatment group nor the waitlist treatment group demonstrated statistically significant correlations between *pre-workshop* retirement self-efficacy scores and positive affect. However, as discussed previously, when treatment groups were combined, the correlation reached statistical significance.

Table 4.6

Intercorrelations for Retirement Self-Efficacy (RSE) and Positive Affect (PA) by Group

Measure	Combined treatment Group (n=61)	Waitlist Treatment Group (n=29)	Initial Treatment Group (n=32)
	PA	PA	PA
PreWorkshop RSE	.257*	0.246	0.265
PostWorkshop RSE	0.29*	.417*	0.194

* $p < .05$

Contrasting results occurred between groups when looking at positive affect and *post-workshop* retirement self-efficacy. The waitlist group demonstrated a much higher correlation between post-workshop retirement self-efficacy and positive affect, $r(27) = .417, p < .05$. This explained that approximately 17.4% ($r^2 = .174$) of the variance in post-workshop retirement self-efficacy was predicted from positive affect for this group. In contrast, without the combined groups, the initial treatment group had a non-significant correlation between post-workshop retirement self-efficacy and positive affect $r(30) = .194, p = .287$.

Additional analysis of negative affect. Because both positive affect and negative affect scores were collected in this study via the PANAS, correlations were also run to investigate if there were significant correlations between negative affect and retirement self-efficacy. Although correlations for each group are shown in Table 4.7, only results for the combined treatment group are discussed as the correlations across groups were very similar.

There was a statistically significant negative correlation between negative affect and pre-workshop retirement self-efficacy, $r(59) = -.501, p < .01$. This indicated that approximately 25% ($r^2 = .25$) of the variance in pre-workshop retirement self-efficacy was predicted from participants' scores on negative affect. There was also a negative correlation between post-workshop retirement self-efficacy and negative affect, $r(59) = -.410, p < .01$. Thus, following the workshop, about 16.8% ($r^2 = .168$) of the variance in post-workshop retirement self-efficacy was predicted from negative affect scores.

Table 4.7

Intercorrelations for Retirement Self-Efficacy (RSE) and Negative Affect (NA) by Group

	Combined treatment Group (n=61)	Waitlist Treatment Group (n=29)	Initial Treatment Group (n=32)
Measure	NA	NA	NA
Pre-Workshop RSE	-.501**	-0.534**	-.526**
Post-Workshop RSE	-.410**	-.369*	-.415*

*p < .05. **p<.01

Additional analysis of high/low positive and negative affect. Further analyses were completed using One-Way ANOVA to determine if there were differences in retirement self-efficacy gain scores based upon whether one had high positive affect versus low positive affect, or if one had high negative affect versus low negative affect. To do this, the combined treatment group was divided into those with high positive affect and low positive affect (0.5 SD above or below the group mean, respectively). They were also grouped likewise into high negative affect and low negative affect. Figure 4.3 illustrates means based on positive and negative affect groups.

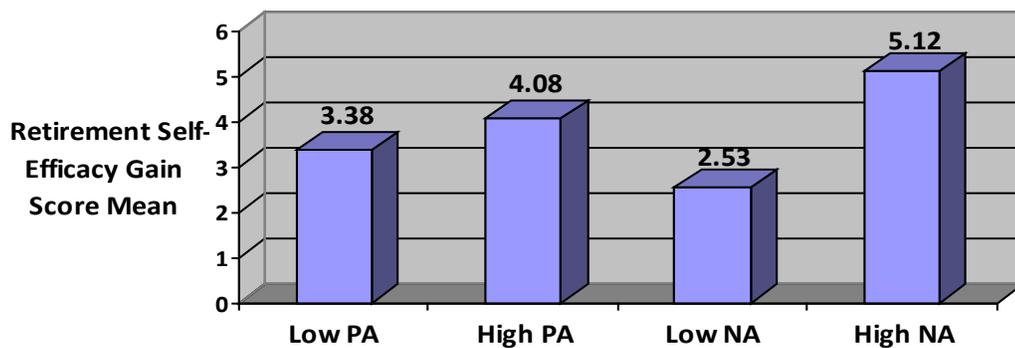


Figure 4.3. Gain score means for low and high positive affect (PA) and negative affect (NA).

No significant differences were found between mean retirement self-efficacy gain scores for those with high positive affect ($M = 4.08$) and low positive affect ($M = 3.38$). The difference between mean retirement self-efficacy gain scores for high negative affect ($M = 5.12$) and low negative affect ($M = 2.53$) did not reach statistical significance either ($p = .29$), but had a d effect size of .36, which was a small to medium effect size (Cohen, 1988).

Summary. Overall, results indicated a positive correlation between positive affect and pre-workshop retirement self-efficacy. Results for correlations between post-workshop retirement self-efficacy and positive affect were more complex, in that the waitlist treatment group (as compared to the initial treatment group) demonstrated a higher relationship between post-workshop retirement self-efficacy scores and positive affect scores. Further analyses involving negative affect revealed that higher negative affect was correlated with lower retirement self-efficacy both pre and post-workshop. Additionally, while the finding did not reach statistical significance, those with high negative affect made greater gains on average in retirement self-efficacy following the workshop than did those with low negative affect.

Research Question Three

Question three asked if there was a combination of intervention (workshop or no workshop), trait positive affect (as measured by the PA scale of the PANAS; Watson, et al., 1988), gender, and self-rated health that predicted retirement self-efficacy gain scores (as measured by a revised confidence subscale of the CTI; Heppner, 1991) better than any one predictor variable alone.

Initial analysis. Simultaneous multiple regression was conducted to investigate possible predictors of retirement self-efficacy gain scores. The combination of intervention (workshop or no workshop), positive affect, gender, and self-rated health failed to reach statistical significance in predicting retirement self-efficacy gains, $F(4, 61) = 1.34, p = .27, \text{adjusted } R^2 = .02$. When including negative affect as a predictor, there was still no statistical significance, and the adjusted R^2 increased to .03.

Additional analysis of pre-workshop retirement self-efficacy. Simultaneous multiple regression was conducted to also investigate predictors of pre-workshop retirement self-efficacy. The means, standard deviations, and intercorrelations have been provided in Table 4.8a. The combination of gender, self-rated health, positive affect, and negative affect was statistically significant in predicting pre-workshop retirement self-efficacy, $F(4, 61) = 6.98, p < .001$. The adjusted R^2 value was .27, indicating that 27% of the variance in math achievement was explained by this model. The beta coefficients have been presented in Table 4.8b. Note that only negative affect was a significant predictor when including all four variables.

Table 4.8a

Mean, Standard Deviations, and Intercorrelations for Pre-Workshop Retirement Self-Efficacy (RSE) and Predictors (n = 66)

Variable	M	SD	Gender	Self-Rated Health	Positive Affect	Negative Affect
Pre-Workshop RSE	49.4	8.1	-.006	.120	0.275*	-0.526**
Predictor Variable						
1. Gender	0.56	0.50	--	.130	.234*	.098
2. Self-Rated Health	13.4	1.5		--	.167	-.304**
3. Positive Affect	36.8	5.5			--	-.182
4. Negative Affect	16.2	4.60				--

*p < .05. **p < .01

Table 4.8b

Simultaneous Multiple Regression Analysis Summary for Predictors of Preworkshop RSE

Variable	B	SEB	β	p
Gender	.13	1.80	.01	.94
Self-Rated Health	-.37	.61	-.07	.55
Positive Affect	.28	.17	.19	.09
Negative Affect	-.90	.20	-.51	< .001

Note. $R^2 = .31$; Adjusted $R^2 = .27$; $F(4, 61) = 6.98$, $p < .001$; $n = 66$

When removing gender and self-rated health, positive and negative affect combined continued to be statistically significant in predicting preworkshop retirement self-efficacy, $F(2, 63) = 14.13$, $p < .001$, adjusted R^2 value = .29. Again, only negative affect was a statistically significant contributor. See Table 4.9 for the beta coefficients for this model.

Table 4.9

Simultaneous Multiple Regression Analysis Summary for Positive Affect (PA) and Negative Affect (NA) Predicting Pre-workshop RSE (n = 66)

Variable	B	SEB	β	p
PA	.27	.16	.19	.09
NA	-.86	.19	-.49	<.001

Note. $R^2 = .31$; Adjusted $R^2 = .29$; $F(2, 63) = 14.13$, $p < .001$.

Summary. Results from the initial analysis to determine if gender, self-rated health, positive affect, and negative affect scores predicted retirement self-efficacy gains were not significant. Further analysis, though, revealed that the combination of gender, self-rated health, positive affect, and negative affect were statistically significant in predicting pre-workshop retirement self-efficacy scores. However, negative affect was the only significant contributor of this group of predictors.

Conclusion

A variety of data analysis procedures collectively provided a more detailed picture of the results from this study. Greater self-efficacy gains made by the waitlist treatment group created a need for further analyses. Furthermore, negative affect was found to be a significant variable in terms of its relationship with retirement self-efficacy. These findings, as well as others pertaining to the original research questions, have been further discussed in the next chapter.

CHAPTER 5: DISCUSSION

This study investigated whether an intervention in the form of a strengths-based retirement workshop improved ratings of retirement self-efficacy as measured by an adapted confidence subscale of the CTI (Heppner, 1991). In other words, it examined if a workshop that helped individuals identify, explore, and clarify activities that provided them with feelings of strength and passion helped to develop greater retirement self-efficacy. Additionally, this study examined the relationship between retirement self-efficacy and positive affect and evaluated if some combination of factors (i.e., the workshop, positive affect, gender, and self-rated health) helped to predict post-workshop retirement self-efficacy levels. Further exploratory analyses were also conducted as appropriate for each question.

