THREE ESSAYS ON FINANCIAL WELLNESS IN THE WORKPLACE

by

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B.S., COLLEGE OF CHARLESTON, 1997
M.A., THE CITADEL, 1999

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

School of Family Studies and Human Services
College of Human Ecology

KANSAS STATE UNIVERSITY
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Abstract

This dissertation, consisting of three studies, explores the factors that influence the financial wellness of employees participating in a workplace financial education program. This dissertation also explores the influence that financial wellness has on the intention to engage in retirement planning activities and perceived retirement preparedness. Data for all three essays was obtained from a Financial Wellness Assessment instrument used in conjunction with a workplace financial education program provided by Financial Finesse (2013). The primary conceptual framework used to guide the three studies was Joo's (2008) conceptual framework of financial wellness.

The first essay examined factors that have been conceptualized as components of financial wellness—financial behaviors, perceived financial knowledge, and financial attitudes. Results showed that employees comfortable with their current level of non-mortgage debt and those with perceived financial knowledge had a greater sense of overall financial wellness. Core financial behaviors and advanced financial behaviors were also found to be associated with financial wellness with core financial behaviors having the biggest effect on financial wellness. Maintaining an emergency fund, having a handle on cash flow, paying credit card balances off in full each month, and paying bills on time were significantly related to greater financial wellness. Personal factors associated with a greater sense of financial wellness included household income, being under age 30, homeownership, being married, and not having children in the household.

The second essay examined the influence of various subcomponents of financial wellness on retirement planning intention. Results indicated that retirement was the leading financial topic of interest of employees. Findings also demonstrated that desirable core financial management behaviors and a financial attitude of comfort regarding current non-mortgage debt increased the

likelihood of employee intentions to engage in retirement planning activities. Specific financial behaviors associated with retirement planning intention included having a handle on cash flow, paying bills on time, and paying off credit card balances in full each month. Personal factors such as age and income also influenced retirement planning intention as older employees and those with greater household income were more likely to intend to plan for retirement. Having children in the household and non-Caucasian/White ethnicity decreased the likelihood of retirement planning intention.

Finally, the third essay utilized Joo's (2008) conceptual framework of financial wellness to explore factors that predict perceived retirement preparedness. Higher levels of financial satisfaction, perceived financial knowledge, and confidence in current asset allocation increased the likelihood employees demonstrated a sense of retirement preparedness. Core and advanced financial behaviors were also associated with perceived retirement preparedness. Younger employees and household income of $100,000 or more increased the likelihood of perceived retirement preparedness.

Results of these three studies demonstrate that financial wellness has a significant influence on perceived retirement preparedness of employees engaged in information seeking activities as part of a workplace financial education program. Key components of financial wellness such as objective financial status, financial knowledge, financial attitudes, financial satisfaction, and financial behaviors were also found to be associated with the intention to engage in retirement planning activities. These findings are relevant to financial counselors, financial planners, financial educators, academicians, and employers dedicated to promoting increased financial wellness among employees.

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Chapter 1 - Introduction

Financial wellness is a key component of overall health and well-being. Personal financial wellness is increasingly important as a confluence of factors have challenged the ability of Americans to manage their personal finances. During the past decade, Americans have experienced global recession, job instability, housing market volatility, and numerous events that have shaken consumer confidence in financial markets. Total net worth decreased by a median amount of 18% across 63% of total households between 2007 and 2009 (Bricker, Bucks, Kennickell, Mach, & Moore, 2011). According to Bureau of Labor statistics (2014), outstanding consumer credit recently peaked to approximately $3.1 trillion (nearly 28% was revolving credit) at the end of 2013. Additionally, many Americans are increasingly burdened by Federal and private student loan debt, which recently passed the $1 trillion mark in 2011 and has since increased to $1.2 trillion. The personal savings rate of U.S. households was approximately 10% in the 1980's and dropped to 4.5% during 2013, the lowest savings rate since 2007 when it was just 3.0%, and just as recently as the early 2000's personal savings rates were at levels not seen since the Great Depression (U.S. Bureau of Economic Analysis, 2014).

Financial health has a significant effect on the ability of individuals and families to meet long-term financial goals, such as retirement. The National Retirement Risk Index (Munnell, Webb, & Golub-Sass, 2012) reported that over half of the households in America were at risk of not being able to replace their pre-retirement standard of living during retirement. The increased focus on meeting immediate household financial concerns is one potential reason that Americans are not saving enough for retirement (Helman, Adams, Copeland, & VanDerhei, 2013). Helman et al. (2013) identified that 41% of employees state the primary reason they are not saving enough for retirement is due to concerns about managing their current living expenses.

Retirement savings has declined as evidenced by the 2013 EBRI Retirement Confidence Survey (Helman et al., 2013), indicating that 28% of respondents were not at all confident in their ability to secure a comfortable lifestyle during their retirement years. Additionally, the survey revealed that over half (57%) of workers have saved less than $25,000 for retirement (excluding home equity and defined benefit plan assets).

