

THE EFFECT OF LOOMING RETIREMENT ON MENTAL AND PHYSICAL WELL-BEING  
AND LIFE SATISFACTION

A Dissertation

by

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## ABSTRACT

Retirement may be a stressor for a large segment of the population. Once seen as a positive time in a person's life (i.e., the Golden Years), in recent years retirement has become a stressful event for most people, mostly due to their lack of preparation for this event. According to a 2010 Pew Research Center article, 10,000 Baby Boomers retire each day and will continue to do so until 2029 and by 2030 the retired Baby Boomers will constitute 18% of the US population. Also, the typical American aged 65 in the U.S. in 2015 is expected to live until 84 years of age and in 2016, 30% of surveyed Americans aged 55 and over had no retirement savings. Clearly, Americans are financially underprepared for the longest retirement with the largest cohort, compared to previous generations. Utilizing two waves of Midlife in the United States data, this study will show how variables such as educational attainment, human agency, and religiosity during the pre-retirement years are associated with a healthier (e.g., decrease of mental and physical health disorders) and happier (increase in life satisfaction) retirement. Life Course, Role, and Role Accumulation theories all guide the research and offer alternative paths towards an ideal retirement in the absence of large financial resources.

## DEDICATION

This dissertation is dedicated to Patricia Shuxia Morales... oh, the places you'll go!

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## CONTRIBUTORS AND FUNDING SOURCES

### **Contributors**

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# CHAPTER I

## INTRODUCTION

Retirement is a major milestone for most people in American society. It is often synonymous with a time of leisure that usually takes place after dedicating a large portion of one's lifetime to labor force participation. Retirement years may be categorized as the "Third Age" (Baltes and Smith, 2003), i.e., a time where leisure activities can be enjoyed before the onset of physical and mental ailments (morbidity). Whether the milestone is seen as positive (Schultz et al., 1998) or negative (Kim et al., 2013) depends on the individual and a number of characteristics and situations, including the person's level of preparedness for retirement during the *pre-retirement* years (ages 55 to 64, although the National Academy of Social Insurance lists age 66 years 2 months as retirement age for people born in 1955).

The legal age of retirement may vary from as early as 62 years of age (with partial retirement benefits) to 66 years of age (with full retirement benefits; National Academy of Social Insurance, n.d. <https://www.nasi.org/learn/socialsecurity/retirement-age>). With the typical 65 year-old living in the United States in 2017 expected to survive to 84.4 years of age (Arias and Xu, 2017), accumulating sufficient resources during the working years to maintain the lifestyle experienced *during* the non-working years may be the largest stressor facing Americans in the pre-retirement ages of 55 to 62. If Americans living in 2015 are predicted to live about 19 years after entering retirement, they would fit neatly into similar models of caregiving found at various times within the life course. From birth to about 18 years of age (the typical social and legal age of adulthood), family members take care of young loved ones. When deciding to form families of their own in adulthood, the cared for (i.e., the wards) become caretakers (i.e., the parents) who

take care of their own offspring, for about 18 years. However, the exact amount of time may vary and has increased in recent times as adult offspring sometimes boomerang back to their parents' household (Burn and Szoeki, 2016; Farris, 2016). Finally, as Americans enter retirement, they may need to learn how to take care of themselves for another 18 or so years.

Moore et al. (2010) used the term “looming retirement” when they examined retirement in Canada. The noun “loom,” is defined as, “the indistinct and exaggerated appearance of something seen on the horizon or through fog or darkness” (Merriam-Webster, n.d., p. 1). Three words are highlighted in the definition and can be applied to a looming retirement: indistinct, exaggerated, and horizon. “Indistinct” refers to the sense that a retirement today may not be very different from non-retirement, and that Americans are less prepared to enter retirement; owing to this ill-preparedness, many may well delay their retirement. “Exaggerated” applies to how many dollars and associated resources are needed to have an ideal retirement (see “\$1 million may not last you in retirement—here's how to figure out how much you need,” Elkins, 2018). And finally, “horizon” refers to the age of retirement, which will arrive for workers at about the same time (at age 65), but may not be applicable to all workers because not all workers may retire at the same age, nor may all workers decide to retire at all. Quickly, looming retirement becomes a type of anxiety-inducing event in itself (Moore et al., 2010). In my dissertation I will examine the mental and physical health-related outcomes that may result from looming retirement. I will ascertain the degree to which such personal factors as age, gender, race/ethnicity, marital status, education, and retirement finances and assets may well influence and be related to people's stress, mental-health, and physical health. My dissertation research will apply to a large and growing number of Americans. According to a 2010 Pew Research Center report (Heimlich, 2010), 10,000 Baby Boomers retire each day and will continue to do so until 2029; and by 2030

the retired Baby Boomers will constitute 18% of the U.S. population, meaning almost 1 in 5 Americans will be of retirement age by 2030.

### **Personal connection**

My interest in examining retirement was sparked while driving on Interstate-10 in El Paso, Texas. I often passed billboards that informed motorists about the need to save for retirement; these billboards also seemed to shame those who had not saved large financial nest eggs. El Paso City has a median income of \$44,431, which is \$13,221 less than the median income for the United States as a whole, according to the U.S. Census Bureau's 2013-2017 American Community Survey 5-Year Estimates. When I read those billboards, I often wondered how many El Pasoans would find their messages to save for retirement anxiety-inducing, rather than helpful. I thought there must be alternatives to achieving a pleasant retirement that takes into account a lack of financial resources, so I decided to examine retirement for my dissertation topic.

On a personal note, I turned 41 in 2019 and am thus a bit less than 25 years from retirement age. While there is no need right now for me to retire, and hopefully, I will not need to retire when I reach my mid-60s, I am getting ready for my eventual retirement. Financially, for many years money has been placed into an Individual Retirement Account for my family and me, and for several years, my employers have contributed to the Teacher Retirement System of Texas on my behalf. Hopefully the need and the desire to retire will continue to be absent for me. Also, some of the findings of this dissertation may well persuade me that there are ways I can offset looming retirement stress and reduce the impact of a known stressor (retirement) late in life.

## **Connections to Demography and Gerontology**

This topic has connections to both demography, i.e., the scientific study of human populations, and to gerontology, i.e., the study of aging. Regarding demography, a large, aging population may further reduce the number of children born in a country as the elderly live longer and require more resources from their adult offspring. This may force their adult offspring to split time and financial resources and reduce the number of children they may plan to have, resulting in an even older population. With regard to gerontology, the aging population in the United States (i.e., the Baby Boomers) may be experiencing new challenges during their retirement years. Perhaps, they may need to be more self-sufficient as available resources for retirees do not meet the demand of a larger cohort retiring. For example, in 2009, Iwinska-Nowak and Morales, using U.S. Census Bureau data from 2000 census and the American Community Survey, found a shortage of available retirement homes for the Baby Boomer generation who reside in, or decide to retire in the state of Florida.

### **Factors predicting an “ideal” retirement**

A 2012 Pew Research Center report (Morin and Fry, 2012) found higher educational attainment led to more confidence in accumulating enough resources to last through retirement. Specifically, 71% of college graduates expressed confidence that they will have enough resources to last through retirement, compared to only 53% of those with a high school diploma or less. The results were similar for household income; as household income increased, so did confidence in having enough resources to last through retirement. In other words, confidence may be one important indicator of an ideal retirement, but the act of actually accumulating sufficient resources to experience an ideal retirement may be quite a different endeavor. Multran et al. (1997) found that retirement planning increased the positive outcomes of retirement.

Planning and accumulating financial resources may be affected by internal (human agency, e.g. knowledge of how to save, discipline to save) and external (societal circumstances and opportunities, e.g., recessions, stock market crashes/rebounds) forces. Beginning with internal forces, it seems Americans about to enter retirement may not possess the knowledge of how to save for retirement or the discipline to do so. In 2019, GoBankingRates, a personal banking website, conducted research on Americans over the age of 55 and found that 54% of older Americans lacked sufficient retirement funds, with an astonishing 30% of Americans 55 and over having no retirement savings (Dennison, n.d., <https://www.gobankingrates.com/retirement/planning/1-3-americans-0-saved-retirement/>).

External forces may thwart the efforts of the most knowledgeable or disciplined savers. For example, in 2007, the United States experienced a recession (the Great Recession of 2007) that resulted in the loss of wealth for a large number of Americans. This recession came about because of the stock market crash, loss of jobs, the burst of the housing bubble, and other economic events. A 2012 Pew Research Center report (Morin and Fry, 2012, p. 8) revealed “in the past 10 years, median wealth of households headed by adults 35 to 44 years old has dropped from \$99,727 in 2001 to \$43,698 in 2010, a 56% decline” due to the Great Recession of 2007. And since most Americans’ wealth is represented by homeownership, the same Pew report (Morin and Fry, 2012, p. 10) found that due to the Housing Bubble Burst, a contributor to the Great Recession of 2007, “...median home equity—so-called housing wealth—declined the most for homeowners aged 35 to 44. Between 2007 and 2010, the equity of homeowners in this age group was cut in half (52%).” These findings highlight some of the external circumstances that Americans may have faced that offset their agency to save for retirement.

Moreover, I suspect that the situation could well be worse for Americans with low social economic status and thus less confidence that they will have sufficient resources to last through retirement. Also, what about Americans who do not know how to save? Or what about those who lost significant wealth due to the recent recession? The 2012-2017 American Community Survey 5-Year Estimates reported that among the population 45 to 65 years of age, only 29.6% held a bachelor's degree or higher. Assuming higher educational attainment leads to better paying occupations and households with higher incomes, the stress of not being properly prepared for retirement and external forces such as the economy may be foreshadowing less than ideal retirements for a large proportion of low socioeconomic status Americans who are or will be retiring soon. This stress may be manifested in mental health disorders such as depression, anxiety of not knowing how retirement will be, and stress which may result in a decrease in life satisfaction.

Parsons' functional role theory (Parsons et al., 2017) suggests that role strain may result during the pre-retirement years when Americans start to worry that they are not embodying the role of a person preparing for retirement and may be dysfunctional during retirement when they do not embody the lifestyle of a leisurely retiree. The stress or role strain during pre-retirement age may well increase the likelihood of mental health disorders such as depression prior to retirement, which may force individuals into disability retirement (having to retire due to a physical or mental disability) (Lamberg et al., 2010). The pre-retirement stress of not being properly prepared for retirement may, in fact, lead to a self-fulfilling prophecy of a less than ideal retirement due to not properly preparing for retirement, but also due to accumulating stress during the pre-retirement years that carries into the retirement years. However, researchers such

as Sharpley and Layton (1998) found that pre-retirement education may lower psychological stress during retirement.

Retirement may be voluntary or semi-voluntary for many in the workforce. While many workers will choose to continue their employment beyond retirement age, some may need to retire early or be forced into retirement due to the presence of a mental or physical disability (i.e., disability retirement). Research conducted in Finland (Lamberg et al., 2010) found that depression, a mental disorder, has become a growing reason for disability retirement. While various researchers have examined the effects of retirement on mental health (Fisher and Ryan, 2018), few have examined the effects of looming retirement on mental health. It is likely that the stressors of looming retirement may contribute to worsening mental health, which may force an individual into semi-voluntary disability retirement due to mental stress. And if the semi-voluntary disability retirement occurs at the early retirement age of 62, this retirement may provide fewer benefits, and that may ultimately lead to a less-than-ideal retirement, creating difficulty obtaining assistance for mental disorders.