Within this chapter, the sample and results according to each research question is discussed. Additional analyses that were undertaken, as well as study limitations, are also considered. Furthermore, implications of this research and recommendations for research and career counseling practice are provided.

Sample

Participants in this study came from a variety of organizations, with most employed by a state university in northern Colorado. They ranged from 47 to 66 years of age with 41% being male, and 59% being female. Overall, this sample did not lend itself easily to generalizability to the general population of retirees. The sample held little racial

or ethnic diversity (95% self-reported they were White), and it was a highly educated group with well over half of the participants holding graduate degrees. According to the U. S. Census Bureau (n.d.), of adults 42-60 years old, 82.2% are white and only 28.8% held a bachelor's degree or higher.

All participants self-reported that they were financially secure enough to not need to work full-time after retiring from their current position. This was in contrast to an AARP study of Baby Boomers turning 65 in 2011, in which only 4 out of 10 individuals indicated they were where they expected to be financially and in terms of their health (Love, 2010). This finding indicated that the sample used in the current study felt more financially secure and had higher ratings of self-rated health than the general population approaching retirement. It should also be noted that this sample was delimited to those that had internet access, which may not be typical for the older adult population.

The research delimitation of recruiting participants that believed they were financially secure enough to not need to work full-time upon retirement was set purposefully. By having a sample that thought they were financially secure, it was hoped that the variable of finances would be better controlled since it was believed that finances could have been a factor in allowing for more freedom and choice in using one's strengths in retirement. It also permitted the workshop to remain focused on the identification and clarification of strengths for the purpose of finding purposeful and affirmative activities in retirement, rather than having it become focused on job searching.

Discussion of Research Question Results

Prior to the following discussion, it is helpful to review Figure 5.1. This is a replicate of a figure from chapter four and provides a reminder regarding the flow of the study and how data analysis groups were formed.

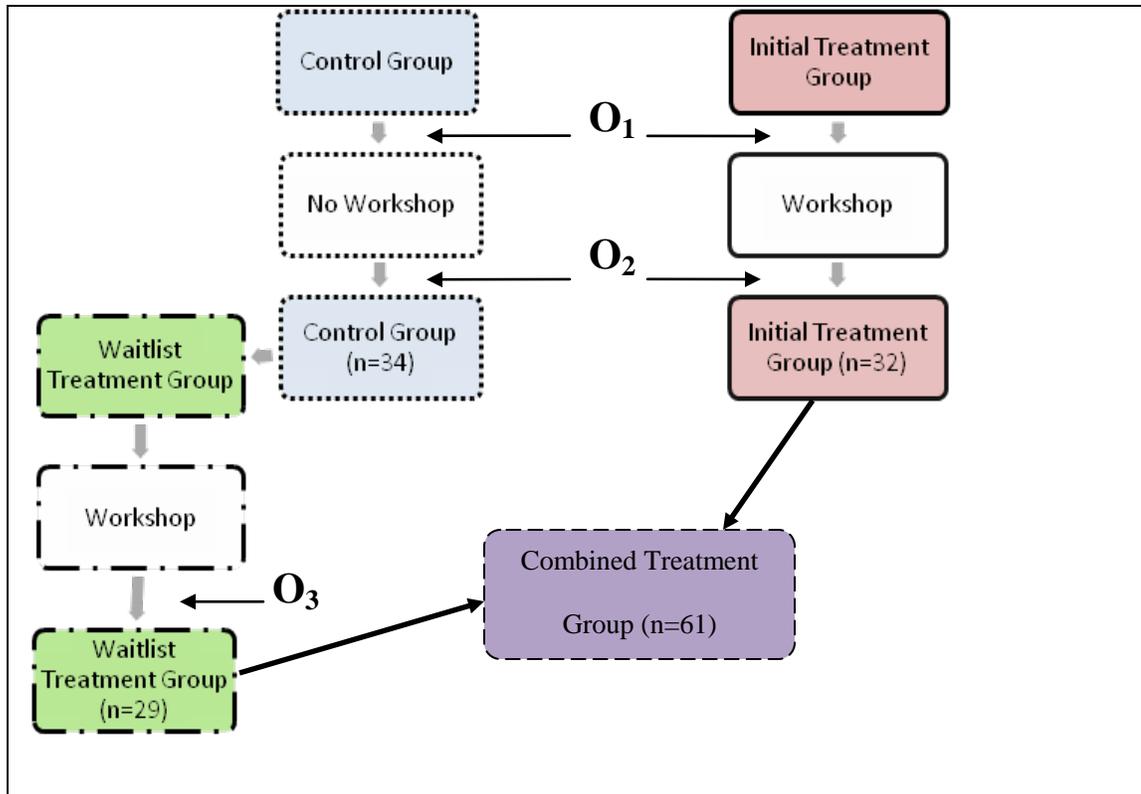


Figure 5.1 Flow chart of study procedures and data analysis groupings with sample sizes. O₁ = first measurement, O₂ = second measurement, O₃ = third measurement. Control group became waitlist group following second measurement and prior to waitlist group workshop.

Research Question One

Is there a difference between groups receiving and not receiving the workshop in regard to the average retirement self-efficacy gain scores as measured by a revised confidence subscale of the CTI (Heppner, 1991)?

Overview of analyses. Varying results occurred when analyzing the data for this question. Complicating the results for this question was the fact that the waitlist treatment group scored higher on retirement self-efficacy after receiving their workshop (gain score $M = 4.69$) than did the initial treatment group (gain score $M = 1.75$). At first glance, when comparing the initial treatment group to the control group, there were no significant differences in gain scores for retirement self-efficacy. However, in combining the initial treatment group with the waitlist treatment group to form the combined treatment group, results indicated that the combined treatment group made greater gains in retirement self-efficacy scores than did the control group ($M = 3.15$ and $-.09$, respectively; $p = .012$, $d = .55$). This was likely influenced, though, by the greater retirement self-efficacy gains made by the waitlist treatment group. Therefore, further statistical analyses were utilized to gain additional information and clarity.

A paired t -test indicated that there were significant differences in individual's pre and post-workshop retirement self-efficacy scores for the combined treatment group ($p < .001$, $d = .41$), but the results were clouded when contrasting within group analyses for the initial and waitlist treatment groups. When separating out the treatment groups, the participants in the waitlist treatment group had statistically significant differences between pre and post-workshop retirement self-efficacy scores ($p = .002$, $d = .65$), but the initial treatment group did not ($p = .068$, $d = .22$). However, since the initial treatment group was closer to reaching statistical significance in this analysis, there seemed to be more support for the possibility of the workshop having positively contributed to retirement self-efficacy.

Mixed ANOVA further confirmed the previous findings and demonstrated that while there was a difference in pre to post-workshop retirement self-efficacy scores, it was qualified by a significant interaction of time (pre to post-workshop) and treatment group (initial versus waitlist) ($p < .001$, partial $\eta^2 = .12$). Those in the control group had minimal to no changes in their average retirement self-efficacy scores, and while those in the initial treatment group went from a mean of 50.41 pre-workshop to 52.16 post-workshop, it was not a statistically significant change. However, those in the waitlist treatment group had significant differences in their pre and post-workshop scores, going from an average of 49.48 to 54.17. In other words, Mixed ANOVA provided further confirmation that the waitlist treatment group made more (and statistically significant) gains in retirement self-efficacy, while the initial treatment group's gains in retirement self-efficacy were smaller (and not statistically significant).

Differences between groups. The differences in gains in retirement self-efficacy scores made by the initial and waitlist treatment groups was an incongruent finding because it did not appear that there were any differences in the treatment (i.e., workshop). Both groups received the same workshop, provided by the same individual, at the same time of day (morning), and at the same facility. They also received the same assessments in the same chronological order.

When looking at the demographics of each group, there did not appear to be anything that was highly different. One area that varied more than others was that the waitlist group had a higher percentage of individuals holding graduate degrees (76%) than did the initial treatment group (59%). Each, group though, had over 80% of their participants holding at least a 4-year degree.

Since participants were not randomly assigned to the differing groups, it is possible that there were differences between the groups not detected by the demographic information collected. Consequently, group comparisons via independent samples *t*-tests were conducted for group means on the pre-workshop measures of self-rated health, positive affect, negative affect, and pre-workshop retirement self-efficacy. No significant differences were detected between the initial and waitlist treatment groups on any of these measures.

A plausible explanation for the greater gains by the waitlist treatment group was that of repeated testing, especially since the waitlist treatment group received the retirement self-efficacy measure a total of three times. The initial treatment group only received it twice. It is interesting to note, however, that the waitlist group (initially serving as the control group) did not have increases on this measure between time one and time two measurements. Indeed, the mean retirement self-efficacy gain score for the control group went down by almost one-tenth of a point from time one to time two.

High pre-workshop retirement self-efficacy levels. Another important factor considered when reflecting on analyses of research question one was that the scores for pre-workshop retirement self-efficacy were high on average, which made gains more difficult to attain. On the original version of the Confidence scale of the CTI (Heppner, 1991), scores were able to range from 11 to 66, and a high score was considered to fall within the range of 48 to 66. The mean for the pre-workshop scores for the revised confidence subscale used in this study was approximately 48 to 49 for the control/waitlist group, and 50 for the initial treatment group. According to the assessment, scores in this range indicated that individuals saw few barriers in relation to their confidence to make

the transition (Heppner, et al., 1994). Thus, on average, those that participated in this study had relatively high confidence about their ability to make a transition to retirement even prior to the workshop, making the ability to score even higher a more difficult task.