Although external forces such as global economic conditions, investment market performance, government policies, and private industry trends (e.g., decline in defined benefit pension plans) have an influence on financial health, financial decisions are ultimately made at the individual level. Financial health has become an important area of focus for researchers, policy makers, and financial professionals tasked with the challenge of improving the retirement outlook of American workers. Financial wellness has emerged as an objective and subjective measure of financial health, which is often measured on a continuum (Prawitz, Garman, Sorhaindo, O'Neill, Kim, & Drentea, 2006). The primary components that makeup financial wellness include objective financial status, financial satisfaction, subjective perceptions (financial attitudes and financial knowledge), and financial behaviors (Joo, 2008). According to Joo and Grable (2004), several factors have been identified as signs of a healthy financial life. Financial behaviors associated with personal financial wellness include the following:

- Maintaining reasonable and low debt
- Having an active savings plan
- Having and intentionally following a personal spending plan
- Lack of money-related conflict with family or partner
- Experiencing high levels of financial satisfaction
- Experiencing low levels of financial stress

Financial distress is commonly viewed as the opposite of financial wellness (Prawitz et al., 2006). Financial stressors include unreasonable debt levels, arguments with family members and loved ones regarding money, and out of control spending due to lack of a spending plan or budget. Individuals with high levels of debt report increased occurrence of mental health problems, such as depression and anxiety related to personal finances (Bridges & Disney, 2010; Drentea, 2000; Jenkins et al., 2008). Marital satisfaction is negatively associated with increased consumer debt (Dew, 2008), and money arguments are a leading predictor of divorce (Dew, Britt, & Huston, 2012). The mere perception of financial spending behaviors is associated with relationship satisfaction (Britt, Grable, Goff, & White, 2008). Furthermore, financial problems have the ability to impact employee productivity and thus are a concern of employers (Joo & Garman, 1998). Significant challenges exist in the field of personal financial planning in the search to help identify methods to effectively reduce financial distress and improve overall financial wellness.

Financial planning is defined as the process of aligning financial resources with important life goals and this process is relevant in addressing the financial health of individuals and families. Although primarily used in individual settings, the financial planning process has been applied in corporate settings through workplace financial wellness programs designed to improve employees' financial health (Financial Finesse, 2013; Garman, Kim, Kratzer, Brunson, & Joo, 1999). The concept of financial wellness has emerged since the 1990's as an assessment of individual financial health. Financial behaviors are an important component of the overall financial well-being of individuals and families throughout the United States. The financial wellness of individuals in this country has been a growing area of concern for financial counseling and planning professionals, marriage and family therapists, academicians, and policy

makers. There has also been increased attention to the concept of financial wellness in the workplace environment.

Financial education programs are growing in popularity across diverse groups including corporations, government agencies, financial institutions, extension programs, churches, and non-profit organizations. Many of these financial education initiatives purport to use a holistic approach to facilitating improvements in financial health. Research studies that explore the impact of workplace financial education lend evidence that such programs benefit both the employees and the employers that sponsor financial education. The growth in workplace financial education is likely due to the premise that personal financial wellness is associated with worker productivity (Joo & Garman, 1998), absenteeism, and financial stress (Bagwell & Kim, 2003). There is a well-established link between financial stress and health with individuals reporting greater financial distress also demonstrating poorer health (Bagwell & Kim, 2003; Drentea & Lavrakas, 2000). Financial wellness has been researched based on personal factors such as age, income, gender, education, race/ethnicity, dependent minors, and homeownership. Participation in workplace financial education programs is also related to organizational satisfaction (Hira & Loibl, 2005). Joo and Grable (2005) found that individuals engaged in a workplace financial education program were more likely to have a retirement savings plan which was subsequently found to be related to improved retirement confidence.

As financial wellness programs increase in popularity with employers, it is important to understand how to assess employees' financial health in order to design and deliver comprehensive financial education designed to promote behavioral change. Financial education is an essential component of wellness programs designed to improve financial health. Employees are increasingly looking to their employers for financial guidance and advice (Financial Finesse,

2013; Joo & Grable, 2000; MetLife, 2014). Joo and Grable (2000) found that 80% of employees expressed interest in receiving financial counseling and education from their employer as long as the cost was minimal. Evidence from MetLife's 12th Annual Employee Benefits Trends Study suggested that the desire for financial education and guidance in the workplace increases when employees' financial concerns impact their work productivity and job attendance (MetLife, 2014). Employers need better direction regarding how to assess financial wellness of their workforce. Some evidence suggests that a general disconnect exists between employers and employees in understanding the value of financial education and wellness employee benefit offerings. Traditionally, workplace financial education has been primarily focused on the topic areas of retirement and investing. According to an Aon Hewitt (2013) report, corporations are demonstrating an interest in promoting financial wellness as 80% of companies in a retirement benefits survey plan on promoting financial wellness through enhanced communication, resources, mobile apps, and online tools.