### **Statement of the Problem**

The major sociological and demographic issue motivating my dissertation research is the fact that a majority of Americans of pre-retirement age are ill-equipped for retirement, notably if they are saving less for retirement and living longer lives (see “\$1 million may not last you in retirement—here's how to figure out how much you need,” Elkins, 2018). The assumption in American society is that older Americans have the wherewithal, the agency, to change their paths into retirement by simply saving more money, or by changing their spending habits in their pre-retirement years. This is based on two theories and one hypothesis that will guide this dissertation research: life course theory (Elder et al., 2003), functional role theory (Parsons et

al., 2017), and the role accumulation hypothesis (Thoits, 2012). The assumption is that Americans are aware of looming retirement when they first enter the labor force at a very young age. Retirement is seen as part of the life course and related to aging. Labor force participants also have roles and are expected to prepare for retirement when they enter the labor force and are sanctioned by other labor force participants if they fail to prepare. As workers prepare to exit the labor force, their roles should shift to the role of retiree, that is, someone who adopts a leisurely lifestyle, very different from their lifestyle while in the labor force. Not entering retirement on time and as expected often disrupts a pathway of the life course and does not embody the role of a person preparing for retirement, creating role strain. Disruption of a pathway in the life course, along with role strain, are expected to result in negative outcomes, such as stress and mental health disorders. However, the role accumulation hypothesis argues that, “role accumulation benefits individuals’ mental and physical well-being and persons with greater well-being acquire more roles over time” (Thoits, 2012, p. 3).

Many Americans about to enter retirement age are typically not in good financial shape to retire, and they often have little confidence in being able to accumulate enough assets that will last through their retirement years (Morin and Fry, 2012). This problem may be widespread and may affect all labor force participants as aging Americans may need to stay in the workforce longer to have enough assets to last through their retirement years; this could also reduce the number of jobs for younger Americans. Stress, mental health disorders, deteriorating physical health, and a decrease in life satisfaction may all affect families who may need to provide care for their older family members, who cannot afford to purchase health care due to lack of financial resources. And the health care system may become strained as more retirees enter retirement with health issues. Clearly, alternatives for having financial resources must be



explored to offset retirement stress. Perhaps the roles of retirees need to be redefined to reduce role strain. And pathways to retirement could well be altered to include partial retirement, delayed retirement, or even a way to exit retirement later in life. All of these would alleviate a bad retirement and the consequences related to a bad retirement.

My dissertation research is particularly important given these trends. The Baby Boomers are America's largest cohort (there were 74.1 million of them in 2016) and the members of this cohort are currently retired or entering retirement age.

### **Purpose of this Dissertation**

The main purpose of this dissertation is to identify those factors that may replace sufficient financial resources as the strongest predictors of an ideal retirement. While an ideal retirement is subjective and varies for each individual, for purposes of this dissertation research it is based on the assumption that the ideal retirement is one free of negative factors created during pre-retirement due to the stress of looming retirement. The absence of financial resources at time 1 (pre-retirement age) may lead to negative outcomes such as stress and mental health disorders such as depression. The absence of financial resources may lead a person to believe that he or she is not following the correct pathway towards retirement, either by not being financially ready or not entering retirement at the appropriate time (around 65 years of age). And role strain may result because people may feel they are not embodying the role of someone who has carefully prepared and saved for retirement and will easily transition from the role of an active labor force participant to the role of a retiree.

Thus, the goal of my dissertation is to use longitudinal data, i.e., data from the Midlife in the United States Survey, or MIDUS, in an attempt to isolate factors other than financial resources to predict an ideal retirement. Research has shown that mentoring (Lindbo and Shultz,

1998), volunteering (Wahrendorf et al., 2016), and the strength of a retiree's social network (Hornstein and Wapner, 1984) may all result in an ideal retirement. Research (Godfrey et al., 2014) has also shown retirees are less ambulatory relative to non-retirees, and perhaps increasing physical activity may also contribute to an ideal retirement. The longitudinal dataset I will use in my dissertation will enable me to follow older Americans from pre-retirement into their retirement years to view how their lives change from time 1 (pre-retirement) to time 2 (retirement), and to identify factors associated with desirable levels of stress and mental health during the pre- and retirement years.

### **Research Questions**

My main research question is, *which factors can be identified during pre-retirement age to assist in achieving an ideal retirement?* Previous studies (Lindo and Shultz, 1998; Wahrendorf et al., 2016; Hornstein and Wapner, 1984) have found that mentoring, volunteering, strength of social networks, and exercise may all result in an ideal retirement. An important aspect of my research is the identification of those factors that can be realistically modified. The factor is categorized as unrealistically modifiable if the average person cannot modify the factor or cannot modify the factor in a way to see any real change. For example, if the findings were to show that for every \$100,000 saved for retirement, a person's positive mental health increases by 2%, this finding would be categorized as unrealistically modifiable, because previous studies (Elkins, 2018) have found that Americans are not saving for retirement. Thus, informing them that \$1,000,000 in retirement savings equates with a 10% increase in mental health during retirement is not very useful information for the average American with little ability to accumulate such a large amount of money. Indeed, it may actually be hurtful and lead to more mental health disorders.

However, if a finding were to suggest that the more a person participated in volunteering in later life, the less likely they would feel depressed, this finding could be categorized as realistically modifiable because the average person may be able to increase their levels of volunteering in life.

### **Theoretical Framework**

Two theories and a hypothesis are being used to address my major research question. The first theory is Elder's life course theory. Elder et al. (2003) describe paradigmatic principles in life course theory. The principles are described below and very much relate to the retirement hypothesis:

*-The Principle of Life-Span Development: Human development and aging are lifelong.*

This principle applies to retirement in that preparation for retirement and entering retirement are part of human development, and retirement itself is a milestone of aging, often preceding morbidity and death. Retirement may be seen as a goal of labor force participation, usually a positive exit from the labor force, and workers are taught to prepare for an eventual exit from the labor force by contributing to retirement plans early in their lives and as workers learn that the earliest preparations yield the most ideal retirements.

*- The Principle of Agency: Individuals construct their own life course through the choices and actions they take within the opportunities and constraints of history and social circumstance.* This principle is very important for retirement in that opportunities and constraints vary for each individual. Although this principle posits that individuals have agency to influence their late life outcomes, the amount of agency varies, and this variance may result in different retirement scenarios.

- *The Principle of Time and Place: The life course of individuals is embedded and shaped by the historical times and places they experience over their lifetime.* The retirement window has opened recently for the Baby Boomer generation and as such, this generation is larger than the previous generation (Carlson, 2008), which may result in a strain on resources such as social security benefits (supported by an active workforce). Coupled with the Great Recession of 2007 that reduced wealth for many Americans, the size of the Baby Boomer generation and its limited resources may affect their retirement outcomes and yield a much more different retirement experience than previous generations.

- *The Principle of Timing: The developmental antecedents and consequences of life transitions, events, and behavioral patterns vary according to their timing in a person's life.* This principle introduces timing as important to retirement, with retirement outcomes (ideal; less than ideal) dependent on when a person decides to retire (early, perhaps for medical reasons; on-time, usually around age 65; or delayed retirement beyond age 65 due to continued participation in the workforce). The timing of when a person decides to enter retirement may predict the type of retirement a person experiences.

- *The Principle of Linked Lives: Lives are lived interdependently, and the socio-historical influences are expressed through this network of shared relationships.* This principle is particularly important because retirement is shared with others and affects not just the retiree, but the people who are part of the retiree's network (i.e., friends, family, and others). Similarly, a retiree's network (or lack thereof) may have an effect on the type of retirement experienced by the retiree.

The second theory, functional role theory (Parsons et al., 2017), argues that people in society have typical behaviors, roles that are prescribed to people and as such, people embody these roles, conform to these roles, display behaviors as norms of such roles, and even sanction others who do not display similar behaviors as part of these roles. This theory is relevant to the retirement hypothesis because there may be functional role strain as people transition into retirement but fail to display behaviors of retirees such as complete departure from the workforce, or fail to embody characteristics of retirees, such as the adoption of a leisurely lifestyle.

Finally, Thoits (2003) argues that multiple roles may actually benefit a person about to enter retirement, a pattern reflecting the role accumulation hypothesis. “Generally, the more role-identities individuals hold, the more purpose, meaning, behavioral guidance, and approving social feedback they have available, and thus, the better should be their mental health or general well-being.” (Thoits, 2003, p. 180). She found, for instance, that the act of volunteering gave individuals a sense of purpose (Thoits, 2012). I will be examining in this dissertation whether, perhaps, volunteering and associated acts (e.g., mentoring) during retirement may increase a retiree’s well-being in the presence of low preparation for retirement during the pre-retirement years.

### **Subsequent Chapters**

The next chapter (Chapter Two) will cover the state of the literature with regard to retirement, examining life satisfaction, mental, and physical health and also previous studies of pre-retirement preparation and stressors. Chapter Three will introduce the dataset, models, and the methodology for data analysis. Chapter Four will discuss the analyses and the results.

Chapter Five will discuss the study's conclusions, limitations, and opportunities for future research.

## CHAPTER II

### REVIEW OF LITERATURE

In the previous chapter, I discussed the background and relevance of the focus of my dissertation and described its overall outline. This chapter will discuss relevant literature encompassing the three phases of retirement, namely pre-retirement, transition into retirement, and retirement. It will highlight some of the major variations such as racial, gender, marital status, and employment differences. The relevant literature connecting retirement and the three dependent variables of life satisfaction and mental and physical health will also be discussed. The next chapter, the third, will discuss the dataset used for this dissertation.

This dissertation examines retirement as three unique phases: *pre-retirement*; *transition into retirement*; and finally, *retirement*. The main focus of the dissertation centers on the *pre-retirement* phase, where the ‘looming’ or the anticipation of retirement occurs. The uncertainty of adequate preparation for retirement may manifest itself into stress and negative health outcomes during actual retirement (Lo and Brown, 1999). The *transition* phase is important as individuals begin to separate themselves from their careers and move into retirement via part-time or bridge employment and finally the total cessation of employment (Dingemans and Henkens, 2014). During the transition phase, stress obtained in the pre-retirement phase may be amplified as separation from the career occurs (Muratore and Earl, 2014). Finally, during the *retirement* phase the individual settles into retirement and a different phase of life occurs, and this often differs from what was envisioned in the pre-retirement phase (Dulin et al., 2012 and Kaskie et al., 2008).

The review of the literature revealed that permanent and highly paid jobs were more likely to offer retirement plans overall (Johnson, 1999). Retirement plans could be seen as incentives to attract a high-skilled workforce. An examination of the labor force showed males, married employees, and whites were more likely to benefit from their employer's retirement plans (Angel et al., 2014). High-skilled and high-paid jobs were occupied by this demographic group, along with the ability to parcel a portion of their income for retirement.

The literature review also covers studies related to life satisfaction and mental and physical health affected by the presence of retirement. Studies suggest associations between retirement and these three dependent variables. However, the direction and strength of the associations often differ due to events occurring prior to retirement. I will organize my presentation and review of the literature by specific demographic and socioeconomic categories.

### **Gender**

In the twentieth century, females transitioned from homemakers to members of the paid labor force as an escape from the homemaker life (with a fractional contribution to their family's income), to a rejection of homemaking altogether with a desire for a career and independence (Coontz, 2000). Today, females outnumber males in higher education (Semuels, 2017) and according to a U.S. Labor Department report (Omeokwe, 2020), in December 2019, females outnumbered males in the workplace (although most growth was experienced in female-dominated industries). Yet, females continue to be underrepresented in science, technology, engineering, and mathematics (STEM) fields (Funk and Parker, 2018), and the gender wage gap persists (Graf et al., 2019).

In spite of the advancement that females have made in higher education and the labor force, men hold significant advantages over women when it comes to retirement benefits



(Johnson, 1999). A gender retirement gap is evident as females are less likely to be in jobs that offer retirement plans, less likely to participate in investments and savings programs, and more likely to delay retirement due to financial strain (Angel et al., 2014). The argument could be made that females may self-select into jobs that do not offer retirement plans and/or that females are disproportionately represented in low-paying jobs, where saving for retirement is not feasible.

Examining the retirement phase, females usually outnumber males in nursing homes due to their higher life expectancy than males, although male life expectancy is improving (Seligman et al., 2016). However, an anomaly was found by Thomeer et al. (2015) in that females were more likely to enter nursing homes during retirement ages overall, but that Black females were 24% less likely to enter a nursing home compared to Black males. Males may have lower life expectancy and when including race, Black male life expectancy is the lowest among major racial groups in the U.S. (Angel and Mudrazija, 2011). Elder Black males may be in poorer health and may have more need for nursing home services relative to Black females, which may explain the anomaly.