This sample's relatively high pre-workshop retirement self-efficacy scores could be explained in part because the sample was comprised of individuals who indicated they were financially secure (enough to not need to work full-time upon retirement), and who generally had high scores on self-rated health. In support of this, research studies have found that socioeconomic status (Neuhs, 1990), income adequacy, and better subjective health ratings (Fretz, et al., 1989) were positively associated with retirement self-efficacy.

Exploration of workshop impact. The findings for research question one also led to more questions regarding what may have actually happened to participants as a result of the workshop. Further exploration of results and data led to interesting information when percentages for gain scores for both the initial and waitlist treatment groups were examined (see Figure 5.2). Only about 10% of the participants had no fluctuations in their scores from pre- to post-workshop, and 59% percent of participants had an increase in their scores ranging from 1 to 23 points. Interestingly, 31% of participants saw their retirement self-efficacy scores go down, from 1 to 7 points.



Figure 5.1. Retirement Self-Efficacy Gain Score Percentages

One possibility for scores going down was that the workshop may have caused cognitive and/or emotional dissonance for some participants by heightening their awareness about the retirement transition. The workshop may have caused them to think more deeply about their lives in retirement and with that, potential changes, challenges, and opportunities they might encounter. This is further explored and discussed in the sections on theoretical and practical implications.

Summary. When considering the gathered evidence, it appeared that the workshop played a part in contributing to gains in retirement self-efficacy, at least for the majority of participants, and especially for the waitlist treatment group. Additionally, since retirement self-efficacy was already high on average for each group, gains in post-workshop retirement self-efficacy scores were conceivably difficult to attain. Furthermore, it was quite possible that the workshop influenced something besides

retirement self-efficacy. For example, heightened awareness and contemplation of how participants wanted to design their retirement could have resulted.

Research Question Two

Are there associations between retirement self-efficacy and trait positive affect?

- a) Is there an association between trait positive affect [as measured by the PA scale of the PANAS (Watson, et al., 1988)] and pre-workshop retirement self-efficacy [as measured by the revised confidence subscale of the CTI (Heppner, 1991)]?
- b) Is there an association between trait positive affect (as measured by the PA scale of the PANAS) and post-workshop retirement self-efficacy (as measured by the revised confidence subscale of the CTI)?

Positive affect. Overall, there appeared to be a positive correlation between trait positive affect and pre-workshop retirement self-efficacy for the combined treatment group, $r(59) = .257, p < .05$. Again, though, when separating the initial treatment group from the waitlist treatment group, the results required further examination. Prior to the workshop, neither the control nor the waitlist group's positive affect scores were significantly associated with pre-workshop retirement self-efficacy scores. However, the Pearson correlations for trait positive affect and pre-workshop retirement self-efficacy for the waitlist group ($r = .246$) and for the initial treatment group ($r = .265$) were almost identical to the combined group's correlation. A plausible explanation for why the waitlist and initial treatment groups did not reach statistical significance was that each group was too small, and thus had less statistical power. The statistical significance achieved by the combined treatment group was likely due to the increased statistical

power achieved through a larger sample size. Since these were *pre-workshop* retirement self-efficacy scores that were correlated to trait positive affect, the greater *post-workshop* retirement self-efficacy gains made by the waitlist treatment group were not at issue.

Following the workshop, the positive correlation between trait positive affect and post-workshop retirement self-efficacy increased to .29 ($p < .05$). Similar to the results attained for the first research question, though, the correlation of positive affect to post-workshop retirement self-efficacy was highly dependent upon the treatment group (waitlist or initial). Only the waitlist treatment group reached statistical significance and it exhibited a much higher correlation between post-workshop retirement self-efficacy and trait positive affect ($r = .417$, $p < .05$) than did the initial treatment group ($r = .194$). This is likely due to the greater gains the waitlist group made in retirement self-efficacy.

Negative affect. While positive affect has been found to have a broadening effect on behavioral and thought-action repertoires (Fredrickson & Branigan, 2005; Vermeulen, 2010; Wadlinger & Isaacowitz, 2006), negative affect has been associated with a narrowing of attention and thought-action repertoires. For example, negative affect was correlated with lessened visual attention to distractors (Vermeulen, 2010) and with decreased urges to consume (eat/drink), contemplate, and work (Fredrickson & Branigan, 2005). Therefore, not only would one have expected the psychological resource of retirement self-efficacy to be positively associated with positive affect, but also to be negatively associated with negative affect. If higher levels of negative affect narrowed one's ability to think about possibilities, then subsequently, it would have diminished the capacity of having self-efficacy about the retirement transition and envisioning possibilities about engaging in purposeful and affirmative activities. Consequently,

additional analyses were undertaken to investigate trait negative affect in terms of its association with retirement self-efficacy.

Based on the combined treatment group, trait negative affect was negatively correlated to pre-workshop retirement self-efficacy ($r = -.50$) and to post-workshop retirement self-efficacy ($r = -.41$). Both of these correlations were considered to be large for the social sciences (Cohen, 1988). Furthermore, unlike what occurred with the correlations between positive affect and post-workshop retirement self-efficacy, these correlations did not vary greatly when separating out the waitlist and initial treatment groups. Thus, these findings supported the notion that higher levels of negative affect were associated with less retirement self-efficacy both pre and post-workshop (regardless of the treatment group).

It was notable that the negative correlation between negative affect and retirement self-efficacy decreased following the workshop. Subsequently, additional analyses were undertaken to explore if there were differences in retirement self-efficacy gain scores based upon whether one had high positive affect versus low positive affect, or if one had high negative affect versus low negative affect. An individual was considered to have high (or low) positive affect if her/his trait positive affect scores were .5 SD above (or below) the sample mean; high/low negative affect was computed in an identical manner.

Although not reaching statistical significance, it was found that individuals with high negative affect made greater gains in retirement self-efficacy ($M = 5.12$) than those with low negative affect ($M = 2.53$) ($p = .29$, $d = .36$). In other words, although negative affect was associated with lower retirement self-efficacy overall, those with high negative affect were still able to make gains in their levels of retirement self-efficacy following the

workshop, and these were greater gains than those made by participants with low negative affect. (Average differences in retirement self-efficacy gains made by those with high versus low positive affect were less than one point.)

This finding had practical significance for those working with individuals approaching or in the retirement transition process as it appeared to indicate that individuals with high levels of negativity would still benefit from assistance in developing their retirement self-efficacy via strengths-based models. Additionally, considering that higher negative affect was related to lower levels of retirement self-efficacy, these individuals may be in more need of interventions to raise retirement self-efficacy. See the practical implications section in this chapter for further discussion regarding these insights.

Research Question Three

Is there a combination of intervention (workshop or no workshop), trait positive affect (as measured by the PA scale of the PANAS; Watson, et al., 1988), gender, and self-rated health that predicts retirement self-efficacy gain scores (as measured by a revised confidence subscale of the CTI; Heppner, 1991) better than any one predictor variable alone?

Predictors of post-workshop retirement self-efficacy. Since multiple regression was used to analyze this question, only the initial treatment and control group could be utilized. No significance was reached in determining predictors of retirement self-efficacy gains, even when negative affect was included as a predictor. It was probable that these results failed to reach significance because the waitlist treatment group's retirement self-efficacy gain scores (which were higher than the initial treatment group)

were not utilized in the analysis (since they also served as the control group). This also resulted in a loss of statistical power.

Because multiple regression provided bivariate correlations among the variables entered, it was found that self-rated health scores were negatively correlated to trait negative affect scores ($r = -.304$, $p = .007$). This supported previous research findings that negative affect was related to health complaints (as cited in Watson, et al., 1988). Also, positive and negative affect were not significantly correlated ($r = -.182$, $p = .072$), which provided some support to the assertion by Watson et al. (1988) that the PA and NA scales of the PANAS were at least quasi-independent of each other. In other words, there was support that they measured distinctly different dimensions, which positive affect and negative affect were postulated to be.

Predictors of pre-workshop retirement self-efficacy. Further analysis was conducted with *pre-workshop* retirement self-efficacy scores as the dependent variable. Upon doing this, it was shown that the combination of gender, self-rated health, positive affect, and negative affect were statistically significant in predicting pre-workshop retirement self-efficacy (adjusted $R^2 = .27$). Of these predictors, though, only negative affect was a statistically significant contributor ($B = -.90$; $\beta = -.51$). This meant that when controlling for gender, self-rated health, and positive affect, for every one point higher an individual scored on negative affect, she/he scored almost one point lower on pre-workshop retirement self-efficacy. This supported previously mentioned findings regarding the negative relationship between negative affect and retirement self-efficacy.

Study Limitations

Generalizing the results from this study to other individuals should be done with care because this sample consisted of a non-random sample of voluntary participants which limited the external validity of the study. As was seen in the description of the participants, there was little ethnic or racial diversity, and this group attained higher levels of education than what was typical for their age group. The sample also contained a group of individuals that believed they were financially secure enough to retire without having to find full-time work upon their exit from their current position. Additionally, the participants in this group rated themselves quite highly on their perceptions of their health status. This sample was also delimited to those individuals that had access to the internet and thus it is likely that this group of adults may have been more internet savvy than their same-age contemporaries.

Although there was little reason to think control and experimental groups differed, internal validity was also reduced since participants were not randomly assigned to the control and intervention groups. While attempts were initially made to do so, ultimately, participants were allowed to choose which workshop date they could attend, thus ensuring a larger sample size. Few differences were noted in terms of the demographic data collected, and no significant differences were found on pre-workshop measures of self-rated health, positive affect, negative affect, and retirement self-efficacy. Nonetheless, causal relationships should not be assumed, especially given the significant differences in retirement self-efficacy gain scores between the initial treatment group and the waitlist treatment group.