The purpose of this dissertation was to examine the factors that influence financial wellness and to explore how components of financial wellness are associated with the intention to plan for retirement and perceived retirement preparedness. More specifically, these studies have direct implications for the design and implementation of workplace financial wellness programs that address the unique needs of certain employee demographics. Financial education in the workplace has traditionally been centered on the topic areas of retirement planning and investing. This dissertation identifies ways to incorporate comprehensive financial planning and education programs in the workplace to improve financial wellness of employees, and in turn improve perceived retirement preparedness. The results provide greater understanding of the assessment of financial wellness in the workplace and aid financial professionals in developing

and implementing holistic financial wellness programs designed to improve overall financial health of employees in a workplace environment.

Description of the Studies

This dissertation examines factors that influence the financial wellness and retirement preparedness of employees participating in a comprehensive financial education program at work. Each of the three papers is focused on the financial wellness of employees engaged in a workplace financial wellness program. Data for all three studies have been obtained from a service provider of unbiased financial education and their proprietary Financial Wellness Assessment. The Financial Wellness Assessment (Financial Finesse, 2013) is an online financial learning tool designed to assess employee financial wellness and provide financial planning guidance to address strengths and potential vulnerabilities with personalized action steps provided based on user responses. The cross-sectional study was administered between January 1, 2012 and December 31, 2012.

Each chapter of this dissertation sought to gain a deeper understanding of financial wellness and its effect on retirement preparedness in employees actively participating in an employer sponsored financial wellness program. The first study, Chapter 2, examined the factors that influence financial wellness. The study built on Joo's (2008) conceptual model of financial wellness to explore the association between financial planning behaviors and financial wellness. The examination of how financial planning behaviors across different personal finance topic areas influence financial wellness adds to the knowledge base of the financial wellness construct itself.

The second study, Chapter 3, explored how components of financial wellness are associated with the intention to engage in retirement planning behaviors. This study attempted to

understand how components of financial wellness influence retirement planning intentions. The purpose of this study was to investigate how the subcomponents of financial wellness are associated with the motivation to engage in retirement planning activities in the workplace environment.

Chapter 4 employed Joo's (2008) conceptual model to examine the use of financial wellness as a predictor of perceived retirement preparedness. It is different than the second study in that it explored how components of financial wellness are related to the subjective assessment of whether an individual is prepared for retirement.

References

Aon Hewitt. (2013). 2013 Hot topics in retirement: Focusing on financial wellness. Retrieved from http://www.aon.com/attachments/human-capital-consulting/US_2013_hot-topics-in-retirement.pdf

Bagwell, D. C., & Kim, J. (2003). Financial stress, health status, and absenteeism in credit counseling clients. *Journal of Consumer Education, 20*, 50-58.

Bricker, J., Bucks, K., Kennickell, A., Mach, T., & Moore, K. (2011). Surveying the aftermath of the store: Changes in family finances from 2007 to 2009. Finance and Economics Discussion Series. Federal Reserve Bank, Washington, DC.

Bridges, S., & Disney, R. (2010). Debt and depression. *Journal of health economics*, *29*(3), 388-403.

Britt, S., Grable, J. E., Goff, B. S. N., & White, M. (2008). The influence of perceived spending behaviors on relationship satisfaction. *Journal of Financial Counseling & Planning*, *19*(1), 31-43.

Bureau of Labor Statistics. (2014). Consumer credit. Federal Reserve Statistical Release, G.19. Retrieved online February 22, 2014 from http://www.federalreserve.gov/releases/g19/HIST/cc_hist_sa_levels.html

Dew, J. (2008). Debt change and marital satisfaction change in recently married couples. *Family Relations*, *57*(1), 60-71.

Dew, J., Britt, S., & Huston, S. (2012). Examining the relationship between financial issues and divorce. *Family Relations*, *61*(4), 615-628.

Drentea, P. (2000). Age, debt and anxiety. *Journal of Health and Social Behavior, 41*(December), 437-450.

Drentea, P., & Lavrakas, P. J. (2000). Over the limit: The association among health status, race and debt. *Social Science & Medicine, 50*, 517-529.

Financial Finesse (2013). *Best Practices Guide: How to Design and Implement Behavior Changing Financial Wellness Programs*. Financial Finesse: El Segundo, California.

Garman, E. T., Kim, J, Kratzer, C. Y, Brunson, B. H., & Joo, S. (1999). Workplace financial education improves personal financial wellness. *Financial Counseling and Planning, 10*(1), 79-88.

Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2013). The 2013 Retirement Confidence Survey: Perceived savings needs outpace reality for many. *EBRI Issue Brief*, (384). Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-13.No384.RCS1.pdf

Hira, T. K., & Loibl, C. (2005). Understanding the impact of employer-provided financial education on workplace satisfaction.*The Journal of Consumer Affairs, 39*(1), 173-194.

Jenkins, R., Bhugra, D., Bebbington, P., Brugha, T., Farrell, M., Coid, J., Fryers, T., Weich, S., Singleton, N., & Meltzer, H. (2008). Debt, income and mental disorder in the general population. *Psychological Medicine, 38*(10), 1485-93.