### **Marriage and family**

Pre-retirement decisions may need to not only include the employee, but also their family as the family dynamic may change dramatically during retirement. Depending on their contributions to retirement savings, income may decrease and expenses may increase as employer-provided healthcare may not fully offset high healthcare costs. The family, notably the spouse, may need to adapt to a decrease in income and to an increase in time spent at home. Lo and Brown's (1999) summary of research suggests that proper preparation while employed is associated with a favorable retirement. As they near retirement, individuals may need to check

their health while still under a work health plan and may want to plan for a changing of roles during retirement when they may have more time for intellectual interests, volunteering, and the lax role of grandparenting.

Retirement may also affect an individual's family as the home dynamic changes when the retiree contributes more to household tasks and finds some value in non-financial contributions. The family may need to adjust to a lower monthly income from the retiree and also may need to provide more support for retirees who have difficulty adjusting to retirement. Henkens (1999) found that the presence of financially dependent children and a poor marriage may reduce spousal support for retirement. Spouses may not want their mate to retire so to preserve the home dynamic, notably if retirement may result in perceived negative outcomes such as financial constraints.

For married couples, retirement may be a tandem decision, but one where one party enters retirement first and the second party retires soon after. A study conducted in the Netherlands found that the decision to retire early (spurred by incentives for early retirement) for male spouses increased the probability that the female spouse retired within one year (Bloemen et al., 2019). A decision to retire by one spouse may serve as a barometer for the other on what retirement is like and if it is something worth pursuing.

Retirement favors those with a spouse because the household can benefit not only from the financial benefits of a dual-income household, but also from the emotional support from one spouse towards the other close to retirement or already retired (Price and Balaswamy, 2009). Marriage may result in increased financial stability through the pooling of resources and the security of one spouse's employment supporting the marriage (Padavic and Reskin, 2002). For

males, being in a marriage has been shown to predict a higher likelihood of participating in their employer's retirement plans (Angel et al., 2014).

The benefits of marriage also depend on a marital partner with steady, high-paying employment and with access to a retirement plan (Angel et al., 2007). If the marital partners are not in high-paying fields, marriage may actually be a financial burden and may affect the type of retirement both parties of the marriage might expect (Angel et al., 2014). Also, a spouse's health and access to healthcare may affect retirement prospects during pre-retirement and retirement for both spouses in the U.S. where healthcare is expensive and a sick partner may be a financial and emotional burden on the relationship (Pokorski and Berg, 2017).

### **Race**

The racial retirement gap is evidenced in much of the literature examining retirement through a racial lens (Angel et al., 2014). The idea of a leisurely retirement may be an ideal only afforded to those employed in high-skilled, high-paid jobs. And historically, people of color, notably Blacks and Hispanics, have been underrepresented in these higher-status jobs (Alonso-Villar et al., 2012). Blacks and Hispanics are disproportionately represented in low-paying jobs with high levels of turnover that offer limited or no benefits and incentives, such as healthcare and employer-matched retirement savings plans (Sohn, 2017). As such, people of color are likely to face a less favorable retirement experience than non-Hispanic Whites, or they may never be able to afford to fully retire.

Minorities, particularly foreign-born, are less likely to participate in their employer's retirement program or have such programs available. Non-Hispanic White males have been shown to participate in retirement programs during their pre-retirement years more often than males African Americans (41.2% to 31.4%) and Hispanics of Mexican-origin (27%), with non-

Hispanic White females showing similar trends to Black males (32.6%) (Angel et al., 2014). Narrowing the focus to native- and foreign-born Hispanics of Mexican-origin during pre-retirement age, Angel et al. (2014) found that 34.7% of native-born males participated in their employer's retirement program, compared to 18.3% of foreign-born males. These researchers also found lower participation among females, with a participation rate of 23.6% among native-born females and 11.8% among foreign-born females of pre-retirement age.

Retirement prospects are positive when the persons are in a dual-earner relationship. However, the death of a spouse may disrupt retirement prospects and may even increase the likelihood of poverty during retirement. With females experiencing longer life expectancy relative to males and with a high likelihood of marrying older males, it is likely that married females in heterosexual marriages will experience widowhood during retirement, but financial security in widowhood has been shown to vary by race and ethnicity. Non-Hispanic White females may experience a more dramatic loss in income and assets as they likely had a higher point of income and assets prior to widowhood. And although minorities may experience a less dramatic loss in income and assets due to a lower starting point prior to widowhood, the small loss may push minority females who were close to poverty during marriage into poverty during widowhood (Angel et al., 2007).

The time in actual retirement varies due to life expectancy differences by race in the United States. Hispanic females have the longest life expectancy at age 65 (the age of retirement with full benefits) and live on average to almost age 87. However, non-Hispanic Black males have the shortest life expectancy at age 65 and live on average to age 80. For reference, the total population at age 65 lives on average to age 84 years of age (Angel and Mudrazija, 2011). Clearly, life expectancy disparities by race exist in the United States and these differences allow

longer times in retirement and if not properly prepared for retirement, a long-life expectancy may translate to stress as limited resources may need to be stretched for many years.

An examination of nursing home admission during retirement also reveals racial disparities. Non-Hispanic Blacks and Hispanics have lower nursing home admission rates relative to non-Hispanic Whites, even if the need for nursing home admission is pressing. Some research has shown that minorities--Hispanics in particular--may be underutilizing nursing homes due to a lack of economic resources to enter a nursing home or cultural norms that may utilize the family as caretakers in old age (Thomeer et al., 2015).

### **The Labor Force**

In the United States, employers are not required to offer retirement plans for their workers (Gassoumis et al., 2008). Often employees are expected to plan for their own retirement, and this may be complicated when employment is non-permanent and low-paid. Low-paid employees (e.g., the working poor) may not be thinking about their future; rather they may be working to survive and may not have the opportunity to think, nor plan and save for their future retirement. On the other end of the spectrum, some companies use retirement plans as incentives to attract highly educated and highly skilled employees (Fronstin, 2007). In the U.S., retirement is not mandatory, whereas in some countries like China, retirement is mandatory (Liu, 2018). However, different segments of the population may shun retirement for different reasons, some out of financial necessity and others simply because they enjoy their jobs and have no desire to leave the workforce.

Employees may also have a fear of retirement, which may be intensified when employees are not aware of how their lives may change during retirement. The fear may increase when employees have a strong attachment and identity to their work roles and fear an inability to

occupy their post-career days with positive, non-work activities. Nuttman-Shwartz's (2004) longitudinal study of Israeli males before and after retirement found that males tended to be uncertain and stressed about retirement, worrying about how to fill an increase of leisure time, the loss of income and increased time with family members such as their wives. However, a follow-up during retirement revealed that the respondents reported active retirement lives (some were politically active) and showed lower levels of distress during retirement than during retirement anticipation, and non-significant increases in well-being and perceptions of health.

Employers may provide seminars and other workshops to prepare employees for retirement and may explain how health insurance may differ during retirement, how to mentally prepare and cope with such change, and how their finances are likely to change. This information is meant to empower and prepare employees for their inevitable separation from their career. Recent research has shown that better planning for retirement tends to result in a better exit from the career (Muratore and Earl, 2014). Hershey et al. (2002) suggest that creating goals is an appropriate method to assist with the transition into retirement, but the goals should be age-appropriate and attainable. To create goals related to financial security in the few years prior to retirement may be useless as the time to affect these goals is usually earlier in the individual's career. Wang and Schultz (Wang and Schultz, 2010, p. 181) concluded that "formal retirement planning works because it contributes to improving people's actual financial and activity planning for retirement through formal planning seminars, whereas informal planning works as it sets up the psychological expectations about retirement."

Employers may offer incentives to entice workers into an earlier retirement, which benefits the employer as it makes space for recruiting newer talent at lower compensation rates. However, entry into early retirement may not rely solely on the employee's desire, but also on

their marital status. Reitzes et al. (1998) found that married, full-time workers were more likely to retire early. Similarly, a study conducted among government workers in the Netherlands found that husbands who retired early strongly influenced their wives' likelihood to retire within a year (Bloemen et al., 2019). Kim and Feldman (1998) also found a spousal effect when examining University of California faculty members, albeit in a different direction. Highly productive faculty members were more likely to reject incentivized early retirement offers if their spouses were employed.

### **Human agency during transition**

The retirement transition phase focuses on the actual transition from employed to retired. The individual may enact plans created in the pre-retirement phase, the separation from work will occur, and some social networks may decrease or desist, while newer ones may appear. Social roles may change in this phase, with an individual usually absorbing newer roles.

According to Schulz (Schulz, 2003, p. 215), bridge employment refers to “labor force participation patterns observed in older workers between their career jobs (e.g., held 10 plus years) and complete labor force withdrawal.” Bridge employment may be part-time employment that the individual pursues more for pleasure than for monetary gain. As noted by Weckerle and Shultz (1999), bridge employment was pursued by workers who felt confident in their financial ability to retire and could retire when so desired. Kim and Feldman (2000) found a strong association between engagement in bridge employment and retirement satisfaction, which suggests that bridge employment may be a key to an enjoyable retirement. Also, younger and more educated individuals who are eligible for retirement often choose bridge employment over full retirement (Wang et al., 2008).

A change of roles often occurs in the transition phase, even while individuals are involved in their careers. Heaven et al. (2013) found that individuals who exhibited meaningful social roles (that provide a purpose during retirement) in retirement often had improved health and overall well-being during the retirement. Interventions during the transition into retirement may maintain such social roles. As individuals transition into retirement, the largest network that may be lost are work colleagues, that is, individuals the person may have interacted with during their full-time employment. Individuals may tap into networks of current or soon-to-be retirees for advice on the transition, and other non-work-related networks may appear. While not a direct association, social networks may influence a person's and a couple's decision to retire, although ultimately the decision to retire is more strongly associated with the couple, and not with the couple's social network (Henkens, 1999).

The individual must also weigh the costs and benefits of early, on-time, and delayed retirement. Usually an early retirement results in less retirement benefits and less work-related stress, while on-time and delayed retirements yield more financial benefits, but at a possible cost to health and leisure. Rosenkoetter and Garris (1998) administered the Retirement Assessment Questionnaire, a questionnaire on pre-retirement planning, health, and adjusting to retirement, to retirees from the southeastern United States. Their data suggested that health care providers (e.g., doctors, nurses, etc.) often treat retirement as a transitional experience that may negatively affect mental and physical health of not only the retiring individual, but also the retiree's family. Also, if performed during the pre-retirement phase, Van Solinge and Henkens (2008) found that volunteer work allows greater adjustment to retirement.



## **Retirement benefit strain**

In the United States Baby Boomers are moving more and more into the retirement ages (Sawyer and James, 2018), and the size of this largest generation will begin to strain the Social Security system built on a similar size of workers contributing to Social Security as retirees withdrawing benefits (Crooks et al., 2018). However, the generations following the Baby Boomers have experienced drops in their birth rates (Livingston and Cohn, 2012). Coupled with this is the fact that the Baby Boom generation is experiencing higher life expectancy than previous cohorts (Eifert et al., 2016), and Social Security may no longer be solvent. A solution to this problem is to increase the age when a person can retire and qualify for Social Security benefits, thus allowing workers to contribute to Social Security longer and decrease the time Social Security has to support a retiree.

Looking at life expectancy, females and males at age 65 who work in low-paying jobs are expected to live five and six years less, respectively, than the total population (Angel and Mudrazija, 2011). A 65-year-old male who is employed in a low-paying job is predicted to live to 77 years of age, resulting in about 12 years of eligibility for retirement benefits. If the age of retirement were increased to 67, this would result in only 10 years of eligibility for retirement benefits. Low-paid females are projected to live to almost 79 years of age. For reference, 65-year-old males in general are predicted to live to age 82, and 65-year-old females to almost age 85. Low-paid workers suffer lower wages in their lifetimes which affects their lifestyle and life expectancy, and during retirement, they may find they have to work longer to earn retirement benefits and ultimately have less years to enjoy them.

## Retirement

This is the end phase, actual retirement. The individuals have separated themselves from their careers but may still be volunteering or be employed part-time. Daily routines differ significantly from those in the pre-retirement phase. In this stage, comparisons can be made to the pre-retirement phase to see if fears from that period are manifested in the retirement phase. The retiree may have difficulty finding utility in the retirement stage and may suffer stress and anxiety.