Theoretical Implications

Self-Efficacy and Broaden-and-Build Theory

Bandura's (1977) construct of self-efficacy and Fredrickson's (2006) Broaden-and-Build Theory (and the concept of positivity) were major components of this study and results from the study lent some support to them. Retirement self-efficacy gains were achieved by the majority of participants, and positive affect was found to be at least mildly related to retirement self-efficacy. However, full implementation of the strongest source of self-efficacy, performance accomplishments, was not possible since the workshop predominantly allowed for the identification, exploration, and clarification of strengths (based on previous performance accomplishments). It was not possible to follow through on more individualized and detailed ways to implement strengths in retirement given time and resource constraints.

Additionally, in terms of the Broaden-and-Build Theory, Salanova, Llorens, and Schaufeli (2011) indicated that to demonstrate the existence of gain spirals, the following three conditions must have been met: (1) a reciprocal relationship between the variables; (2) incremental increases in the mean levels of the variables over time; and (3) gain spirals must have been investigated through a longitudinal research design that had at least three waves that allowed for testing of increases, decreases, or stability of mean levels over time. This study was not a longitudinal design, nor did it measure state positive affect pre and post-workshop to see if there were reciprocal relationships between it and retirement self-efficacy. Subsequently, it was unable to test the possibility of upward spiraling effects between positive affect and retirement self-efficacy to support Fredrickson's (2006) Broaden-and-Build Theory.

Supplementary Model of Change

Through the course of this research, new insights, understandings, and questions regarding what happened in the workshop arose. One of these new insights was the belief that the workshop may have heightened participants' awareness about retirement and the retirement transition. The workshop may have caused participants to think more deeply about their future life chapter, have more urgent questions regarding "what *is* next", and experience cognitive and/or emotional dissonance. It was decided that another model may have helped to further explain what happened in the workshop, as there seemed to be a missing piece; something was not explained by the models for retirement self-efficacy or positivity.

According to Hiatt and Creasey (2003), the ADKAR model of change management can be used to manage personal transitions (individual change management), as well as organizational change management. The ADKAR model offered five stages of change that individuals go through when making a change (such as transitioning to retirement). The stages (Awareness, Desire, Knowledge, Ability, Reinforcement) are:

1. *awareness* of the need to change;
2. *desire* to participate in and support the change;
3. *knowledge* about how to change;
4. the *ability* to implement the necessary skills and behaviors to change; and
5. the appropriate *reinforcement* to keep the change in place (Hiatt & Creasey, 2003).

It was likely that the workshop heightened awareness about the need to consider how individuals wanted to live their lives after retirement, and about how engaging in purposeful and affirmative activities using their strengths would enrich their lives. In other words, the workshop may have brought into sharper focus an awareness of the need to consider what *is* next, rather than having retirement continue to be a fairly nebulous and futuristic concept. With this raised awareness, it was possible that some participants felt new apprehension and/or ambivalence about retirement, and subsequently, lessened retirement self-efficacy.

In addition, the workshop was focused on helping individuals identify and clarify their strengths (awareness, and to a lesser extent, knowledge stages), and how using their strengths in activities after retirement could be beneficial (desire stage). While numerous resources were provided, it was beyond the scope of the study to follow-up with participants to provide more in-depth assistance with the knowledge and ability stages about how to translate the knowledge gained from the workshop into specific plans for after retirement. This is particularly relevant in that performance accomplishments are considered to hold the greatest power to help build self-efficacy (Bandura, 1977).

Thus, retirement self-efficacy may come after awareness and desire are built, and when one has the chance to implement mastery experiences in the knowledge and ability stages. Furthermore, if positive affect can be built during the awareness and desire stages, it could engender a broadening of thought-action repertoires to assist in exploring possibilities and gaining more mastery experiences, which could then build greater retirement self-efficacy.

Practical Implications

Retirement and Self-Efficacy

Both self-efficacy in general, and retirement self-efficacy specifically, have been associated with life satisfaction (Harper, 2005; Neuhs, 1990; Williams, Wissing, Rothmann, & Temane, 2010). Self-efficacy has also been related to work/task engagement (Llorens, Schaufeli, Bakker, & Salanova, 2007) and retirement self-efficacy to earlier planned retirement dates (Taylor & Shore, 1995), more retirement readiness (Neuhs, 1990), as well as better attitudes about retirement, and less anxiety and depression (Fretz, et al., 1989). Mastery, which captures elements of self-efficacy and locus of control, has also correlated to better retirement adjustment (Donaldson, Earl, & Muratore, 2010). Clearly, in assisting individuals with their retirement transition, their self-efficacy about being able to make that transition appears to have great consequence.

Results from this study provided the discovery that it is possible, even probable, that there are other steps necessary in the process of developing retirement self-efficacy. In other words, it is likely that there needs to be something following the identification, exploration, and clarification of strengths before greater levels of retirement self-efficacy can be developed. The ADKAR model of change management provides a user-friendly framework for considering the change process and determining where individuals are at in terms of their readiness for change. Using this model, it appears that the workshop may have stimulated greater awareness about the retirement transition, but having the opportunity to more fully implement the knowledge and abilities stages are probably required to more fully enhance self-efficacy. This is further discussed in the practice recommendations section of this chapter.

Language has power. As suggested by the results from the current study, one aspect of living one's vision of retirement, and having confidence in successfully negotiating the retirement transition, is being able to identify and engage in activities that makes one feel strong, purposeful, passionate, or most alive. These terms (purpose, passionate, most alive) arose from participants during the workshop and indicated the need to give individuals their own voice to find language that has the most meaning for them. Thus, while this study has used the term "strengths", it is probable that individuals need to find language that best suits and empowers them to find purposeful and affirmative retirement activities.

This also calls into question the use of the term retirement self-efficacy. Self-efficacy tends to be used in academia and research and may have less meaning for individuals approaching or experiencing retirement. Thus, it is suggested that practitioners strongly consider the language they use and what has more meaning for the general public, as well as individual clients. Self-efficacy is defined as a perception about whether one is capable of producing a desired effect or accomplishing a certain level of performance (Bandura, 1986). However, Heppner et al. (1994) stated that the original self-efficacy scale of the CTI was renamed *confidence* to better describe the meaning of the self-efficacy construct to the people taking the inventory. This provides sage advice for those wishing to extend research to a practical and user-friendly level.

Retirement as defined by the individual. As just discussed, language is powerful and gives voice to personal meaning. Consequently, the word "retirement" must also be scrutinized. As indicated in chapter one, retirement is a social construct that was developed largely due to (1) industrialization where youth took precedence over age, (2)

the rise of social security and pensions, and (3) the marketing of retirement as a time for disengagement and leisure. However, it is highly questionable that this version of retirement is adequate for today's society.

According to an AARP report, the baby boom generation which began turning 65 in 2011, differ from their parents in one very important aspect—

...the baby boom generation has redefined what retirement means. When their parents entered retirement, it was considered a time that might feature travel, relaxation, enjoyment, but little work outside of an avocation. Baby boomers overall and many of those turning 65 consider work to be part of retirement and a significant percentage would say that they never will consider themselves retired. (Love, 2010, p. 2)

In fact, of those still employed at the time of the survey, 40% said they would “work until they drop” (Love, 2010, p. 12). Additionally, the percentage of employed respondents planning to work until they were at least 70 years old had risen from 14% of those age 60 in 2006, to 29% of working adults turning 65 in 2011 which was perhaps partially due to the drastic economic downturn between 2006 and 2010 (Love, 2010).

Other factors that may encourage older workers to stay in the workforce longer are: (1) the rise of the age requirement to receive full Social Security benefits (age 67 for those born in 1960 or later); (2) the elimination of Social Security disincentives to work after age 65; (3) the rise of defined contribution plans which pay out more the longer you work (versus defined benefit plans, which pay out at a specific age); and (4) older Americans are more healthy than ever before (L'Allier & Kolosh, 2005; Quinn, 2010). Finally, more older women are in the workforce and since wives are typically younger than their husbands, and often have fewer years in the labor force overall, couples

choosing to retire at the same time may find the need for a delayed retirement for husbands (Quinn, 2010).

Not only does it appear that Americans are, and will be, working longer, but how they retire is also changing. Quinn (2010) states that data from the Health and Retirement Study used by him and other colleagues in various studies point to the idea that bridge jobs may be growing and that “gradual or partial retirement is a very important part of the current retirement landscape” (p. 50). Thus, defining retirement becomes slippery at best, not only for individuals facing or in the retirement transition, but for career practitioners, and others, working with individuals regarding retirement.

Positive and Negative Affect

Results from this study provided some evidence that positive affect and retirement self-efficacy were related. It also found that while higher negative affect correlated with lower retirement self-efficacy overall, there was some practical evidence (although not reaching statistical significance) that those with high negative affect stand to benefit from a strengths-based intervention to raise retirement self-efficacy. The idea that those with higher negative affect can benefit from interventions is also supported by Bylsma, Taylor-Clift, and Rottenberg (2011). They found that while individuals experiencing either major or minor depressive episodes reported having greater daily negative, and less positive, affect overall than the control group, they also reported greater reductions in negative affect following positive events (as compared to the control group).

It is also possible that the strengths-based workshop may have directly influenced positive and negative affect levels. Nelson and Knight (2010) found that individuals given a task requiring them to write about a positive “peak” experience were more likely

to report experiencing positive affect and less likely to report experiencing negative affect than the control group. They also found that the students in the positive-thought group were more likely to report an optimistic attitude, experience less test anxiety, and express more confidence in their ability to cope with the stressor (an upcoming quiz).