Joo, S. (2008). Personal financial wellness. In J.J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 21-33). New York: Springer.

Joo, S. H., & Garman, E. T. (1998). The potential effects of workplace financial education based on the relationship between personal financial wellness and worker job productivity. *Personal finances and worker productivity*, *2*(1), 163-174.

Joo, S., & Grable, J. E. (2000). Improving employee productivity: The role of financial counseling and education. *Journal of Employment Counseling, 37*(1), 2-15.

Joo, S., & Grable, J. E. (2004). An explanatory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues, 25*(1), 25-50.

Joo, S., & Grable, J. E. (2005). Employee education and the likelihood of having a retirement savings program. *Journal of Financial Counseling & Planning*, *16*(1), 37-49.

MetLife. (2014). 12th Annual U.S. Employee Benefit Trends Study. Retrieved from https://benefittrends.metlife.com/assets/downloads/benefits-breakthrough-summaries-2014.pdf

Munnell, A. H., Webb, A., & Golub-Sass, F. (2012). The National Retirement Risk Index: An update. Center for Retirement Research at Boston College. Issue in Brief 12–20, Chestnut Hill, MA.

Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). InCharge financial distress/financial well-being scale: Development, administration, and score interpretation. *Financial Counseling and Planning, 17*(1), 34-50.

U.S. Bureau of Economic Analysis. (2014). Personal income and outlays. Retrieved from http://www.bea.gov/newsreleases/national/pi/pinewsrelease.htm

Chapter 2 - Financial Planning Behaviors and Financial Wellness in the Workplace

Introduction

The financial health of American individuals and families has been a growing area of concern in recent years and continues to grow in the aftermath of the Great Recession. Personal financial health has become increasingly important as the ability of individuals and families to manage personal finances has seen a growing amount of attention over the past couple of decades due to consumer debt concerns, rising health care costs, insufficient savings, low financial literacy, and a general lack of retirement preparedness. The workplace environment is a natural fit for programs designed to improve the financial health of employees. Many financial education programs were implemented in the workplace as a shift occurred from defined benefit plans to defined contribution plans that place the primary burden of saving for retirement on the employee. This shift required a need for increased knowledge and the majority of financial education programs focused primarily on retirement planning and investments. In order to enhance the understanding of how to assess financial wellness in the workplace, this study examines the relationship between subcomponents of financial wellness and comprehensive financial planning behaviors of participants in a workplace financial education program.

It has been argued that comprehensive financial wellness programs are needed to help employees manage their personal financial management skills and improve financial wellness (Hira & Loibl, 2005; Kim, 2007). Previous studies demonstrated benefits of financial education programs in the workplace (Garman, Kim, Kratzer, Brunson, & Joo, 1999; Kim, 2007) and there has been a rapid expansion of financial wellness programs in many large and mid-sized companies as a result (Financial Finesse, 2013). However, there remains a limited amount of

research demonstrating the effectiveness of commonly recommended financial planning activities that are the central focus of many comprehensive financial wellness programs. In order to establish empirical support for financial wellness programs, additional studies are needed to assess the impact of financial planning activities on employee financial wellness. In addition, financial wellness needs vary significantly across different companies and organizations as well as within these groups. As a result, comprehensive financial wellness assessment procedures are needed to assess the unique financial wellness characteristics of individuals and the organizations at which they are employed.

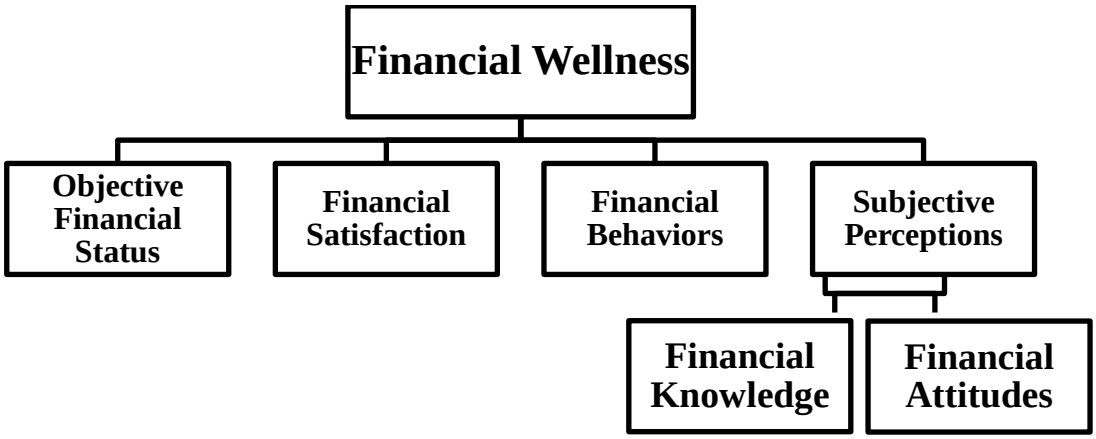
Personal financial wellness is a widely used term and an important factor that contributes to one's overall sense of well-being (Joo, 2008). More specifically, financial well-being is a subjective appraisal about one's financial status and is defined as ''a state of being financially healthy, happy, and free from worry'' (Joo, 2008, p. 22). Financial wellness is also defined as an active state of an individual's financial health that is often demonstrated by positive financial behaviors such as having a low or manageable level of debt, actively saving for goals such as retirement, and following a spending plan (Joo & Grable, 2003; Rutherford & Fox, 2010). Some factors of financial wellness previously studied by researchers include maintaining reasonable levels of debt, actively saving for future life goals, creating and implementing an active savings plan, lack of interpersonal conflict with family members and partners related to money, financial satisfaction, and low levels of financial stress (Klontz & Klontz, 2009). Prior research studies have attempted to gain a thorough understanding of factors that contribute to generalized well-being, financial satisfaction, and financial well-being (Joo & Bagwell, 2003). These terms are associated with financial wellness and they are frequently synonymous with one another. However, key differences exist and further exploration of personal financial wellness has