Retirees may need time to adjust to retirement. Retirement preparation likely took years, and the retirement phase may also need a settling period where retirees may adjust and adapt to their new roles. Wong and Earl (2009) found that wealth, health, being married, and preparing for retirement before exiting the workforce predicted a better adjustment to retirement among Australian retirees (average age of 71) who were in retirement for about ten years. Focusing on health outcomes during retirement, Behncke (2012), using data from the English Longitudinal Study of Ageing (ELSA), found that retirement raised the risk of any chronic condition, notably cardiovascular disease or cancers. Additionally, self-report health also decreased during retirement. In the United Kingdom, where ELSA was conducted, retirement age has been increased in an effort to not overwhelm the pension system. However, this study showed that delaying retirement only postpones the onset of poor health in retirees.

Health outcomes during retirement may vary by race and ethnicity, as evidenced in the research of Angel et al. (2001), who used the Health and Retirement Study, a longitudinal study, to compare the self-reported physical and emotional health of almost 9,000 Hispanic and non-Hispanic (immigrant) males and females born between 1931 and 1941. A finding of the comparison between Hispanics and non-Hispanics focused on the effect of accumulated assets

(among Hispanics) and its effect on health. Specifically, Hispanics who accumulate wealth have health outcomes similar to native-born (non-Hispanic) males and females, compared to Hispanics who do not accumulate wealth and are seen as non-assimilating, suffering poor health outcomes.

Retirees may find some fulfillment in volunteering or community engagement once they leave the labor force. Volunteering may be a productive and enjoyable way to spend their retirement years. Dulin et al. (2012) found that volunteering increases happiness, especially among older New Zealanders. Civic engagement, defined by Kaskie et al. (Kaskie et al., 2008, p. 369) as “being involved with community and political affairs” could be a formal role for retirees that may produce value and purpose.

### **Retirement and life satisfaction**

Life satisfaction in retirement can be improved if retirees are independent and have support from their families. In a longitudinal study carried out in Sweden, autonomy, support from family, and cognitive abilities improved life satisfaction among retirees with poor physical health (Hansson et al., 2018). This finding is of importance as deteriorating health usually accompanies retirement and old age. Workers may decide to continue to work, regardless of their ability to fully retire and continuation of work may increase life satisfaction. An analysis of longitudinal data collected in the 2000s of workers eligible for retirement in European countries revealed that those who worked less than full-time and had a low pension had higher life satisfaction than similarly defined low-pension workers who completely retired from the labor force (Dingemans and Henkens, 2019). Similarly, Dutch workers who experienced involuntary retirement had higher life satisfaction if they engaged in bridge employment (employment that is not career related that exists right before full retirement), compared to similar involuntary

retirees (Dingemans and Henkens, 2014). Life satisfaction in retirement may be affected by family support and the ability to continue working prior to fully retiring from the labor force.

### **Retirement and physical health**

Individuals may also desire retirement as a way to alleviate health issues stemming from the workplace. Van der Heide et al. (2013) performed an extensive examination of longitudinal studies of retirement and health outcomes. Although a lack of conclusive evidence in the literature between retirement and physical health (negative or positive outcomes) was found, a connection between retirement and increased mental health emerged. The authors stated that the absence of work, but not the state of retirement, may explain improved mental health. In another longitudinal study, Hyde et al. (2004) examined white-collar civil servants in London, England with data from the Whitehall II longitudinal study. Most of the civil servants retired at an early age (60, compared to 65 for most British workers), and an important finding of this research was that the civil servants enjoyed retirement, especially if they willingly retired at an early age (instead of being forced to retire for health reasons). Workers who retired due to health reasons quite often had poor retirements due to continued poor health. Those who willingly retired were affected by a decrease in income. However, accumulated assets (often their homes were paid in full) indicated less debt and a better adjustment to decreased income.

### **Retirement and mental health**

The review of the literature has showed mixed effects on mental health when a person retires. The benefits of retirement include the following: Retirement can help the mental health of those who are most at-risk of depression (Kolodziej and Garcia-Gomez, 2019), retirement can improve mental health as long as a retiree is physically active (Olds et al., 2018), retirement from psychologically demanding jobs reduces likelihood of depression (Van den Bogaard and

Henkens, 2018), and better financial planning for retirement led to less anxiety and depression in a recent survey of middle-aged workers in China (Chen et al., 2018). However, retirement has been shown to increase symptoms of depression among Japanese males from lower -lass occupations although these symptoms can be offset by recreational socialization (Shiba et al., 2017).

Focusing on mental health disorders such as depression, Oksanen et al. (2011) studied antidepressant use among recently retired Finnish public-sector employees and found stark differences in antidepressant use among individuals who retired due to mental causes (sharp increases of antidepressant use prior to a retirement and sharp decreases after retirement) and those who retired due to physical causes (low steady use of antidepressant prior and after retirement). The authors noted that the decreased use of antidepressants among individuals who retired due to mental causes could be due to the absence of work-related stress, although counterarguments could point to employees seeking formal diagnoses of depression during work years to obtain longer leaves of absences, and thus mental health issues may persist in retirement, but without formal treatment.

Also, unemployment late in life has been shown to lead to involuntary retirement and a decline in mental health during retirement (Voss et al., 2020), and although physical activity may help mental health, among older and elderly Chinese citizens, moderate physical activity has been shown to help ward off depression among females, but vigorous physical activity increased the risk of depression among males.

### **Research gap**

As evidenced in my above review of the literature, much of the research on the three dependent variables of life satisfaction, mental health and physical health was conducted outside

the United States. The Midlife in the United States longitudinal dataset allows comparisons of the studies done in other countries to a population living in the U.S. This may be useful as the Baby Boomer generation fully retires and social services for retirees are strained. Generations after the Baby Boomers may experience a different type of retirement, perhaps one that is self-funded and occurs at a later age. Regardless, with life expectancy continuing to increase, retirement will continue to encompass a large portion of the life course and this research is necessary to first show how the U.S. compares to other populations used in the aforementioned studies. Second, the research will use the Baby Boomer generation as the target population, which is the largest generation in U.S. history and may still benefit from any dissertation findings. Third, findings from this research could be used to assist future generations adjust for retirement. These future generations are predicted to be much smaller than the current Baby Boomer generation.

### **Summary**

In this chapter I have provided an overview of literature related to retirement, highlighting important findings in the phases before retirement and during retirement. The extant research has examined a multitude of variables, showing how common themes such as marriage, human agency, race, and the labor force affect retirement outcomes. This chapter also provided insights on literature related to the three main dependent variables (life satisfaction, mental health, and physical health). The chapter closed with a discussion of a research gap that appeared after completing the literature review. In the next chapter I will discuss the dataset I will use in my dissertation research, as well as the variables and other methodological issues that will be employed.

## CHAPTER III

### DATA AND METHODS

In the previous chapter I introduced and discussed several theories relevant to the realm of retirement. I also examined the retirement literature from three different perspectives, namely, pre-retirement, transition to retirement, and actual retirement. In this chapter I will build on the previous chapter by introducing the dataset I am using, specifically the Midlife in the United States (MIDUS) longitudinal study. Subsequently, I will show how the main theories and hypothesis introduced in the previous chapter will be related to the research questions that I seek to answer in this dissertation. I will conclude the chapter with a discussion of the specific variables and statistical methods I will employ to answer my research questions.

The main purpose of my dissertation is to identify the potential factors/variables that may be able to add to, or replace, the variable of “sufficient financial resources” as a key predictor of an *ideal* retirement. While an ideal retirement is a subjective construct and varies among individuals, for the purposes of my dissertation, I have defined it as *one free of negative factors created during pre-retirement due to the stress of looming retirement*. As such, the main research question of this dissertation is the following: Which non-financial factors can be identified during the pre-retirement years to assist in achieving an ideal retirement?

#### **Data**

The data I will use in this dissertation are from the dataset known as the Midlife in the United States (MIDUS) longitudinal study. Funded initially by the MacArthur Foundation Research Network on Successful Midlife Development and later by the National Institute of Aging, the MIDUS is a “collaborative, interdisciplinary investigation of patterns, predictors, and

consequences of midlife development in the areas of physical health, psychological well-being, and social responsibility” (ICPSR website, 2019, para. 1). The MIDUS was the first nationally representative survey conducted in the U.S. that aimed to “investigate the role of behavioral, psychological, and social factors in accounting for age-related variations in health and well-being in a national sample of Americans” (MIDUS website, 2019, para. 1).

The MIDUS gathered its initial wave of data in 1995 through 1996 and has collected data over the years as recently as 2017, with special waves oversampling minorities (such as minorities living in Chicago and New York City), targeting certain cities (e.g., Boston), and examining indicators of health such as cognition and neuroscience. A similar survey was carried out in 2008 in Japan (the Survey of Midlife in Japan, MIDJA), with the goal of studying age-related disparities among older Japanese citizens. The MIDUS is an ideal dataset to use for this dissertation because respondents can be tracked from pre-retirement into retirement. Moreover, the survey includes a host of health-related variables.

I will use two waves of longitudinal data from the Midlife in the United States (MIDUS) longitudinal study in this dissertation. Wave I data were collected in 1995-96, with a subset of 1,270 respondents between the ages of 55 through 64 (born between 1932 and 1941). I will identify and define these respondents as persons of pre-retirement age. Wave II data were collected in 2004-2006 (about 10 years later) and included a subset of 933 (73.5%) respondents from those included in Wave I. All respondents from the previous wave of data collection were of retirement age (65+) in Wave II. Finally, when I restrict respondents to those who reported their current employment status as “employed” in Wave I and as “retired” in Wave II, there are 336 respondents who were employed and close to retirement in Wave I and were actually retired



in Wave II. This means that 36.0% of those who were of retirement age in Wave II actually retired. These 336 respondents will be used in all of the analyses in this dissertation.

### **Guiding theories**

In the previous chapter I introduced three relevant theories of interest for the topic of this dissertation. The first is Elder's life course theory (Elder et al., 2003). Life course theory discusses several principles, a few of which are particularly relevant to retirement. The first is the principle of life-span development. Human development and aging are lifelong events that are not intermittent; rather they are continuous and are influenced by earlier life. Retirement can be marked clearly by a specific point in time (often after age 65), but the employment that leads to retirement usually begins much earlier in the life course (often after high school or college graduation); thus, retirement preparation may well have coincided with the start of employment.

The principle of agency is the second relevant principle. This principle proposes that individuals construct their own life course through the choices and actions they take given the opportunities and constraints of history and social circumstance. Planning for retirement is often an individual's decision, and some may plan early and show discipline in contributing to retirement funds. Others may delay their planning and retirement, resulting in more limited funds for retirement due to the later contributions. Still, some individuals may not have the opportunity to contribute to their retirement due to other financial constraints, such as low-paying employment and debt such as a home mortgage.

The principle of time and place is the third principle. It argues that the life course of individuals is embedded and shaped by the historical times and places they experience over their lifetime. This principle is relevant for retirement mainly because certain events may occur during a lifetime, such as a war or recession, which may affect the opportunities available to

individuals, such as constricting employment positions and may devalue assets, such as stocks, bonds, or real estate. Similarly, the principle of timing proposes that the developmental antecedents and consequences of life transitions, events, and behavioral patterns vary according to their timing in a person's life. With regard to retirement, the timing of an early, on-time, or late retirement has various precursors, such as the individual's health or a company's early retirement incentives, and a variety of outcomes, such as limited or full financial benefits, depending on when the entry into retirement is pursued.

Finally, the principle of linked lives posits that lives are often lived interdependently and socio-historical influences are expressed through this network of shared relationships. Individuals who will soon retire may well lose networks from the workplace and may gain networks from others transitioning into retirement. Family members, notably spouses, may be greatly affected by a retiree, and the home dynamic may well change with simply the presence of a retiree.