Similarly, Rogatko (2009) found that individuals who experienced greater increases in the experience of “flow” reported that not only did they have higher increases in positive affect, but they also had greater decreases in negative affect. Flow is a state in which an individual becomes completely absorbed in an activity in which their level of skill matches the challenge (Csikszentmihalyi, 1997). Both flow and peak performances have been related in various ways to using one’s strengths, with Seligman et al. (2006) asserting that one way to enhance flow is to identify one’s top talents and strengths and find ways to use them more.

These findings relate to the current study given that the workshop was focused on the identification, exploration, and clarification of participants’ top strengths. Furthermore, participants may have experienced peak experiences with some of the workshop activities. Thus, the workshop may have resulted in participants experiencing greater positive affect and/or lower negative affect. However, ongoing measures of state positive and negative affect would have been necessary to verify this possibility.

Research Recommendations

With the aging of the population, it is clear that a better understanding of retirement, and its implications for individuals’ life satisfaction as well as its organizational, economic, and societal consequences, is paramount. As with any human research though, research on this major life transition must be multi-faceted and draw

from numerous disciplines. Based on the current study, areas that could be addressed involve retirement self-efficacy, readiness for change, positive and negative affect, and qualitatively exploring the phenomenon of retirement and the ongoing transitions involved with it.

It is difficult to fully ascertain why the waitlist treatment group made greater gains than the initial treatment group in this study. To shed light upon this incongruity, replicating this study with another that utilizes a strengths-based workshop and pre and post-workshop retirement self-efficacy measures may prove helpful. Larger sample sizes would also increase statistical power. Furthermore, expanding this study to include gathering quantitative and/or qualitative data about how the workshop impacts participants could provide initial answers regarding what constructs would be helpful to measure in the future. For example, it would be interesting to explore if, why, and how much the workshop creates cognitive and/or emotional dissonance in participants. One could also gather data about if, how, and how much, the workshop moves individuals along in the process of change per the ADKAR model of change management (Hiatt & Creasey, 2003)

A longitudinal approach could be helpful in ascertaining possible reciprocal relationships between positive affect and retirement self-efficacy. Replicating and extending this study by measuring state positive affect over time would allow for a greater ability to test broaden-and-build effects between positive affect and retirement self-efficacy.

Finally, given that retirement appears to be entering a new age with unknown parameters, phenomenological qualitative studies that provide insights into the “new

retirement” are necessary. Exploring what retirement means for current and future generations and determining how old definitions have affected individuals’ retirement transitions is an important area to probe. Furthermore, it is important to examine the experiences of others as they forge innovative paths to help ascertain ways in which individuals might go about defining and writing their next life chapters in ways that are purposeful and affirming.

Practice Recommendations

Career practitioners are positioned to be able to work with individuals as they contemplate, enter, and work through their next life-career transition process of retirement. In doing so, practitioners need to be aware that numerous life areas must be considered in regards to retirement, and these extend well beyond financial planning for retirement. One’s ability to manage/sustain relationships, maintain health, renegotiate and clarify personal identity and values, and engage in purposeful and affirmative activities will most likely impact not only how well one adjusts to retirement, but also her/his life satisfaction. Pulling all of this together into a journey of self-exploration and discovery can help in ascertaining one’s strengths, values, needs, desires, wishes, concerns, and fears.

This process of discovery can facilitate the retirement transition process by raising awareness of the retirement transition and its associated opportunities and challenges, as well as increase individuals’ desire to continue through it. It can also lead to the exploration and implementation of ways to go about living a personal definition and vision of retirement, and thus help develop greater confidence about navigating the retirement transition to find purposeful and affirmative life engagement.

Facilitating Personalized Language and Retirement Definitions

A discovery induced by this study was that language is powerful and can give voice to personal meaning. As such, it is recommended that career practitioners facilitate individuals' abilities to construct their own meaning of retirement. Rather than defaulting to the long held view of retirement as an endpoint that involves disengaging from work, individuals should be challenged to reflect on their current assumptions and encouraged to explore how they want to live their next life chapter. These personal definitions of retirement could include any number and combination of options including, but not limited to, continuing some form of paid work; engaging in formal or informal volunteerism; participating in structured or unstructured learning opportunities; joining various associations or clubs; and enjoying leisure time, socializing, and hobbies.

It is critical for career practitioners to provide new and more language to individuals so that they can better define their own retirement, understand and describe themselves, and explore opportunities and options. Career practitioners also need to partner with individuals to search for language that best suits them and provides personal meaning for them. For example, while self-efficacy is often used by researchers and practitioners, it is possible that the word confidence may carry more meaning for the individual with whom one is working. Additionally, individuals may have different needs and wants in terms of expressing those activities that make them feel strong. Providing examples such as: "activities that make me feel most alive, at my greatest purpose, passionate, centered" can help to stimulate further discussion and insights.

Developing Retirement Self-Efficacy

This study found some success in using a strengths-based approach to develop retirement self-efficacy. However, when looking through the lens of the ADKAR change management model (Hiatt & Creasey, 2003), this one workshop may not have been enough to greatly impact one's confidence about the retirement transition. It may have primarily raised awareness about the retirement transition, influenced participants' desire regarding the transition, and provided a foundation of knowledge about using strengths to find purposeful and affirmative activities in retirement. It may have also stimulated cognitive or emotional dissonance in individuals which is often a condition enabling further growth and development

Greater follow-up, via a series of workshops or through individual counseling, would more fully address each of the stages of change. Processing and encouraging deeper thinking and awareness about life in retirement may help move individuals towards greater desire for change. It can also help them gain more knowledge about how to negotiate the retirement transition to engage in purposeful and affirmative life activities. Partnering with individuals to gain more knowledge about how to more fully put their strengths into action, and exploring ways to create and engage in mastery experiences, may also further their confidence in negotiating the retirement transition to find purposeful and affirmative life engagement.

It is also recommended that career practitioners be cognizant of, and address, the constructs of positive and negative affect in their work with individuals entering or in retirement. Attempts to raise positive affect may assist in broadening clients' thought processes and openness to new ways of thinking about retirement, and how they want to

live it. This ultimately may help build psychological resources (e.g., retirement self-efficacy) that can assist them to successfully negotiate the retirement transition.

Furthermore, those with higher negative affect should not be overlooked as results from this study indicated that those with higher negative affect made greater gains in post-workshop retirement self-efficacy. (These results were not statistically significant, but of sound practical consequence.) Thus, those with higher negative affect should be included in retirement self-efficacy (and likely other) interventions as they have the possibility of making substantial improvements. Additionally, since the current study found that those with higher negative affect had lower retirement self-efficacy overall, these individuals are also most likely the ones that have higher needs in terms of developing retirement self-efficacy.

As discussed earlier, the retirement transition involves numerous facets of one's life (e.g., engaging in purposeful and affirmative activities, renegotiating relationships, health, finances, etc.). Additionally, while strengths can be a basis for identifying activities for retirement, more factors are ultimately involved, including one's values, abilities, skills, interests, and life context. In research, it is necessary to attempt to seclude and separate variables to determine their relationships and effects. However, on a practical level, these variables can never truly be separated and must all be included in the practitioner's toolbox when partnering with individuals to work toward their life goals. Conversely, the more tools the practitioner has that are empirically sound, the more she/he can practice with confidence. Furthermore, the career counseling profession and clients will undoubtedly receive greater benefit from having evidence-based practices.

Conclusion

This research expanded on previous research linking retirement self-efficacy to various retirement factors (e.g., retirement adjustment, life satisfaction) by examining if retirement self-efficacy can be developed or enhanced through an intervention in the form of a strengths-based retirement workshop. In other words, it examined if a workshop that utilized an approach to help individuals identify, explore, and clarify those activities that provided them with feelings of strength facilitated the development of retirement self-efficacy. Furthermore, this study assessed the relationship between retirement self-efficacy, trait positive affect, and trait negative affect, and evaluated possible predictors of retirement self-efficacy levels.

Overall, results from this investigation indicated support for the use of strengths-based interventions in developing retirement self-efficacy. It also pointed to the relevance of positive and negative affect in terms of their relationships with retirement self-efficacy and the development of it. Further research in these areas could prove helpful in providing evidence-based practices for those working with individuals contemplating, or in, retirement. Implications from this research also suggested the importance of acknowledging the current times we live in and the need to reevaluate what retirement is, and means, to each individual. Additionally, new learnings arose because of this research that had both theoretical and practical implications.

It should be remembered that the retirement transition is an ongoing process, thus it may be best for individuals to stop running towards it as if it were the finish line (Anthony, 2001). Koenig (2002) proposes that “retirement is the last one-third of life that no longer has the restrictions of the first two-thirds” (p. 7). This new life chapter can be a

time of new opportunities and a chance to become reacquainted with the wonders and joys that went unnoticed for many years (Koenig, 2002; Schacter-Shalomi & Miller, 1995). This may be more likely to occur if individuals are able to gain greater awareness and knowledge about retirement and how they want to live it, as well as have a sense of self-efficacy regarding their ability to negotiate the retirement transition and discover purposeful and affirmative life engagement.

EPILOGUE

Throughout the research process, I found that more questions came up than were answered. Fortunately, I also learned that this was a good thing. Just as the participants in the study's workshop may have experienced cognitive dissonance, so did I, many times. I had held hunches in my mind about what I believed might occur during this study and when it did not, I had to ask deeper questions and search for previously not considered answers. Consequently, one of my greatest learnings from this process was to hold lightly to my preconceived notions, and be willing to let go of them to construct new meaning and deeper learning. It is what I consistently ask of the students I teach and the clientele with whom I work, thus it is appropriate that I should apply this belief to research as well.