conceptualized that it is a sub-construct of general well-being (Joo, 2008). Well-being has been linked to life satisfaction and happiness and is predicted by good health, positive social relationships, and access to essential resources such as food and shelter (Diener, 2000). Around the mid 1990's numerous academic studies were conducted that explored the multi-faceted dimensions of financial wellness (Joo & Bagwell, 2003). While the concept of personal financial wellness has increased in popularity there is a general lack of consensus about what it means and how to measure it (Baek & DeVaney, 2004; Joo, 2008; Porter & Garman, 1993).

The main purpose of this study is to investigate the association between financial wellness and best practice financial planning behaviors of participants in a workplace financial education program when controlling for demographic factors and other concepts outlined in Joo's (2008) conceptual model (see Figure 2.1). More specifically, this study provides a comprehensive analysis into the actual financial planning behaviors that contribute to overall financial wellness. Previous financial wellness studies, utilizing Joo's conceptual framework, tend to focus on core financial management behaviors such as money management, debt, and credit management (Gerrans, Speelman, & Campitelli, 2013; Robb & Woodyard, 2011; Rutherford & Fox, 2010). The current examination of this conceptual model involves looking at financial behaviors as two separate groupings for the purposes of this study. The categorization of financial behaviors identified as "core" and "advanced" financial management behaviors. In order to establish empirical support for financial wellness programs additional research is needed to assess the impact of specific best practice financial planning activities have on employee financial wellness. In addition, financial education programs vary significantly so comprehensive financial wellness assessment is needed to address the impact of various types of education on overall financial wellness. A deeper understanding of the factors that influence overall financial

wellness will assist employers, financial education providers, financial planners, counselors, and researchers in designing financial education programs that target specific demographics and financial planning topic areas. The results of this study could also be used to develop and implement financial wellness programs in the workplace that target specific demographics with financial education designed to increase positive financial behaviors and improve overall financial wellness.

Figure 2.1. Joo's (2008) Financial Wellness Model



In general, this study analyzed variables that have been researched in previous studies for their effect on overall financial wellness. The unique aspect of this research question is the inclusion of advanced financial planning behaviors (e.g., estate planning) to the existing conceptual framework that has previously been left out of studies examining financial planning behaviors as a component of overall financial wellness. In addition, this study is also unique in that all participants are actively involved in a comprehensive financial education program and

the results of their financial wellness assessment provide a personalized action plan with recommendations based on their responses.

Theoretical Review and Related Literature

Financial wellness is a relatively new concept that has been increasingly examined by researchers and a term commonly used by financial counseling and planning practitioners over the past decade. Financial wellness is often conceptualized as a measure of financial health (Joo, 1998; 2008). The satisfaction with material and non-material aspects of one's financial situation is an integral component of financial health. Financial satisfaction does not always translate into good financial health due to the possibility that someone with significant debt or insufficient retirement savings may maintain high levels of financial satisfaction. Financial wellness also includes the perception or subjective assessment of financial stability including the adequacy of financial resources. Subjective perceptions of financial stability do not necessarily mean positive financial health due to similar challenges that financial satisfaction presents as a standalone measure of financial wellness. Individual assessment of one's financial situation is not always accurate and that is why objective measures of material and non-material financial resources are included as additional components of financial wellness (Joo, 2008). According to Joo (2008), "an individual's personal financial wellness can be said to be "high" (or a person is "well") when individuals are satisfied with their financial situations, their objective status is desirable, they have positive financial attitudes, and exhibit healthy financial behavior" (p. 23). The conceptual model of financial wellness is represented in Figure 2.1. In summary, the subcomponents of financial wellness include objective status, financial satisfaction, financial behaviors, and subjective perceptions.