The second theory is Parsons' functional role theory (Parsons et al., 2017). This perspective argues that people in society have typical behaviors, roles that are usually prescribed to people and as such, people embody these roles, conform to these roles, display behaviors as norms of such roles and even sanction others who do not display similar behaviors as part of these roles. The role of retiree is generally expected from people in their mid-60s. Retirees may be expected to have a more lax lifestyle compared to that in their working years. Individuals nearing retirement age may be expected to embody the role of someone preparing for a change, someone who is welcoming retirement. A person entering retirement may shed the role of worker, and their master status may no longer be tied to the workplace. Also, society may expect older individuals to prepare for and embrace their departure from the workplace.

The third theory is Thoits' role accumulation theory (1983). This approach suggests that the benefits of holding multiple roles, including resource accumulation and support against role failures or loss, are more likely to accrue if identities remain segregated. This theory argues for numerous roles, and in retirement an individual may gain a role such as someone who engages in civic affairs or volunteers and these multiple roles allow the individual to excel in some and lack in other roles, but still have a successful retirement.

### **Variables**

As I mentioned earlier, the goal of my dissertation is to identify those factors/variables that may replace sufficient financial resources as the strongest predictors of an ideal retirement. While an ideal retirement is subjective and varies for each individual, the ideal retirement is one free of negative factors created during pre-retirement due to the stress of looming retirement.

As such, three main dependent variables will be used in my analyses. They are life satisfaction, mental health, and physical health. Increases of life satisfaction, mental health, and physical health during the time prior to retirement (in Wave I), are expected to lead to a desirable retirement in Wave II.

Proximity of retirement is also an important variable to consider. It may be hypothesized that in Wave I, during the pre-retirement phase, individuals who are closer in age to a typical retirement age of 65 may experience more stress about retirement than a younger individual. Similarly, in Wave II, individuals who just experienced retirement (in this case, younger individuals), may be more stressed and less settled in retirement than an older individual who has had years to adjust to the change.

Using the proximity of retirement variables described above, the type of retirement may be identified. If retirement occurred before age 65, it will be categorized as an early retirement;

a retirement at 65 to 66 years of age will be categorized as an on-time retirement; and a retirement at age 67 or later will be categorized as a late retirement.

I will now list and describe the variables that will be employed in my analyses. All the data below were obtained from MIDUS and I analyzed the data using Stata 16 (StataCorp. 2019).

The three main dependent variables were all self-reported during Wave II. Their operationalization and descriptive data are as follows:

Table 1

*Descriptive Data for the Three Dependent Variables*

Dependent variable	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Life Satisfaction (5-item), Wave II	306	8.15	1.15	10 (high)	3.25 (low)
Mental/emotional health (self-evaluated), Wave II	336	2.12	0.94	4 (fair)	1 (excellent)
Physical health (self-evaluated), Wave II	336	2.53	1.07	5 (poor)	1 (excellent)

In Wave I (1995-96) all but a handful of independent variables were obtained. This dissertation aims to uncover variables that can be realistically modified during pre-retirement. The independent control variables include: gender (54% female, captured during Wave II to confirm Wave I data); age (average age of 66.44, captured during Wave II to confirm Wave I data); marital status (75% married); educational attainment (33% graduated with a bachelor's degree or beyond); race (89% White); and if they are a US citizen (93% U.S. citizens).

The main independent variables are captured during Wave I. Below are summary data of these variables.

### **Finances**

Financial security can be seen as the strongest predictor of an ideal retirement. While this dissertation aims to identify variables other than finances that result in an ideal retirement, the finance variables below may be seen as feasible targets to reach during pre-retirement with some planning and budgeting.

Table 2

*Descriptive Data for the Finance Independent Variables*

Finance variables	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Do you own your home outright, are you paying on a mortgage, or do you rent?	319	1.75	.62	3 (rent)	1 (own)
On average, how many dollars per month do you or your family living with you contribute to your grandchildren or grown children?	313	83.48	224.58	2000	0

## **Health**

Health variables may be the most feasible variables to modify during pre-retirement. The variables below all lend themselves to change during pre-retirement and the dividends for such health change may be paid in pre-retirement and also retirement. Moderate activities (which MIDUS has defined as bowling or using a vacuum cleaner) and vigorous activities (such as running or lifting heavy objects) are not time consuming nor are they expensive, which reiterates the feasibility aspect of the health variables.



Table 3

*Descriptive Data for the Health Independent Variables*

Health variables	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Rate health currently	323	7.59	1.62	10 (best)	2 (2 above 'worst')
Compare energy now to 5 years ago	323	2.32	.66	3 (worse now)	1 (better now)
Compare fitness now to 5 years ago	323	2.33	.66	3 (worse now)	1 (better now)
I work hard at trying to stay healthy	319	2.23	1.13	7 (disagree strongly)	1 (agree strongly)
Rate control over health	323	7.67	1.90	10 (very much)	0 (none)
Rate thought/effort put into health	323	7.50	1.92	10 (very much)	0 (none)
Currently smoke cigarettes regularly	191	1.70	.46	2 (no)	1 (yes)
Thinking about the one year when respondent drank the most, focusing on respondents who drank less than 1 drink per week, how many days per month did respondent consume alcohol	106	2.35	.77	3 (less often than 1 day a month)	1 (3 or 4 days a month)

Table 3 Continued

Health variables	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Summer moderate activity	321	1.79	1.14	6 (never)	1 (several times a week or more)
Summer vigorous activity	320	3.01	1.90	6 (never)	1 (several times a week or more)
Winter moderate activity	322	2.00	1.29	6 (never)	1 (several times a week or more)
Winter vigorous activity	321	3.34	1.79	6 (never)	1 (several times a week or more)

## **Human agency**

Human agency variables may be hypothesized to assist future retirees by highlighting the amount of control they perceive to have over their lives. These data may assist during the pre-retirement phase by forcing an assessment on the amount of control future retirees have in their lives and perhaps seek out assistance in becoming more empowered. This assessment may be most useful in the pre-retirement phase when change can be enacted to modify retirement trajectories from less than ideal to an ideal retirement.

Table 4

*Descriptive Data for the Human Agency Independent Variables*

Human Agency variables	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Little control over things that happen to me	318	5.64	1.64	7 (disagree strongly)	1 (agree strongly)
Really no way I can solve problems I have	319	6.10	1.39	7 (disagree strongly)	1 (agree strongly)
What happens to me in the future depends on me	320	2.01	1.43	7 (disagree strongly)	1 (agree strongly)
Life is a process of learning/changing/growth	322	1.68	.98	7 (disagree strongly)	1 (agree strongly)
Helpful to set goals for the near future	320	1.91	.77	4 (not at all)	1 (a lot)

## **Life Satisfaction**

Although life satisfaction is one of the dependent variables of interest in this dissertation, the variables below may predict life satisfaction during retirement. The variables may empower future retirees to resist and combat discrimination and inequality, which may increase life satisfaction. Also, if pride is not being experienced at home or in life achievements, perhaps future retirees may seek avenues to increase pride in their lives and set and achieve new goals late in life and into their retirement years.

Table 5

*Descriptive Data for Life Satisfaction Independent Variables*

Life Satisfaction variables	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Amount of perceived daily discrimination	312	12.34	4.27	31 (high discrimination)	9 (low discrimination)
Amount of perceived inequality in family	302	1.61	.46	3.67 (high inequality)	1 (low inequality)
Rate life overall currently	316	8.31	1.28	10 (best)	3 (0 is worst)
Pleased with how life turned out	321	2	1.16	7 (disagree strongly)	1 (agree strongly)
Disappointed about achievements in life	330	1.83	.38	2 (disagree)	1 (agree)
Feel pride about work at home	318	1.61	.73	4 (not at all)	1 (a lot)

## **Religion**

The importance of religion may increase with age, which tends to accompany a decrease in health. Religion may provide comfort, community, and a sense of purpose for future retirees, who may begin to think less about their life as a member of the labor force and more as a member of a family and community. The lone variable below may show that the importance of religion may predict an ideal retirement.

Table 6

*Descriptive Data for Religiosity Independent Variable*

Religiosity variable	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Importance of religion in life	315	1.76	.84	4 (not at all)	1 (very)



## **Spouse**

A marital partner may provide comfort and support while preparing to retire and also during retirement. A spouse may also retire first and in so doing show their partner what retirement is like. Resources may be pooled in a marriage, which may assist the type of retirement the marriage experiences. Similarly, the health of one spouse could well affect the marriage as a whole. The variables below may show how the spouse of a future retiree may affect the prospects of an ideal retirement.

Table 7

*Descriptive Data for Spouse Independent Variables*

Spouse variables	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Spouse/partner education	253	2.68	1.03	4 (Graduated college to doctorate or pro. degree)	1 (Some grade school to GED)
Describe spouse/partner physical health currently	245	2.42	.96	5 (poor)	1 (excellent)
Describe spouse/partner mental health currently	245	2.01	.99	5 (poor)	1 (excellent)
Give spouse/partner emotional support (hours per month)	307	27.79	83.08	720	1
Receive emotional support from spouse/partner (hours per month)	309	20.79	61.08	700	1
Receive strain from spouse/partner	245	2.10	.59	4 (high)	1 (low)
How often good talk with spouse/partner	245	2.76	1.28	5 (less often than that)	1 (at least once a day)

## **Support**

Support from family and friends may help future retirees not feel alone as they prepare for retirement and may allow them to recover from perceived discrimination or health issues, or lack of life achievements. The variables below may help an individual prepare for retirement and also find support during retirement.

Table 8

*Descriptive Data for Support Independent Variables*

Support variables	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Receive support from family	321	3.56	.59	4 (high support)	1 (low support)
Receive support from friends	321	3.29	.67	4 (high support)	1 (low support)

The following analytical models will be employed:

**Retirement age** (Wave #2, the same employed respondents from Wave #1, but now aged 65+ and retired, N= 336).

-Model 1.1- Life satisfaction (DV) is predicted to be a function of variables related to finances, health, human agency, life satisfaction, religion, spouse, and support.

-Model 1.2- Mental health (DV) is predicted to be a function of variables related to finances, health, human agency, life satisfaction, religion, spouse, and support.

-Model 1.3- Physical health (DV) is predicted to be a function of variables related to finances, health, life satisfaction, spouse, and support.

Ordinary Least Squares (OLS) regression equations will be estimated for each of the above models. Variance inflation factors (VIFs) will be examined for each of the independent variables in each model allowing me to keep to a minimum excessively high multicollinearity in the predicting variables. The analyses will ensure that there is no excessive multicollinearity in my models because high multicollinearity creates statistical estimation problems. The main issue of high multicollinearity is larger than acceptable variances for the slope estimates, and consequently larger than acceptable standard errors. I will want to make that sure none of my independent variables have VIF values that are higher than 2.8. A VIF of 2.8 corresponds to a tolerance value of .35 ( $VIF = 1/\text{tolerance}$ ). A tolerance of 0.35 for an independent variable means that only 35 percent of the variation in that independent variable is independent of the variation of the other independent variables in the model.

I will also center all my predictor (independent) variables to allow easier interpretation of continuous variables that are categorical and have no meaningful zeroes. I will also standardize the predictor variables to gauge the effect each variable has on the dependent variable within each model. These two procedures will allow easier interpretation of the effect of each independent variable and also to highlight the strength of each independent variable to others in the model.

Earlier in this chapter I introduced the dataset I will be using, specifically the Midlife in the United States (MIDUS) longitudinal survey. In this chapter I also connected the main theories introduced in the previous chapter to my research questions. I discussed the specific variables and statistical methods I will employ to answer my research questions. In the next chapter I will present the results of my statistical analyses. I will ascertain whether my hypotheses have been confirmed and I will discuss the relevant findings.

## CHAPTER IV

### RESULTS

In the last chapter I introduced the dataset I am using in this dissertation, specifically the Midlife in the United States (MIDUS) Longitudinal Study. The main research questions I will address in this dissertation were also introduced in the last chapter, along with the specific variables and statistical methods I will employ to answer my research questions. Descriptive statistics were used to highlight the participants over ten years and two waves of data. In this chapter, I will present the results of the statistical analyses testing the research hypotheses, and I will also discuss relevant findings.