REFERENCES

- Allison, P. D. (1999). *Multiple regression: A primer*. Thousand Oaks, CA: Pine Forge Press.
- Anthony, M. (2001). *The new retirementality: Planning your life and living your dreams...at any age you want*. Chicago, IL: Dearborn Financial Publishing.
- Asplund, J., Lopez, S. J., Hodges, T., & Harter, J. (2007). *The Clifton StrengthsFinder 2.0 technical report: Development and validation*. Princeton, NJ: The Gallup Organization.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives On Psychological Science*, 1(2), 164-180.
- Black, B. (2001). The road to recovery. *The Gallup Management Journal*, 1(4), 10-12.
- Brady, E. M., Leighton, A., Fortinsky, R. H., & Crocker, E. (1996). Preretirement education models and content: A New England study. *Educational Gerontology*, 22, 329-339.
- Buckingham, M. (2007). *Go put your strengths to work: 6 powerful steps to achieve outstanding performance*. New York, NY: Free Press.
- Buckingham, M., & Clifton, D. O. (2001). *Now, discover your strengths*. New York, NY: Free Press.
- Bylsma, L. M., Taylor-Clift, A., & Rottenberg, J. (2011). Emotional reactivity to daily events in major and minor depression. *Journal of Abnormal Psychology*, 120(1), 155-167. doi: 10.1037/a0021662
- Cantwell, L. (2005). A comparative analysis of strengths-based versus traditional teaching methods in a freshman public speaking course: Impacts on student learning and engagement. *Dissertation Abstracts International*, 67(02A), 478-700. (UMI No. AAT3207574).

- Clifton, D. O., & Anderson, E. (2002). *StrengthsQuest: Discover and develop your strengths in academics, career, and beyond*. Washington, D.C.: The Gallup Organization.
- Clifton, D. O., & Harter, J. K. (2003). Strengths investment. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), *Positive organizational scholarship* (pp. 111-121). San Francisco, CA: Berrett-Koehler.
- Cohen, J. (1988). *Statistical power and analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Connelly, J. (2002). All together now. *The Gallup Management Journal*, 2(1), 13-18.
- Connolly, J. (1992). Participatory versus lecture/discussion preretirement education: A comparison. *Educational Gerontology*, 18, 365-379.
- Crawford, J. R., & Henry, J. D. (2004). The positive and negative affect schedule (PANAS): Construct validity, measurement properties and normative data in a large non-clinical sample. *British Journal of Clinical Psychology*, 43, 245-265.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage.
- Csikszentmihalyi, M. (1997). *Finding flow: The psychology of engagement with everyday life*. New York, NY: Basic Books.
- Danner, D. D., Snowdon, D. A., & Friesen, W. V. (2001). Positive emotions in early life and longevity: Findings from the Nun Study. *Journal of Personality and Social Psychology*, 80(5), 804-813.
- Donaldson, T., Earl, J. K., & Muratore, A. M. (2010). Extending the integrated model of retirement adjustment: Incorporating mastery and retirement planning. *Journal of Vocational Behavior*, 77, 279-289. doi: 10.1016/j.jvb.2010.03.003
- Dorfman, L. T. (1995). Health conditions and perceived quality of life in retirement. *Health & Social Work*, 20(3), 192-200.
- Dychtwald, K. (2000). *Age power: How the 21st century will be ruled by the new old*. New York, NY: Putnam.
- Evans, L., Ekerdt, D. J., & Bosse, R. (1985). Proximity to retirement and anticipatory involvement: Findings from the normative aging study. *Journal of Gerontology*, 40, 368-374.
- Feldman, D. C. (1992). The decision to retire early: A review and conceptualization. *The Academy of Management Review*, 19, 285-311.

- Fitzpatrick, M. R., & Stalikas, A. (2008). Positive emotions as generators of therapeutic change. *Journal of Psychotherapy Integration, 18*(2), 137-154.
- Fredrickson, B. L. (1998). What good are positive emotions? *Review of General Psychology, 2*, 300-319.
- Fredrickson, B. L. (2006). The broaden-and-build theory of positive emotions. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.), *A life worth living: Contributions to positive psychology* (pp. 85-103). Oxford, NY: Oxford University Press.
- Fredrickson, B. L. (2009). *Positivity*. New York, NY: Crown Publishers.
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion, 19*(3), 313-332.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist, 60*, 678-686.
- Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crises? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of Personality and Social Psychology, 84*, 365-376.
- Freedman, M. (1999). *Prime time: How baby boomers will revolutionize retirement and transform America*. New York, NY: Public Affairs.
- Fretz, B. R., Kluge, N. A., Ossana, S. M., Jones, S. M., & Merikangas, M. W. (1989). Intervention targets for reducing preretirement anxiety and depression. *Journal of Counseling Psychology, 36*(3), 301-307.
- Gallup. (2008). Employee engagement. Retrieved December 1, 2008, from <http://www.gallup.com/consulting/52/Employee-Engagement.aspx>
- Gee, S., & Baillie, J. (1999). Happily ever after? An exploration of retirement expectations. *Educational Gerontology, 25*, 109-128.
- Glass, J. C., Jr., & Flynn, D. K. (2000). Retirement needs and preparation of rural middle-aged persons. *Educational Gerontology, 26*, 109-134.
- Gliner, J. A., & Morgan, G. A. (2000). *Research methods in applied settings: An integrated approach to design and analysis*. Mahwah, NJ: Lawrence Erlbaum.
- Gliner, J. A., Morgan, G. A., & Leech, N. L. (2009). *Research methods in applied settings: An integrated approach to design and analysis* (2nd ed.). New York, NY: Routledge

- Goldberg, B. (2000). *Age works: What corporate America must do to survive the graying of the workforce*. New York, NY: The Free Press.
- Hanson, K., & Wapner, S. (1994). Transition to retirement: Gender differences. *International Journal of Aging and Human Development*, 39, 189-208.
- Harper, M. C. (2005). Retirement modeling: An exploration of the effects of retirement role model characteristics on retirement self-efficacy and life satisfaction in midlife workers. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 66(8-A), 2842.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal Of Applied Psychology*, 87, 268-279.
- Hayslip, B., Jr., Beyerlein, M., & Nichols, J. (1997). Assessing anxiety about retirement: The case of academicians. *International Journal of Aging and Human Development*, 44, 15-36.
- Heppner, M. J. (1991). *The Career Transitions Inventory*. (Available from M.J. Heppner, Department of Educational and Counseling Psychology, 16 Hill Hall, University of Missouri, Columbia, MO 65211). .
- Heppner, M. J., Multon, K. D., & Johnston, J. A. (1994). Assessing psychological resources during career change: Development of the career transitions inventory. *Journal of Vocational Behavior*, 44, 55-74.
- Hiatt, J. M., & Creasey, T. J. (2003). *Change management: the people side of change*. Loveland, CO: Prosci
- Holmes, J. S., & Dorfman, L. T. (2000). The effects of specific health conditions on activities in retirement. *Activities, Adaptation & Aging*, 25(1), 47-65.
- Hornstein, G. A., & Wapner, S. (1985). Modes of experiencing and adapting to retirement. *International Journal of Aging and Human Development*, 21, 281-315.
- Hyde, M., Ferrie, J., Higgs, P., Mien, G., & Nazroo, J. (2004). The effects of pre-retirement factors and retirement route on circumstances in retirement: Findings from the Whitehall II study. *Ageing & Society*, 24, 279-296.
- Kamouri, A. L., & Cavanaugh, J. C. (1986). The impact of preretirement education programmes on workers' preretirement socialization. *Journal of Occupational Behaviour*, 7, 245-256.
- Kirnan, J. P. (2003). Career Transitions Inventory. In B. S. Plake, J. C. Impara, R. A. Spies & L. L. Murphy (Eds.), *The fifteenth mental measurements yearbook*. Lincoln, NB: Buros Institute of Mental Measurements.

- Kirnan, J. P. (2009). The Career Transitions Inventory (CTI). In E. A. Whitfield, R. W. Feller & C. Wood (Eds.), *A counselor's guide to career assessment instruments* (5th ed., pp. 356-360). Broken Arrow, OK: National Career Development Association.
- Koenig, H. G. (2002). *Purpose and power in retirement*. Philadelphia, PA: Templeton Foundation Press.
- L'Allier, J. J., & Kolosh, K. (2005, June). Preparing for baby boomer retirement. *Chief Learning Officer*, 4, 42-49.
- Linley, P. A., & Joseph, S. (2004). Applied positive psychology: A new perspective for professional practice. In P. A. Linley & S. Joseph (Eds.), *Positive psychology in practice*. Hoboken, NJ: John Wiley & Sons.
- Llorens, S., Schaufeli, W. B., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist? *Computers in Human Behavior*, 23, 825-841.
- Lopez, S. J., Magyar-Moe, J. L., Petersen, S. E., Ryder, J. A., Krieshok, T. S., O'Byrne, K. K., et al. (2006). Counseling psychology's focus on positive aspects of human functioning. *The Counseling Psychologist*, 34, 205-227.
- Lopez, S. J., & Tree, H. A. (2009). Clifton StrengthsFinder or StrengthsFinder 2.0. In E. A. Whitfield, R. W. Feller & C. Wood (Eds.), *A Counselor's Guide to Career Assessment Instruments* (5th ed.). Broken Arrow, OK: National Career Development Association.
- Love, J. (2010). *Approaching 65: A survey of baby boomers turning 65 years old*. Retrieved from AARP website: <http://www.aarp.org/personal-growth/transitions/info-12-2010/approaching-65.html?cmp=SN-TWTTR>
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 23, 695-706.
- MacEwen, K. E., Barling, J., Kelloway, E. K., & Higginbottom, S. F. (1995). Predicting retirement anxiety: The roles of parental socialization and personal planning. *Journal of Social Psychology*, 135, 203-213.
- Marcellini, F., Sensoli, C., Barbini, N., & Fioravanti, P. (1997). Preparation for retirement: Problems and suggestions of retirees. *Educational Gerontology*, 23, 377-388.
- Mock, S. E., & Cornelius, S. W. (2007). Profiles of interdependence: The retirement planning of married, cohabiting, and lesbian couples. *Sex Roles*, 56, 793-800.