Objective Financial Status

The term objective financial status refers to quantitative measures of a person's financial health. Measures of objective financial status include income, cash flow, emergency savings, and debt/income ratios. Financial wellness research has identified the scarcity of financial resources to meet life's demands as a source of financial distress. Some financial status measures such as income and financial ratios (i.e., debt/income and investment asset/net worth ratios) have been used to examine the association between objective financial status and financial well-being, financial satisfaction, and overall life satisfaction (Joo, 2008). Financial wellness is often associated with income which has been the most common measure of financial status used by researchers, practitioners, and policy makers (Joo, 2008; Joo & Bagwell, 2003; Xiao, Tang, & Shim, 2009). Previous research suggests higher levels of income and greater total assets lead to a greater sense of financial wellness. In addition to measuring household income, previous studies have analyzed objective financial measures such as net worth, total assets, debt, and financial ratios (Baek & DeVaney, 2004; Garrett & James, 2013; Joo, 2008). Other objective financial measures include financial ratios related to savings, asset allocation, liquidity (liquid assets/monthly income), solvency (total assets/total debts), and investment assets ratio (investment assets/net worth; Joo & Bagwell, 2003; Garrett & James, 2013). Therefore, Hypothesis 1 states the following:

Hypothesis 1: Total household income will be associated with higher financial wellness.

Financial Satisfaction

Financial satisfaction is an integral component of financial wellness and is defined as a sense of contentment with one's material (objective) and non-material (subjective) financial situation (Joo & Grable, 2004). Researchers have examined financial satisfaction in terms of overall satisfaction with one's income, savings, and assets available to meet future financial

goals (Hira & Mugenda, 1998). Personal financial management practices have been shown to be significantly related to the levels of satisfaction or dissatisfaction with one's current financial situation (Porter & Garman, 1993). Many researchers have devoted a significant amount of attention to the topic of financial satisfaction. Financial satisfaction has been displayed to be positively associated with income, education, and age (Joo & Grable, 2004). Researchers have operationalized financial satisfaction as overall level of satisfaction with an individual's financial situation and financial satisfaction is often used to measure financial well-being (Joo & Grable, 2004). Financial satisfaction is directly and indirectly influenced by factors such as marital stress, financial knowledge, financial stress, education, and financial solvency. Existing research literature has suggested higher income levels and accumulation of greater total assets is associated with increased likelihood of self-reported financial satisfaction with overall financial well-being (Archuleta, Dale, & Spann, 2013). Financial satisfaction was not examined as a predictor variable in this study because the scale used to measure financial wellness, the outcome variable in this study, includes a scale item that specifically assess satisfaction with current financial situation.

Financial Behaviors

The term "financial behaviors" refers to positive and desirable behaviors that are generally recommended as best practice financial activities (Robb & Woodyard, 2011; Xiao, 2008). Financial professionals generally accept the view that financial wellness is directly associated with desirable financial behaviors (Hilgert, Hogarth, & Beverly, 2003). Financial behaviors generally fall into the categories of personal finance basics, borrowing, saving/investing, and protection (Huston, 2010). Robb and Woodyard (2011) previously examined six financial planning behaviors applicable to the financial planning process in their

study of the relationship between financial behaviors and financial knowledge: emergency fund, credit report, overdraft accounts, credit card payoff, retirement accounts, and risk management. Numerous studies have examined how certain financial behaviors are related to achieving financial goals (Joo, 1998; Kim, 2007). Financial wellness has been demonstrated to be associated with financial behaviors, such as maintaining reasonable and low debt (Gutter & Copur, 2011). Individuals with increased levels of financial wellness are more likely to actively contribute to savings on a regular basis. Studies have identified a relationship between factors of financial wellness (i.e., financial knowledge, income, and financial satisfaction) and behaviors such as having and intentionally following a personal spending plan.

Financial wellness is also associated with family related arguments with findings suggesting that higher financial wellness related to a lower likelihood of money-related conflict with a family member or partner. Research has demonstrated that financial wellness is associated with experiencing high levels of financial satisfaction and low levels of financial stress. Some studies have viewed financial wellness on a continuum with financial distress on one end of the spectrum (Prawitz et al., 2006).

A substantial body of research exists demonstrating the positive impact that specific financial behaviors can have on financial well-being and financial satisfaction (Joo & Grable, 2004). Personal financial management behaviors are integral components in the understanding of financial well-being (Garman & Forgue, 2010). Previous studies have demonstrated that the availability of financial resources helps to determine financial behaviors related to saving and meeting routine financial obligations (Aizcorbe, Kennickell, & Moore, 2003). Specific financial behaviors associated with higher financial well-being include cash management, credit and debt

management, preparing for life transitions (e.g., marriage, birth of a child, retirement, and college planning).