The Midlife in the United States (MIDUS) dataset was obtained from the Inter-University Consortium for Political and Social Research (ICPSR) website, a unit within the Institute of Social Research at the University of Michigan. The dataset, codebook, and accompanying software were downloaded and analyzed locally on a computer using the Stata 16 statistical software. MIDUS data obtained from the ICPSR website are packaged to easily run on a variety of statistical packages, including Stata. The two waves of data used in this analysis are ‘Midlife in the United States (MIDUS 1), 1995-1996 (ICPSR 2760)’ and ‘Midlife in the United States (MIDUS 2), 2004-2006 (ICPSR 4652).’ Stata’s MERGE command (\*merge) using respondent ID in both waves of data created a new dataset from the two waves of data. Any participant not present in both datasets was thus deleted from the merged dataset. To limit the analysis to people who were of pre-retirement age in Wave I (1995-1996), only respondents born between 1932 and 1941 were included (10 years or less from age 65 in 1995). Additionally, only respondents who were employed in Wave I and who were retired in Wave II were included in the

analysis. These restrictions resulted in my dropping the number of respondents in the merged dataset from 933 to 336.

### **Descriptive results**

Life satisfaction, mental/emotional health, and physical health are the three dependent variables selected for this analysis, and all three are captured in the Wave II data. Below are summary data of these three variables.



Table 9

*Descriptive Data for the Three Dependent Variables*

Dependent variable	<i>N</i>	<i>Mean</i>	<i>S. D.</i>	<i>Max.</i>	<i>Min.</i>
Life Satisfaction (5-item), Wave II	306	8.15	1.15	10 (high)	3.25 (low)
Mental/emotional health (self-evaluated), Wave II	336	2.12	0.94	4 (fair)	1 (excellent)
Physical health (self-evaluated), Wave II	336	2.53	1.07	5 (poor)	1 (excellent)

Wave I (1995-96) was the wave that included all but a handful of the independent variables. In my dissertation I am endeavoring to identify variables that can be realistically modified during pre-retirement. The independent control variables that I am using are: gender (54% female, captured during Wave II to confirm Wave I data); age (average age of 66.44, captured during Wave II to confirm Wave I data); marital status (75% married); educational attainment (33% graduated college or beyond); race (89% White); and if they are a US citizen (93% US citizens).

Many variables asked about the respondent (lifestyle, work, and health), the respondent's spouse, and the respondent's family; all were included in Wave I. I used Stata's function pairwise correlation (\*pwcrr) with the merged Wave I and II dataset to detect pairwise correlations between the three dependent variables and a range of independent variables. The table below presents the results for those independent variables that were significantly related to the three dependent variables. The independent variables are listed in the columns, and the three dependent variables across the rows.

The significant correlations in Table 2 were used as guides when constructing the models to use for the multiple regression analyses highlighted in Tables 3 through 5. Before delving into the multiple regression models, a clear pattern becomes apparent in Table 2. Life satisfaction, as a dependent variable, has a higher correlation with the variables chosen for this analysis than mental and physical health variables. When adding and removing variables to the models, the life satisfaction model had more independent variables that showed significant associations with life satisfaction. This finding encourages a future examination of an ideal retirement within the MIDUS dataset, but with a focus solely on life satisfaction.

Table 10

*Correlations of Three Dependent Variables and Finance, Health, Human Agency, Life Satisfaction, Religiosity, Spouse, and Support Variables*

Variables	<i>Life Satisfaction (5-item)</i>  (N=306)	<i>Mental/emotional health, self-evaluated</i>  (N=336)	<i>Physical health, self-evaluated</i>  (N=336)
<b>Finance Variables</b>			
Do you own your home outright, are you paying on a mortgage, or do you rent?	-.12*	-.02	.11*
On average, how many dollars per month do you or your family living with you contribute to your grandchildren or grown children?	-.14*	.17**	.08
Feel obligated to take adult children back into home	.11	.04	-.02
<b>Health variables</b>			
Rate health currently	.32***	-.18**	-.27***
Compare energy now to 5 years ago	-.15*	.07	.12*
Compare fitness now to 5 years ago	-.14*	.09	.15**
I work hard at trying to stay healthy	-.17**	.15**	.18**
Rate control over health	.26***	-.12*	-.18**
Rate thought/effort put into health	.16**	-.07	-.01
Currently smoke cigarettes regularly	.12*	-.12*	-.15**

Table 10 Continued

Variables	<i>Life Satisfaction (5-item)</i>  (N=306)	<i>Mental/emotional health, self-evaluated</i>  (N=336)	<i>Physical health, self-evaluated</i>  (N=336)
Thinking about the one year when respondent drank the most, focusing on respondents who drank less than 1 drink per week, how many days per month did respondent consume alcohol	-.12*	.05	.05
Summer moderate activity	-.19**	.06	.19**
Summer vigorous activity	-.05	.05	.11*
Winter moderate activity	-.16**	.07	.21**
Winter vigorous activity	-.12*	.07	.11*
<b>Human agency variables</b>			
Little control over things that happen to me	.11*	-.14*	-.10
Really no way I can solve problems I have	.13*	-.13*	-.09
What happens to me in the future depends on me	-.20**	.21**	.19**
Life is a process of learning/changing/growth	-.14*	.08	.08
Helpful to set goals for the near future	-.13*	.09	.09
Like to make plans for future	-.11	.08	.07

Table 10 Continued

Variables	<i>Life Satisfaction (5-item)</i>  (N=306)	<i>Mental/emotional health, self-evaluated</i>  (N=336)	<i>Physical health, self-evaluated</i>  (N=336)
<b>Life satisfaction variables</b>			
Amount of perceived daily discrimination	-.12*	.11*	.04
Amount of perceived inequality in family	-.14*	.11*	.12*
Amount of perceived inequality in home	-.11	.10	.09
Rate life overall currently	-.05	.16**	.09
Pleased with how life turned out	-.28***	.16**	.14*
Disappointed about achievements in life	.15*	-.03	-.02
Feel pride about work at home	-.17**	.06	.02
<b>Religiosity variables</b>			
Importance of religion in life	-.17**	.02	.14**
<b>Spouse variables</b>			
Spouse/partner education	-.02	-.12*	-.09
Describe spouse/partner physical health currently	-.16**	-.00	.05
Describe spouse/partner mental health currently	-.18**	-.00	.05
Give spouse/partner emotional support (hours per month)	-.16**	.13*	.18**

Table 10 Continued

Variables	<i>Life Satisfaction (5-item)</i>  (N=306)	<i>Mental/emotional health, self-evaluated</i>  (N=336)	<i>Physical health, self-evaluated</i>  (N=336)
Receive emotional support from spouse/partner (hours per month)	-.13*	.11*	.11
Receive strain from spouse/partner	-.15**	-.01	.02
How often good talk with spouse/partner	-.15**	-.01	.03
<b>Support variables</b>			
Receive support from family	.15**	-.00	-.04
Receive support from friends	.17**	-.10	-.11*

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

The above are all zero-order correlations. Many of the relationships are as expected, but some were unexpected. It should be noted that MIDUS uses scales for some variables that use a low number for a positive response (e.g., 1 equals excellent health, while 4 equals poor health), which explains why some correlations are negative. Also, the life satisfaction variable shows '10' as 'high life satisfaction' while mental health and physical health are coded 'excellent' at '1' and decrease with larger numbers. The previous chapter contained several tables showing the minimum and maximum values of each variable to assist in interpretation of correlations.

Starting with the finance variables, home ownership and supporting adult children and grandchildren were correlated with life satisfaction and physical health. Actual home ownership is coded as '1' and renting a home is a '3'. Participants could be more satisfied with their lives in retirement if they own their homes (perhaps a sense of accomplishment and security), and their physical health might increase due to the need for home maintenance. Financially supporting adult children and grandchildren tended to lessen life satisfaction and mental health. Perhaps having to support these family members may be a proxy for stress towards the participant, which may negatively affect life satisfaction and mental health.

The relationships associated with the health variables were not surprising given that an increase in the health variables resulted in higher life satisfaction and better mental and physical health. These variables may be deemed the most feasible to change in pre-retirement and likely at the lowest expense. However, human agency variables may be more of a realization of how participants view their power to control their lives. Perhaps if informed during pre-retirement, changes can be made. If no changes can be made, then these variables still inform participants on the power they have over their lives and they may be able to overcompensate in other areas (such as exercise) to achieve an ideal retirement.

Life satisfaction variables behaved as expected, with decreases of perceived discrimination and inequality and increases of pride resulting in higher life satisfaction and mental health. Religion was important to life satisfaction and mental health, as was the spouse, and support from family and friends. These final categories of variables behaved as expected and could find use in informing soon-to-be retirees of the importance of these institutions (community, family, and religion) on an ideal retirement.

### **Multiple regression results**

I estimated multiple regressions for each of the dependent variables. The p-value of the F-test of each of the three regression models was significant (0.000).

The first model, examining life satisfaction during retirement, found that higher educational attainment was associated with more life satisfaction. Higher educational attainment could result in more resources via higher paying jobs and pensions, which may increase life satisfaction. Although, access to higher education may not be available to all segments of the U.S. population. Financial contributions to adult children and grandchildren were associated with a decrease life satisfaction, which may be indicative of offspring who may not have properly launched into adulthood. Surprisingly, an obligation to take adult children into the home was associated with an increase in life satisfaction, with a large standardized coefficient (beta) value (.433). The variable is a result of asking about an obligation, which may not manifest itself in actual action, but rather responsibility and ability to take an adult child back into the home. This may be indicative of financial resources to do such an action and perhaps the sense of family when welcoming an adult child back into the home.

Health is also associated with life satisfaction, with current health displaying a statistically significant coefficient and a large beta value (.320). This finding may convince pre-



retirees to not neglect their health as it is a predictor of high life satisfaction during retirement. Similarly, if a respondent reported that their current fitness level was better than five years ago, their life satisfaction increased (current fitness level is coded 1 'better now'). And, moderate summer activity, coded 1 for 'several times a week or more,' is feasible as it includes activities such as bowling and vacuum cleaning.

Setting goals for the near future (coded 1 as 'a lot') showed an increase in life satisfaction, which represents agency in attempting to determine the near future. This finding could also assist financial preparedness for retirement because setting goals to save or pay off a home may increase a retiree's overall life satisfaction. Satisfaction with life's outcome was also associated with increased life satisfaction, which may be related to goal setting that may direct life towards a desirable outcome. Pride with work at home may be related to home ownership, as the work may be more valued in a home that one owns, as opposed to rents. The work at home may also be related to moderate exercise, such as the vacuuming mentioned previously.

Finally, the support from friends showed significance towards life satisfaction, which may support sharing retirement plans and goals with friends who may provide insight on retirement and may provide useful feedback on the feasibility of retirement goals. Friends may also become more important during actual retirement because work colleagues may be less involved in a retiree's life.

Life satisfaction may be deemed the variable that most clearly demonstrates an ideal retirement. The multiple regression results below show several variables associated with life satisfaction and the variables can be modified in a feasible manner (such as an increase in exercise or more contact with friends). This model accounts for almost 37% of the variance of life satisfaction during retirement.