- Moen, P., Kim, J. E., & Hofmeister, H. (2001). Couples' work/retirement transitions, gender and marital quality. *Social Psychology Quarterly*, *64*, 55-71.
- Morgan, G. A., Gliner, J. A., & Harmon, R. J. (2006). *Understanding and evaluating research in applied and clinical settings*. Mahwah, NJ: Lawrence Erlbaum.
- Morgan, G. A., Leech, N. L., Gloeckner, G. W., & Barrett, K. C. (2004). *SPSS for introductory statistics: Use and interpretation* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- National Center for Health Statistics. (2009). Health, United States, 2008 Retrieved February 19, 2010, from <http://www.cdc.gov/nchs/data/hus/hus08.pdf#026>
- National Center for Health Statistics. (2009, March). *Health, United States, 2008*. Retrieved July 15, 2009, from <http://www.cdc.gov/nchs/data/hus/hus08.pdf#026>
- Nelson, D. W., & Knight, A. E. (2010). The power of positive recollections: Reducing test anxiety and enhancing college student efficacy and performance. *Journal of Applied Social Psychology*, *40*(3), 732-745.
- Neuhs, H. P. (1990). Retirement self-efficacy: The effects of socioeconomic status, life satisfaction, health and readiness for retirement. *Journal of the New York State Nurses Association*, *21*(1), 15-20.
- Neuhs, H. P. (1991). Ready for retirement? Give the quiz to find out the retirement issues that can erode or threaten self-confidence in an elder's golden years. *Geriatric Nursing*, *12*, 240-241.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York, NY: Oxford University Press.
- Peterson, P. G. (1999). *Gray dawn: How the coming age wave will transform America--and the world*. New York, NY: Random House.
- Petkoska, J., & Earl, J. K. (2009). Understanding the influence of demographic and psychological variables on retirement planning. *Psychology and Aging*, *24*(1), 245-251.
- Pinquart, M., & Schindler, I. (2007). Changes of life satisfaction in the transition to retirement: A latent-class approach. *Psychology and Aging*, *22*, 442-455.
- Price, C. A. (2002). Retirement for women: The impact of employment. *Journal of Women & Aging*, *14*, 41-57.
- Price, C. A. (2003). Professional women's retirement adjustment: The experience of reestablishing order. *Journal of Aging Studies*, *17*, 341-355.

- Quinn, J. F. (2010). Work, retirement, and the encore career: Elders and the future of the American workforce. *Journal of the American Society on Aging, 34*(3), 45-55.
- Richardson, V., & Kilty, K. M. (1991). Adjustment to retirement: Continuity vs. discontinuity. *International Journal of Aging and Human Development, 33*, 151-169.
- Rogatko, T. P. (2009). The influence of flow on positive affect in college students. *Journal of Happiness Studies, 10*, 133-148. doi: 10.1007/s10902-007-9069-y
- Salanova, M., Llorens, S., & Schaufeli, W. B. (2011). "Yes, I can, I feel good, and I just do it!" On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology: An International Review, 60*(2), 255-285. doi: 10.1111/j.1464-0597.2010.00435.x
- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work*. Hoboken, NJ: John Wiley & Sons.
- Schacter-Shalomi, Z., & Miller, R. S. (1995). *From age-ing to sage-ing: A profound new vision of growing older*. New York, NY: Warner Books.
- Schreiner, L. A. (2006). *A technical report on the Clifton StrengthsFinder with college students*. Omaha, NE: The Gallup Organization.
- Secombe, K., & Lee, G. R. (1986). Gender differences in retirement satisfaction and its antecedents. *Research on Aging, 8*, 426-440.
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment*. New York, NY: Free Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14.
- Seligman, M. E. P., Rashid, T., & Parks, A. C. (2006). Positive psychotherapy. *American Psychologist, 61*(8), 774-788.
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist, 60*(5), 410-421.
- Sharpley, C. F., & Layton, R. (1998). Effects of age of retirement, reason for retirement and pre-retirement training on psychological and physical health during retirement. *Australian Psychologist, 30*, 119-124.
- Siegel, S., & Rees, B. (1992). Preparing the public employee for retirement. *Public Personnel Management, 21*, 89-100.

- Siegel, S. R. (1994). A comparative study of pre-retirement programs in the public sector. *Public Personnel Management, 23*, 631-647.
- Slowik, C. M. (1991). The relationship of preretirement education and well-being of women in retirement. *Gerontology & Geriatrics Education, 11*(4), 89-104.
- Smith, D. B., & Moen, P. (1998). Spouse's influence on the retirement decision: His, her, and their perceptions. *Journal of Marriage and the Family, 60*, 734-744.
- Snyder, C. R., & Lopez, S. J. (2007). *Positive psychology: The scientific and practical explorations of human strengths*. Thousand Oaks, CA: Sage Publications.
- Szinovacz, M. E., & Davey, A. (2004). Honeymoons and joint lunches: Effects of retirement and spouse's employment on depressive symptoms. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 59*, P233-P245.
- Taylor-Carter, M. A., & Cook, K. (1995). Adaptation to retirement: Role change and psychological resources. *Career Development Quarterly, 44*, 67-82.
- Taylor-Carter, M. A., Cook, K., & Weinberg, C. (1997). Planning and expectations of the retirement experience. *Educational Gerontology, 23*, 273-288.
- Taylor, M. A., & Shore, L. M. (1995). Predictors of planned retirement age: An application of Beehr's model. *Psychology and Aging, 10*(1), 76-83.
- U. S. Census Bureau. (2006). *Appendix - Selected highlights from 65+ in the United States: 2005*. Retrieved December 5, 2008, from <http://www.census.gov/Press-Release/www/2006/65appendix.html>
- U. S. Census Bureau. (n.d.). Selected characteristics of baby boomers 42 to 60 years old in 2006. Retrieved February 18, 2011 <http://www.census.gov/population/www/socdemo/age/2006%20Baby%20Boomers.pdf>
- van Solinge, H., & Henkens, K. (2008). Adjustment to and satisfaction with retirement: Two of a kind? *Psychology and Aging, 23*, 422-434.
- Vermeulen, N. (2010). Current positive and negative affective states modulate attention: An attentional blink study. *Personality and Individual Differences, 49*, 542-545. doi: 10.1016/j.paid.2010.04.003
- Wadlinger, H. A., & Isaacowitz, D. M. (2006). Positive mood broadens visual attention to positive stimuli. *Motivation and Emotion, 30*, 89-101.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.

- Wells, Y. D., & Kendig, H. L. (1999). Psychological resources and successful retirement. *Australian Psychologist, 34*(2), 111-115.
- Williams, S.-A., Wissing, M. P., Rothmann, S., & Temane, Q. M. (2010). Self-efficacy, work, and psychological outcomes in a public service context. *Journal of Psychology in Africa, 20*(1), 43-52.

APPENDIX A: MEASUREMENT INSTRUMENTS

This appendix contains a copy of the following instruments: The adapted Confidence Subscale of the CTI, the PANAS, and the questionnaire administered to obtain demographic and self-rated health information.

Adapted Confidence Subscale of the Career Transitions Inventory (CTI)

Directions: Below is a list of 11 statements. Read each item, and then indicate to what extent you agree or disagree with that item.

All questions were answered on the following scale:

Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
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1. The retirement transition process may be too complex for me to work through.
2. I never have been able to go through transitions very easily. I doubt I will this time.
3. The risk of retiring seems serious to me.
4. Some would say that retirement is a risky venture, but the risk doesn't bother me.
5. I don't feel that I have the talent to make a transition to retirement that I will feel good about.
6. It seems natural with something as scary as transitioning to retirement, I would be preoccupied with worry about it.
7. I am one of those people who was brought up to believe I could be/do anything I wanted to.
8. In dealing with aspects of this retirement transition, I am unsure whether I can handle it.
9. I feel confident in my ability to do well in the retirement transition process.
10. The magnitude of this retirement transition is impossible to deal with.
11. The number of unknowns involved in making a transition to retirement bothers me.

This assessment was adapted with permission from M. J. Heppner (personal communication, March 5, 2010). The original CTI can be obtained from M.J. Heppner, Department of Educational and Counseling Psychology, 16 Hill Hall, University of Missouri, Columbia, MO 65211.

The PANAS

This scale consists of a number of words that describe different feelings and emotions.

Read each item and then mark the appropriate answer in the space next to that word.

Indicate to what extent you generally feel this way, that is, how you feel on the average.

Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely
_____ interested				_____ irritable
_____ distressed				_____ alert
_____ excited				_____ ashamed
_____ upset				_____ inspired
_____ strong				_____ nervous
_____ guilty				_____ determined
_____ scared				_____ attentive
_____ hostile				_____ jittery
_____ enthusiastic				_____ active
_____ proud				_____ afraid

From "Development and validation of brief measures of positive and negative affect: The PANAS scales," by D. Watson, L. A. Clark, and A. Tellegen, 1988, *Journal of Personality and Social Psychology*, 54, 1063-1070. Copyright © 1988 by the American Psychological Association. Reproduced with permission.