Robb and Woodyard (2011) used Joo's (2008) conceptual framework of financial wellness to examine the relationship between financial knowledge and financial behaviors. Both objective and subjective knowledge were determinants of desired financial behaviors across different categories including money management, retirement, and risk management. The study also found that financial satisfaction, income, education, age, race, and ethnicity were predictors of financial behaviors. The survey instrument used did not look at specific behaviors related to estate planning or investing. Financial planning researchers and practitioners share a general consensus that individuals must demonstrated desirable behaviors in areas of personal finances to maintain positive financial health (Joo, 2008). Financial wellness is incumbent on the display of proper behaviors in the topic areas of money management, credit and debt management, planning for events across different life stages (e.g., marriage, buying a home, education planning, and retirement). Based on a review of the literature, the following hypothesis was developed:

> Hypothesis 2: Core and advanced financial planning behaviors will be associated with higher financial wellness.

Subjective Perceptions

The subjective perception of an individual's financial status is a component of financial wellness (Joo, 2008). According to Joo's conceptual framework of financial wellness, subjective perceptions include financial attitudes and financial knowledge.

Financial Attitudes. Financial stress is a component of financial wellness and is related to cognitive perceptions of financial health. Some examples of financial attitudes explored in the

past include financial stress (Prawitz et al., 2006), financial anxiety (Archuleta et al., 2013), debt-related attitudes, and optimism (Norvilitis et al., 2006). Financial stress is a significant source of distress in people's lives that also impacts personal health (Drentea & Lavrakas, 2000), family relationships, and work productivity (Kim & Garman, 2003). Debt related research identified a moderate relationship between debt and psychological problems such as depression and anxiety (see Archuleta et al., 2013). Research studies have demonstrated that debt is associated with lower reported financial well-being and greater overall stress (Norvilitis et al., 2006). Based on previous research, Hypothesis 3 states the following:

Hypothesis 3: Comfort with current level of debt will be associated with higher financial wellness.

Financial Knowledge. Financial knowledge is another significant component of subjective perception (Joo, 2008). Financial knowledge has the ability to influence financial attitudes and supports desirable financial behaviors which subsequently results in higher financial wellness. Financial knowledge and financial literacy are terms often used interchangeably. Objective and subjective financial knowledge has been associated with positive financial behaviors (Hilgert, Hogarth, & Beverly, 2003; Perry & Morris, 2005; Robb & Woodyard, 2011). Robb and Woodyard (2011) found that subjective financial knowledge has a larger impact on financial behaviors than objective financial knowledge. Other studies explored the positive correlation between financial literacy and financial behavior (Lusardi & Mitchell, 2007). Borden, Lee, Serido, and Collins (2008) researched the association between financial knowledge and financial behaviors finding that financial knowledge increased the intentions to perform desirable financial behaviors and avoid risky and problematic behaviors. Objective financial knowledge and subjective financial confidence were found to have a low level of

correlation yet both impact behavior (Robb & Woodyard, 2011). Other studies have identified the link between financial knowledge and future goal oriented activities related to thinking about retirement (Lusardi & Mitchell, 2007). Financial knowledge has also been associated with retirement planning and retirement success (Lusardi & Mitchell, 2006). Therefore, Hypothesis 4 was developed based on previous research on financial knowledge and various factors of financial wellness.

Hypothesis 4: Perceived financial knowledge will be associated with higher financial wellness.

In addition to the theoretical concepts, numerous demographic and environmental factors have been linked to financial wellness. Demographic factors are the most commonly researched determinants of financial wellness. Some of the most frequently researched demographic characteristics linked to financial wellness include age (Joo, 1998; Porter & Garman, 1993), gender (Malone, Stewart, Wilson, & Korsching, 2010), marital status (Porter & Garman, 1993), education (Joo & Grable, 2004), ethnicity, age, income (Joo, 1998; Porter & Garman, 1993), and homeownership (Joo, 1998). Having young children in the household and the number of financial dependents in the household has also been shown to be negatively related to financial well-being (Ross & Huber, 1985). For the purpose of this study demographic factors were used as control variables.

The current study examined the factors influencing financial wellness of individuals in the workforce. Specifically, the study was designed to test Joo's (2008) financial wellness model as it relates to individuals participating in a workplace financial education program. Additionally, the study sought to determine whether differences exist between advanced financial planning behaviors (i.e., investing, insurance, and estate planning) and financial wellness.

Methods

Sample Description

This study used a data set from a patent pending Financial Wellness Assessment used in conjunction with an employer sponsored financial education program. A total of 3,794 financial wellness assessments were available for use in this study. The data set consisted of employed individuals actively seeking online financial guidance through a multi-faceted financial wellness program provided as an employee benefit. Respondents included employees of a large health care benefits company based in northeastern United States with employees located throughout the country. Participation was voluntary and the Financial Wellness Assessments were completed via the internet between January 1, 2012 and December 31, 2012. The convenience sample includes respondents from different regions of the U.S. but is not a representative sample. Employees completed a Financial Wellness Assessment (FWA) for the purposes of assessing their current financial status and to identify priorities and vulnerabilities in their personal financial management.