Table 11

*Life Satisfaction as Dependent Variable, Regression of Finance, Health, Human Agency, Life Satisfaction, Religiosity, Spouse, and Support Variables*

Variables	Coefficient	p-value	$\beta$
<b>Control Variables</b>			
Gender	.149	.255	.065
Age	-.004	.863	-.008
Marital Status	.122	.325	.114
Educational Attainment	.157	.010	.136
Race	-.113	.174	-.070
U.S. Citizen	-.004	.940	-.004
<b>Finance Variables</b>			
On average, how many dollars per month do you or your family living with you contribute to your grandchildren or grown children?	-.000	.033	-.133
Feel obligated to take adult children back into home	.052	.000	.433
<b>Health variables</b>			
Rate health currently	.179	.000	.320
Compare fitness now to 5 years ago	-.162	.045	-.116
I work hard at trying to stay healthy	.057	.257	.068
Rate control over health	.029	.474	.058
Rate thought/effort put into health	.052	.126	.104

Table 11 Continued

Variables	<i>Coefficient</i>	<i>p-value</i>	$\beta$
Currently smoke cigarettes regularly	.021	.191	.065
Summer moderate activity	-.171	.011	-.184
Winter moderate activity	.084	.204	.096
Winter vigorous activity	-.035	.324	-.058
<b>Human agency variables</b>			
Little control over things that happen to me	-.065	.088	-.106
What happens to me in the future depends on me	-.068	.083	-.095
Helpful to set goals for the near future	-.168	.045	-.154
Like to make plans for future	.125	.134	.115
<b>Life satisfaction variables</b>			
Amount of perceived inequality in family	-.022	.554	-.035
Amount of perceived inequality in home	-.183	.142	-.131
Pleased with how life turned out	-.162	.002	-.178
Disappointed about achievements in life	-.218	.063	-.106
Feel pride about work at home	-.147	.016	-.148
<b>Religiosity variables</b>			
Importance of religion in life	-.019	.700	-.023

Table 11 Continued

Variables	<i>Coefficient</i>	<i>p-value</i>	$\beta$
<b>Spouse variables</b>			
Describe spouse/partner mental health currently	-.062	.402	-.165
Receive emotional support from spouse/partner (hours per month)	-.000	.194	-.076
Receive strain from spouse/partner	-.081	.362	-.209
How often good talk with spouse/partner	.051	.344	.130
<b>Support variables</b>			
Receive support from friends	.179	.042	.161

The results in the second model, focusing on mental/emotional health during retirement, show that higher educational attainment was associated with better mental/emotional health. High educational attainment may result in a better paying job, which may reduce financial stress and may afford resources such as retirement plans that reduce worrying about retirement. Financially supporting adult children and grandchildren was associated with worse mental health with a sizeable beta value (.133).

Current health resulted in better mental health, indicating that exercising and other steps such as a healthy diet may not only increase physical health, but also life satisfaction and mental health. Human agency is present in agreeing that what occurs in the future depends on the individual and significance showed for this variable, indicating that as an individual believed the future relied on their actions, their mental health increased. Although not present in this model, perhaps creating goals may be a way to increase self-empowerment over the future (and creating goals results in high life satisfaction).

Finally, having a positive outlook on life currently has been shown to be associated with an increase in favorable mental health. This variable may lend itself to modification as individuals may realize they are not happy with their life currently and after this realization, they may decide to take action (perhaps by creating goals) to modify their outlook on life. This model accounts for over 18% of the variance of mental/emotional health during retirement.

Table 12

*Mental Health as Dependent Variable, Regression of Finance, Health, Human Agency, Life Satisfaction, and Spouse Variables*

Variables	Coefficient	p-value	$\beta$
<b>Control Variables</b>			
Gender	.048	.636	.025
Age	.024	.196	.067
Marital Status	.101	.241	.118
Educational Attainment	-.183	.000	-.193
Race	.099	.143	.083
U.S. Citizen	-.036	.435	-.046
<b>Finance Variables</b>			
On average, how many dollars per month do you or your family living with you contribute to your grandchildren or grown children?	7.36e-06	.034	.133
<b>Health variables</b>			
Rate health currently	-.121	.001	-.294
I work hard at trying to stay healthy	.045	.242	.068
Rate control over health	.035	.287	.094
Currently smoke cigarettes regularly	-.023	.102	-.087
<b>Human agency variables</b>			
Little control over things that happen to me	-.040	.173	-.089

Table 12 Continued

Variables	<i>Coefficient</i>	<i>p-value</i>	$\beta$
What happens to me in the future depends on me	.086	.010	.147
<b>Life satisfaction variables</b>			
Rate life overall currently	.008	.050	.114
Pleased with how life turned out	.054	.174	.078
<b>Spouse variables</b>			
Spouse/partner education	-.064	.057	-.194
Receive emotional support from spouse/partner (hours per month)	-.000	.227	-.075

The regression results for the third model, examining physical health during retirement, showed that higher educational attainment was associated with better physical health, similar to the previous two models. Current health and exercise were significantly associated with an increase in physical health in retirement, which may not be that surprising on the surface, given that health during pre-retirement will increase health in retirement; this finding may be surprising and is well worth reporting to individuals in pre-retirement.

Religiosity and believing what happens in the future may be associated with perhaps empowering the individual towards ideal trajectories during retirement and perhaps after retirement in death (or the afterlife, if part of the individual's religion). Physical health may be another form of empowerment as the individual may be able to modify his/her physical health on their own with little influence from others. This model accounts for almost 25% of the variance of physical health during retirement.



Table 13

*Physical Health as Dependent Variable, Regression of Finance, Health, Human Agency, Life Satisfaction, and Spouse Variables*

Variables	Coefficient	p-value	$\beta$
<b>Control Variables</b>			
Gender	.025	0.824	.012
Age	.016	0.407	.041
Marital Status	-.047	0.329	-.049
Educational Attainment	-.226	0.000	-.210
Race	.094	0.202	.070
U.S. Citizen	-.001	0.980	-.001
<b>Health variables</b>			
Rate health currently	-.188	0.000	-.402
Currently smoke cigarettes regularly	-.026	0.073	-.090
Summer moderate activity	.175	0.000	.217
<b>Human agency variables</b>			
What happens to me in the future depends on me	.103	0.002	.155
<b>Religiosity variables</b>			
Importance of religion in life	.134	0.002	.172
<b>Support variables</b>			
Receive support from friends	-.017	0.807	-.018

## **Conclusion**

In this chapter I have described the major variables used in my analyses and I have estimated several multiple regression equations to test my research hypotheses. The findings varied and showed support for interventions during pre-retirement to predict an ideal retirement. Life satisfaction, as mentioned previously, may be deemed the clearest indicator of an ideal retirement (i.e., high life satisfaction during retirement), and a number of other variables such as education, health, and support from friends were shown to be associated with life satisfaction in retirement. These analyses show that feasible action can be taken in the pre-retirement stage to achieve an ideal retirement. In the following and last chapter of the dissertation, I will further discuss the major findings, as well as limitations in the data and their analyses. I will also suggest future areas for my possible research in the years ahead.

## CHAPTER V

### CONCLUSIONS, LIMITATIONS, AND FUTURE RESEARCH

In the previous chapter, I presented and discussed the results of the statistical analyses of ideal retirement and retirement preparation that I conducted using the Midlife in the United States (MIDUS) longitudinal data. My analyses identified specific independent variables correlated with the main dependent variables of life satisfaction, mental health, and physical health. In this chapter, I will further discuss my conclusions, and will reflect on the limitations of the dataset. I will also discuss some of the future avenues that retirement research might well follow.

#### **Conclusions**

Chapter 4 showcased three multiple regressions involving the main dependent variables of life satisfaction, mental, and physical health. Below are the three models introduced in Chapter 3:

-Model 1.1- Life satisfaction (DV) is predicted to be a function of variables related to finances, health, human agency, life satisfaction, religion, spouse, and support.

-Model 1.2- Mental health (DV) is predicted to be a function of variables related to finances, health, human agency, life satisfaction, religion, spouse, and support.

-Model 1.3- Physical health (DV) is predicted to be a function of variables related to finances, health, life satisfaction, spouse, and support.

Not all variables in the three models found support in the Chapter 4 analyses and specific relationships will be discussed. All three dependent variables in their respective regression models were positively associated with educational attainment, supporting previous findings of the benefits of high educational attainment (Assari, 2019; Muñoz -Rodriguez et al., 2019; Yahirun et al., 2020). These results regarding the benefits of high educational attainment should be shared with universities and colleges who could disseminate to their student bodies, who may not be aware of these additional advantages of higher education. Places of employment might be encouraged to create and support programs that allow employees to further their education, which benefits the employer by increasing the skillset of their labor force and also increases the mental and emotional health of workers, which may reduce insurance claims and time off from work due to health reasons. An increase in education may be associated with greater opportunities for advancement in one's career, along with health benefits and a higher likelihood of an ideal retirement upon the conclusion of one's work life.

Educational attainment in the data was captured during the ten years before retirement age in the MIDUS dataset. This opens the window of educational attainment up until the workers reach age in the mid-50s range, which could support a movement to obtain education later in life, possibly graduate degrees or certificates. Graduate certificates are particularly important because they allow an individual to “develop new skills and build expertise in a specialized area to update your professional profile, advance your career, or broaden your knowledge base” (Harvard Extension School website, 2020, p. 1). A return into higher education may be associated with a happier and healthier retirement.

Home ownership was associated with higher life satisfaction during retirement. Paying off a mortgage and owning a home may be feasible for individuals who simply make it a goal to

pay off their mortgage by increasing monthly payments or refinancing long mortgage terms to shorter ones. In my dissertation, I attempted to identify factors beyond the financial ones that may result in an ideal retirement; home ownership falls within that confine. It may not simply be more money that makes home ownership possible. Rather it may be financial savviness and creating and maintaining goals and budgets that will lead to home ownership before retirement (Storms, 2000).

Good health in the pre-retirement years also showed significant associations with life satisfaction, mental health, and physical health. Employed workers nearing retirement may want to utilize their employer's health insurance to assess their health prior to retirement when their costly health care may not be covered by their former employer's health care system. Exercise during the pre-retirement years may normalize physical activities during the transition into retirement, and as I showed in Chapter 4, may increase life satisfaction, mental health, and physical health during retirement, and perhaps also during pre-retirement.

Setting goals and being aware that the future can be shaped by an individual were also significant independent variables that were associated with all three dependent variables. Employers may wish to utilize consultants to teach employees how to properly craft and implement feasible goals. Perhaps setting goals seems obvious, but the method used to create goals may be more complicated (e.g., using Specific, Measurable, Aggressive but Achievable, Relevant, and Time-bound, or SMART goals) (Rubin, 2002)). Soon to be retirees may also benefit from formal training in creating goals in order to benefit from goal setting. Common goals for middle-aged individuals should include increasing their educational attainment, paying off their mortgages, and exercising, all of which are associated with higher life satisfaction and more favorable health in retirement.

Pride with one's life and work are interesting findings and, like educational attainment, can be modified in the years before retirement. Pride with life may overlap with educational attainment, since perhaps more education may well increase pride and satisfaction with life. Homeownership may be a source of pride, especially after the housing crisis of the late 2000s when many people in the U.S. lost their homes or lost tremendous value on their homes (Yunus, 2019). And perhaps just being able to create and achieve a goal may be a source of pride for an individual.

Life satisfaction during retirement was shown to be dependent on support from friends in the years leading to retirement. While employed, individuals may spend much time with work colleagues who may be considered friends and sources of support. In relation to retirement, work colleagues may share information on retirement and offer support to those who will enter retirement soon. Friends may also be more objective and offer frank advice and support to older individuals about to enter retirement and also with respect to creating and achieving life goals.

Mental health was shown to be negatively affected by financial support for adult children and grandchildren. And mental health was shown to be positively affected by how an individual rates their life currently, which in this dataset, occurred in the Wave I period during the pre-retirement years. These two variables could be related to having to financially support offspring (and grandchildren) and may reflect having children who did not fully launch from the nuclear family and are still dependent on their parents in later life. That financial obligation may cause distress as it may take away resources from a soon-to-be retiree's goals, such as paying off a home or pursuing a graduate degree. And not having children who successfully launched may decrease life satisfaction during pre-retirement, which may persist into retirement. However, since the financial support of adult children and grandchildren occurred in the pre-retirement

years, a soon-to-be retiree who is financially supporting their offspring may make it a goal to wean their financial support and force their adult children and grandchildren to be more financially independent. During pre-retirement, perhaps income is still high from employment, but during retirement, financially supporting others could be financially disastrous. Successfully weaning offspring from financial support may well increase mental health and also life satisfaction and may also provide tangible benefits such as homeownership.

Physical health outcomes in retirement were also affected by variables such as educational attainment, physical health (in pre-retirement), and human agency, but religiosity emerged as a significant predictor of positive physical health during retirement. Religion may provide a sense of worth and inclusion in a community which may translate into better health outcomes in retirement. Religion may go beyond weekly commitments and may expand to involvement in activities that may simply make an individual more active, resulting in better physical health outcomes in retirement. Perhaps religious organizations may want to be made aware of these findings because often the benefits of religious involvement are spiritual and non-tangible. Better physical health outcomes in retirement may push some soon-to-be retirees to participate in their local religious organizations.