Questionnaire for Demographic and Self-Rated Health Information

1. Age: _____

2. Gender:
_____ Female
_____ Male

3. Race/Ethnicity (mark all the apply)
_____ American Indian or Alaska Native
_____ Asian
_____ Black or African American
_____ Hispanic or Latinoa
_____ Native Hawaiian or Other Pacific Islander
_____ White

4. Education Level:
_____ Did not complete high school
_____ High School or GED
_____ Some college
_____ 2-year degree
_____ 4-year degree
_____ Graduate degree

5. How would you describe your health in general?
_____ very good (5)
_____ good (4)
_____ fair (3)
_____ poor (2)
_____ very poor (1)

6. Compared to others your age, how would you rate your health?
_____ very good (5)
_____ good (4)
_____ fair (3)
_____ poor (2)
_____ very poor (1)

7. How would you rate your ability to complete your daily activities?
_____ very good (5)
_____ good (4)
_____ fair (3)
_____ poor (2)
_____ very poor (1)

APPENDIX B: RECRUITMENT AND CONSENT FORMS

This appendix contains copies of the consent form, and recruitment letter and flier.

Consent to Participate in a Research Study

Colorado State University

TITLE OF STUDY:

Retirement Self-Efficacy: The Effects of a Pre-Retirement Strengths-Based Intervention on Retirement self-efficacy and an Exploration of Relationships between Positive Emotion and Retirement Self-Efficacy

PRINCIPAL INVESTIGATOR:

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CO-PRINCIPAL INVESTIGATOR:

Jackie Peila-Shuster, School of Education, Ph.D. Candidate; 221 Education Bldg, Colorado State University, Fort Collins, CO 80523; (phone); jpshu@rams.colostate.edu

WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH?

I am asking you to be a part of this study because you are planning to retire within the next three years. I am interested in examining your level of confidence about retiring. I am also interested to see if a workshop about your strengths can help you develop confidence about retiring and if certain emotions are related to confidence about retiring.

WHO IS DOING THE STUDY?

Jackie Peila-Shuster, the co-investigator and a Ph.D. candidate in the Colorado State University School of Education, will conduct the study for her research dissertation. The research team for this study also consists of Dr. Richard Feller as the principal investigator.

WHAT IS THE PURPOSE OF THIS STUDY?

This study will look at if a workshop that helps people learn about activities that use their strengths will improve their confidence about retiring. This study will also see if confidence about retiring is related to positive emotions. It will check to see if there are certain things that can help predict confidence about retiring.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

This study will take place on a computer that you use to access the internet and at a site to be determined for the workshop. The entire study will take around 4 to 6 weeks, but the time you will actually be spending on it is only about 5 to 6 hours. You will spend a total of about 1 to 1 ½ hours on the computer to complete assessments and questionnaires. The workshop will take 4 hours.

WHAT WILL I BE ASKED TO DO?

If you volunteer for this study, you will:

- Use the internet to complete these assessments provided by the study co-investigator:
 - The Clifton StrengthsFinder 2.0
 - A short questionnaire (8 questions about demographics and self-rated health)
 - The Positive and Negative Affect Schedule (20 questions on a rating scale about positive and negative emotions)
 - An adapted version of the confidence subscale of the Career Transitions Inventory (11 questions on a rating scale concerning your confidence about retiring). This last measure will be given 2-3 times during the study.
- Attend a 4-hour workshop that will use the Clifton StrengthsFinder 2.0 and other activities to help you identify and clarify activities that give you feelings of strength/passion/purpose.

ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY?

There are no known reasons why you should not take part in this study.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

The likelihood of any risks or discomforts from this study is very small. Some of the assessments may give you some information about your confidence level regarding retirement and about your positive and negative emotions. If at any time you have concerns about your emotional health you may contact the researcher for helping services resources. Your participation in this study is entirely voluntary and you may withdraw at any time without consequence.

The researcher will keep all assessment results confidential and participant names will not be used in any presentations or publications.

It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY?

You will receive your top five themes of strengths/talents by taking the Clifton StrengthsFinder 2.0. These results will also include ways to further develop these themes. Additionally, the workshop will help to better define and personalize these strengths. Through the workshop, it is hoped that you will develop greater confidence about retiring and finding meaningful and affirmative activities in retirement.

Additional benefits include what this research will add to the field of positive psychology and to the knowledge base surrounding retirement. It is also expected that individuals (e.g., counseling professionals) working with pre-retirees or retirees will be provided with additional information regarding this particular transition including a possible approach to help individuals develop higher levels of confidence about retiring.

DO I HAVE TO TAKE PART IN THE STUDY?

Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at any time without penalty or loss of benefits to which you are otherwise entitled.

WHAT WILL IT COST ME TO PARTICIPATE?

There are no costs for you to participate.

WHO WILL SEE THE INFORMATION THAT I GIVE?

We will keep private all research records that identify you, to the extent allowed by law. Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

Precautions will be taken to facilitate confidentiality of the participants. However, because the intervention involves a group workshop, no guarantees can be made that information brought up in the workshop will be kept confidential by other participants.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. For example, you will be given a study code to utilize on the measurement instruments and questionnaires which will allow for your name, e-mail, and any other identifying information to not be connected to the data gathered. If you lose your code over the course of the study, you may contact the co-investigator for it. This code will be kept with your signed consent form in a locked site separate from all data gathered. This locked site will only be able to be accessed by the primary investigator and the co-investigator. The online survey instrument used to gather data will be a secured and encrypted tool. All data collected online will be kept on a password protected computer.

You should know, however, that there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court OR to tell authorities if we believe you have abused a child, or you pose a danger to yourself or someone else.

CAN MY TAKING PART IN THE STUDY END EARLY?

If you do not complete all assessments and questionnaires, and take part in the workshop, you may be removed from the study.

WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY?

You will not be compensated for your participation in the study.

WHAT HAPPENS IF I AM INJURED BECAUSE OF THE RESEARCH?

The Colorado Governmental Immunity Act determines and may limit Colorado State University's legal responsibility if an injury happens because of this study. Claims against the University must be filed within 180 days of the injury.

WHAT IF I HAVE QUESTIONS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact the investigator, Jackie Peila-Shuster at (phone number). If you have any questions about your rights as a volunteer in this research, contact Janell Barker, Human Research Administrator at (phone number). We will give you a copy of this consent form to take with you.

This consent form was approved by the CSU Institutional Review Board for the protection of human subjects in research on September 20th, 2010.

WHAT ELSE DO I NEED TO KNOW?

This study will take place in various steps. Please initial each of the following if you consent.

_____ You will complete the initial assessments/questionnaire provided by the researcher prior to receiving your code to take the Clifton StrengthsFinder 2.0.

_____ You will complete the Clifton StrengthsFinder 2.0 (code provided by the researcher).

_____ You will participate in a workshop designed to help you identify, define and explore your strengths.

_____ You will take a follow-up assessment provided by the researcher one week after the workshop.

_____ There are two groups participating in this study. You will be placed in one of these groups randomly. You will receive the same assessments/questionnaire and workshop in either group. If you are in the second workshop group, you will complete the confidence assessment two times prior to the workshop (rather than just once) and one time following the workshop.

Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, on the date signed, a copy of this document containing 4 pages.

Signature of person agreeing to take part in the study

Date

Printed name of person agreeing to take part in the study

Name of person providing information to participant

Date

Signature of Research Staff

Date

Verbal and Written Script for Permission to Distribute Recruitment Fliers

Greetings,

My name is Jackie Peila-Shuster and I am a Ph.D. Candidate in the School of Education at Colorado State University. I am conducting a research study about retirement and will be offering a free workshop to individuals who may be considering retirement in the next three years. This workshop will attempt to help participants identify those talents and activities that make them feel strong and explore the possibility of carrying these talents and activities forward in some fashion into their next life chapter.

With your permission, I would like to distribute fliers in your organization about this workshop and research study. Individuals' participation in this study will be strictly voluntary and not associated with your organization. If approved, fliers will be distributed at your organization but your organization will not be engaged in, or a part of, the research study.

This study has been approved by the Institutional Review Board (IRB) on September 20th, 2010, at Colorado State University which ensures the university complies with the federal regulations governing review of research that involves human subjects, such as this study.

Please contact me at jpschu@rams.colostate.edu or at (phone number) for any further information.

Thank you for your time,

Jackie Peila-Shuster
School of Education
Colorado State University
jpschu@rams.colostate.edu
970-222-8964

Understanding & Unleashing Your Retirement Passions

This free workshop is being provided as a part of a research study by Jackie Peila-Shuster, Instructor & Rich Feller, Ph.D., Professor, School of Education Colorado State University.

To be eligible for this workshop/study you must:

- be planning to retire within the next 3 years
- feel financially secure enough with retirement that you have no plans to find full-time employment following retirement
- have access to the internet

This workshop/research study will:

- provide you with access to the Clifton StrengthsFinder 2.0 assessment
- help you identify, define, and explore your talents and strengths
- explore how your talents and strengths can help you find and engage in purposeful and affirmative activities
- help others by providing information to further best practices in assisting individuals with the retirement transition

If interested, please contact Jackie Peila-Shuster at jpshu@rams.colostate.edu or at (phone number) by November 5th. Workshop date is scheduled for Nov/Dec.

Research Study Title: *Retirement Self-Efficacy: The Effects of a Pre-Retirement Strengths-Based Intervention on Retirement Self-Efficacy and an Exploration of Relationships between Positive Affect and Retirement Self-Efficacy.*

It is expected that your participation in this study will take approximately 5-6 hours of your time (including the 4-hour workshop) over a 4-6 week period. You may withdraw from the study at any time.