Elder's life course theory (2003), specifically the principle of life-span development, found support in the findings. Education was associated with positive life satisfaction and health and as argued earlier, education may be increased late in life by way of graduate school or graduate certificates. Variables such as exercise can be modified in pre-retirement and can continue modification into retirement, which supports the notion human development and aging are indeed lifelong events.

Life course's principle of agency is also evident as the ability to create goals was associated with a positive retirement. Also, the principle of linked lives was present as support from friends and financially supporting adult children influenced the type of retirement experienced by an individual.

Parsons' functional role theory (Parsons et al., 2017) found overall support as the variables examined in Chapter 4 were associated with predicting an ideal retirement by way of life satisfaction and positive health outcomes. The dysfunction could appear when individuals are not able to enter retirement (such as an inability to retire due to financial constraints) and this could cause role strain. The variables identified in the previous chapter can be modified during pre-retirement and lead to less role strain during retirement.

Finally, Thoits' role accumulation theory (1983), which discusses the benefits of holding multiple roles, including resource accumulation and support against role failures or loss, was supported by the findings. Success in paying off a home results in the role of homeowner, which may offset the lack of other roles, such as not being able to create goals in life. Soon-to-be retirees may be encouraged by findings related to Thoits' research and may find a desirable retirement by achieving some of the variables (e.g., homeownership), rather than find role strain by not being able to modify all significant variables during pre-retirement.

### **Significance**

I believe the importance of the results of this dissertation lies in finding non-financial ways to allow individuals to enjoy their retirement. As mentioned in the introductory chapter, many Americans are ill-prepared financially for retirement. And for an individual who is nearing retirement, the time available to increase their savings may be limited. Also, individuals may have other financial commitments that may not make increasing financial contributions to



retirement programs feasible. In my dissertation, I provided empirical evidence on ways individuals may be able to increase their life satisfaction and health in retirement by modifying behaviors and goals in the pre-retirement years.

When thinking of the life course, people are most likely to pursue higher education in early adulthood. It is probable that the pursuit of additional higher education during midlife be associated with career and life investments. Higher education during the career may be more focused and with a goal to increase career opportunities. And higher education may bring pride to an individual and may serve as a feasible and attainable goal for middle-aged individuals.

With longer life expectancies occurring today, most individuals will live as retired for a longer portion of their lives. Retirement is no longer a small blip of time before death, but rather a larger phase of life for which one should prepare. The results in my dissertation have led me to question the belief that an ideal retirement is solely dependent on financial resources. And the findings may further alleviate the stress some soon-to-be retirees may experience from not knowing how their lives will be during retirement.

These findings may find a wide audience, ranging from the individual, to the individual's friends and family, to the individual's employer. All could well benefit from the main findings of this dissertation as retirees are well-integrated in American society and even after retirement, their health may affect the amount of resources they draw from retirement health plans.

Retirement may not be a universal event for all Americans, but reaching retirement age may be more common and, thus, this topic may be of importance to all Americans. While planning for retirement can start as early as desired, being cognizant of the factors and variables in the years before retirement may well control for the lack of early preparation. Health lends itself to modification throughout the life course, and the years before retirement are no exception.

Building and relying on friendships for support were shown to result in better physical health during retirement. Building friendships may be easier to do than implementing workout routines and may show similar health benefits.

### **Contributions**

The principal findings of my dissertation contribute, I believe, to the retirement literature mainly because they identify feasible opportunities for change during pre-retirement to ensure an ideal retirement. In Chapter 2, I summarized several studies that examined retirement from several viewpoints, such as how minorities and females are likely to experience retirement. The differences in outcomes due to these ascribed attributes are important and necessary to study. And the results of my dissertation also complement the findings of several studies summarized in Chapter 2 by viewing achieved attributes as predictors of an ideal retirement, looking beyond finances (which are achieved).

The findings of this dissertation can also be used as calls to action for persons nearing retirement; they may still have time to improve their health or pay off their homes. While the limitations in the following section discuss the generalizability issue in the findings, much of the previous work on retirement is specific to a certain subgroup, specific country, or type of employment, and the analyses conducted in this dissertation should be replicated for the various populations utilized in previous studies.

The findings of this dissertation encompass fields outside of sociology (such as banking and the health care industry). Viewing retirement outcomes using an interdisciplinary approach may be supported using the findings of this dissertation. While the MIDUS dataset includes a plethora of variables, perhaps datasets from other fields (such as health care) may strengthen the

findings as they may be triangulated if similar findings are found to be present in studies using other datasets.

Finally, the stereotypes of retirement may be challenged as variables were significantly correlated with mental and physical health outcomes in retirement. Persons who are getting close to retirement may empower their journey into the post-work period and experience greater health knowing the factors that need to be modified during pre-retirement. The stereotype of the retiree in poor health may be challenged and perhaps future retirees may experience better health than retirees of previous generations.

### **Limitations**

The research that I conducted in this dissertation was hindered by several limitations. The first liability is the small sample size. Merging two waves of MIDUS longitudinal data that contained participants who were nearing retirement in Wave I and who were retired in Wave II yielded 933 cases (out of 7,108 total cases in Wave I data). But limiting cases to only those individuals who were employed in Wave I and retired in Wave II lowered the number of cases to 336; they comprised the sample used in this dissertation's analyses. Such a drop in cases may limit the generalizability of the findings. For the most part, the sampled individuals are a mostly educated, non-Hispanic White subpopulation. The findings are thus reflective of a small portion of the U.S. population. Future studies of this topic may wish to utilize later waves of MIDUS that oversampled smaller segments of the U.S. population. Nevertheless, the findings of this dissertation offer a valuable starting point to expand the scope of an ideal retirement for all segments of the U.S. population.

Another limitation of this dissertation is that retirement outcomes may differ depending on the state of the economy. A stronger economy with low unemployment may adequately

sustain a large number of retirees. A weaker economy may dim the retirement outlook for soon-to-be retirees, who could well delay retirement even if they presently desire it. This dissertation did not control for the state of the economy when the individuals in the analyses retired, although they retired in a relatively similar time period. Future studies could well employ a multi-level framework using variables at level-2 that capture the type of economy present when the respondents at level-1 decide to retire (or not). It is likely the case that the state of the economy influences decisions to retire; a multi-level analysis would allow researchers to test this hypothesis.

The MIDUS longitudinal waves were about ten years apart. Many issues could have developed or occurred in the decade between pre-retirement and retirement which may not be captured in the data. Revisits to this dissertation topic should attempt to uncover factors that occurred in the 10-year span between the MIDUS waves of data. There may be factors that occurred during a specific period of time that may influence the type of retirement experienced by an individual.

### **Future Research**

Future reanalysis of this dissertation topic may wish to address some of the aforementioned limitations. Including additional waves of MIDUS data may be useful to track the youngest individuals in the data who are now middle-aged, and then follow them to pre-retirement and then to retirement (utilizing all three waves of data instead of only two). Additional waves may give us insights about individuals in the dataset who are furthest from retirement at Wave I, and these may be different from those of individuals who are nearing retirement at Wave I.

Cross-sectional comparisons may supplement longitudinal data findings, which were hindered by a small sample size. Perhaps examining individuals who were retired in Wave II (and not present in Wave I) may provide data on life satisfaction, mental health, and physical health outcomes in retirement, regardless of the absence of data during the pre-retirement years. With higher life expectancy and thus more time in retirement, the post-employment phase should not be seen as a uniform event. Perhaps the early years of retirement may well differ from the later years, and future research should examine the different stages of actual retirement.

In my dissertation, I limited my respondents to individuals who were employed in Wave I and retired in Wave II. Future research should examine individuals who were eligible for retirement in Wave II, but remained employed, to see if similar predictor variables in Wave I are associated with life satisfaction and health outcomes in Wave II. Similarly, future research may also want to include individuals who were not employed in Wave I. Such individuals may have left the labor force for reasons that may affect their later retirement outcomes.

### **Remaining work**

Beyond the topics I discussed above in the section dealing with limitations, I believe this dissertation offers a blueprint on how work on retirement should not only be examined in discrete analyses. Also, my main findings could well be used as calls for action that may assist American workers who may retire soon. The limitations should be addressed in future work on retirement. The remaining work for scholars studying retirement should include finding a consistent avenue to disseminate findings. Research on retirement should not live in the annals of academia. Rather, they should find similar channels that medical journals use to spread their findings to mass media and the public.

Using a longitudinal dataset such as MIDUS is useful to follow the same individuals over a long period of time. Yet, there should be ways to fill in the gaps for the ten years between the waves of data. Perhaps an effort should be made to reach out to MIDUS participants and ask them to retroactively fill in data gaps. This may further assist and perhaps strengthen the findings of this dissertation.

Work to separate retirement into different phases should also be undertaken. Retirement may be seen as one complete period (retirement) or separated into early and late retirement years. Work to uniformly define the different phases of retirement may be necessary as life expectancy increases. Future research may begin with finding the average amount of time a person spends in retirement and then analyzing the groups separately by early retirement years, middle retirement years, and late retirement years. The goal would be to avoid lumping all retirees together and assuming they are similar simply because they have entered retirement.

### **Reflections**

If I had the opportunity to start anew my dissertation research, I would still wish to identify factors that are associated with an ideal retirement. But I would include more waves of the MIDUS data. I very much care about retirement, not only for selfish reasons since I am likely to experience retirement, but also because it pertains to a large segment of Americans' lives. The MIDUS dataset has several waves of data and after conducting my analyses and viewing the results, I began to yearn for more waves of data in an effort to make the findings more generalizable.

I previously had much interest in the Epidemiological Paradox (Markides and Coreil, 1986; Palloni and Morenoff, 2001) the paradox that Hispanics of Mexican-origin, particularly in the case of immigrants, have health outcomes and longevity that are generally superior to those

of non-Hispanic Whites who have more access to the opportunity structures, and that are dissimilar to those of other socioeconomically disadvantaged groups, such as African-Americans. I continue to be very much interested in this line of research. I see retirement as an aspect of the paradox and one that can apply to all ethnicities and races, as well as in international settings.

After my recent visit to China in late 2019, I discovered college students in Beijing showing a strong interest in my dissertation topic. With one of the world's largest populations, research into retirement outcomes may be valid and important for Asian countries with large populations and increasing life expectancy. Conversations with college students in China encouraged me to continue my research work after this dissertation is complete. I plan to continue studying retirement, following some of the work of researchers such as Angel (Angel et al., 2014).

### **Five-year plan**

My five-year research plan is to focus on the literature that includes calls for action to improve retirement outcomes. I think work on this topic may find immediate use in American society and the workplace. The limitations I discussed and covered above in this chapter mentioned the lack of generalizability. This is a serious issue if future work will be disseminated to the public. The immediate plan is to strengthen my statistical abilities dealing with analyses of the datasets I relied on in this dissertation. Some previous literature used multi-level modelling, and other research analyzed categorical dependent variables in their analyses of retirement outcomes. I plan to revisit my earlier statistical coursework and reacquaint myself with some of these statistical techniques, and thus undertake analyses of health and retirement

outcomes not possible within models conducted of an interval outcome at a single level of analysis.

I also desire to perform an in-depth analysis of retirement outcomes in countries other than the U.S. to examine if similar factors present in pre-retirement in the U.S. are associated with positive life satisfaction and health outcomes in retirement in other international contexts. Retirement differs in other developed countries and perhaps a thorough examination of other countries may yield findings relevant to a global audience. China presents itself as a country with a need for retirement research with its large population, mandatory retirement, and a rapidly aging elderly population. In my dissertation, I very much used a Western eye to examine retirement. I need to modify my perspective so my findings will be more generalizable.

At the end of five years' time, I hope to still continue work in retirement with a more diverse knowledge of retirement on a global scale and a more robust statistical toolbox to assist with my work. My goal is to contribute to the literature on the topic of retirement and build opportunities for collaboration with researchers who are established experts in retirement.

This is the final chapter in my dissertation examining non-financial predictor variables that may be associated with desirable life satisfaction and health outcomes during retirement. This final chapter offered conclusions, limitations, ideas for future research and ways to improve work in the study of retirement.



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