Upon completion of the Financial Wellness Assessment employees receive immediate feedback in the form of a personal "financial wellness" score and specific action steps to address their financial planning priorities and vulnerabilities. Due to the structure of the Financial Wellness Assessment there are core questions that everyone receives and secondary questions based on financial planning priorities and potential areas of vulnerabilities. As a result some respondents may not be presented with all questions. The responses used in this study were collected from individuals who expressed a desire to engage in retirement planning or investment planning. The financial wellness program as available to employees on an ongoing basis and repeat usage was encouraged. In the event an employee completed multiple Financial Wellness Assessments during the time period of this study the final assessment was used to avoid multiple

responses from the same respondent. The data set was further reduced to only include respondents who answered yes or no the following statement: "I regularly pay off my credit card balances in full." This recoding excluded the "I don't use credit cards" response option in order to maintain the yes or no format of this binary independent variable. Therefore, the final data set used in all statistical analyses (N = 3,105) was analyzed using SPSS/PASW Version 22 statistical software.

Dependent Variable

Financial wellness was the outcome variable used in this study. It was measured by the Personal Financial Wellness (PFW) Scale™ (Prawitz et al., 2006), which identifies both objective (i.e., ability to pay for normal living expenses and emergencies) and subjective (i.e., financial stress, worry about meeting normal living expenses) dimensions of financial wellness. The PFW Scale™ consists of 8 items where respondents are asked to indicate how strongly they identify with each item ranging from 1 to 10 (see Table 2.3 for specific items). A score of 1 indicates lowest financial wellness/overwhelming financial distress and a score of 10 is indicative of the highest financial wellness/no financial distress. Items are summed for a total score of 8 to 80 and subsequently divided by 8 to obtain a mean score. The Cronbach's alpha measure of the scale's internal consistency was obtained in a national norming study and was .96 (Prawitz et al., 2006).

Independent Variables

As guided by Joo's (2008) conceptual framework, the independent variables selected represented subcomponents of personal financial wellness—objective financial status, financial behaviors, and subjective perceptions. Financial satisfaction, an additional subcomponent of financial wellness according to Joo's conceptual framework, was not used as an independent

variable because the PFW Scale ™ includes an item that measures financial satisfaction. Other predictor variables ancillary to the conceptual framework included the following demographic variables: age, gender, marital status, presence of dependent children in household, homeownership, and race/ethnicity. The method of operationalizing each variable is described below.

Objective Financial Status. Annual household income was measured as a categorical variable. The six categories were coded as follows: 1 = under $35,000; 2 = $35,000 to $59,000; 3= $60,000 to $74,999; 4 = $75,000 to $99,999; 5 = $100,000 to $149,999; and 6 = $150,000 and over.

Financial Behaviors. Sixteen individual financial behaviors across seven categories of financial planning behaviors commonly viewed as best practice behaviors were identified with the intent of determining behaviors associated with financial wellness. These personal finance topic areas included: (a) money management, (b) debt and credit management, (c) tax planning, (d) retirement planning, (e) investment planning, (f) insurance planning, and (g) estate planning. The financial behaviors were chosen based on their relevance to the major personal finance areas commonly addressed during the financial planning process. Each financial behavior was measured as single items with a binary question to account for whether the specific behavior had been performed by an individual (1) or not (0). For interpretive purposes the financial behaviors were categorized as core money management behaviors (money management, debt and credit management) and more advanced financial behaviors (income tax planning, insurance planning, investment planning, retirement planning, and estate planning). The financial behavior items are presented in Table 2.1.

Table 2.1

Financial Behaviors by Personal Finance Topic Area

Core Financial Behaviors
Money Management
1. I have a handle on my cash flow so I spend less than I make each month.
2. I pay my bills on time each month.
3. I have an emergency fund to pay bills for a few months if I lose my job.
Debt and Credit Management
1. I regularly pay off my credit card balances in full.
2. I check my credit report on an annual basis.
Advanced Financial Behaviors
Retirement Planning
1. I have used a retirement calculator.
2. I contribute to my retirement plan at work such as a 401(k), 457, or 403(b) plan.
Investment Planning
1. I have taken a risk tolerance assessment and I am aware of my conservative, moderate, or aggressive investor risk strategy.
2. I rebalance my investment accounts to keep my asset allocation plans on track.
Income Tax Planning
1. I adjust my withholding each year so I neither owe a large amount nor receive a large refund.
2. I maximize all available federal tax credits and deductions to reduce my tax liability.
Insurance Planning
1. I review my insurance coverage on an annual basis and I am confident that I am adequately covered by my health insurance and auto/homeowner's policies.
2. I carry enough life insurance to replace my income, pay for college expenses, and create an emergency fund for my beneficiaries.
3. I have long-term disability insurance in place to replace my salary in case I am ill or have an accident and am unable to work at my current job.
Estate Planning
1. I have written up legal documents such as a will or trust and made decisions about who should receive my assets and who should raise my children.
2. I have made sure that my beneficiary designations on insurance policies and retirement plans are up to date.

Note. Responses to each item were coded 1 = yes and 0 = no.

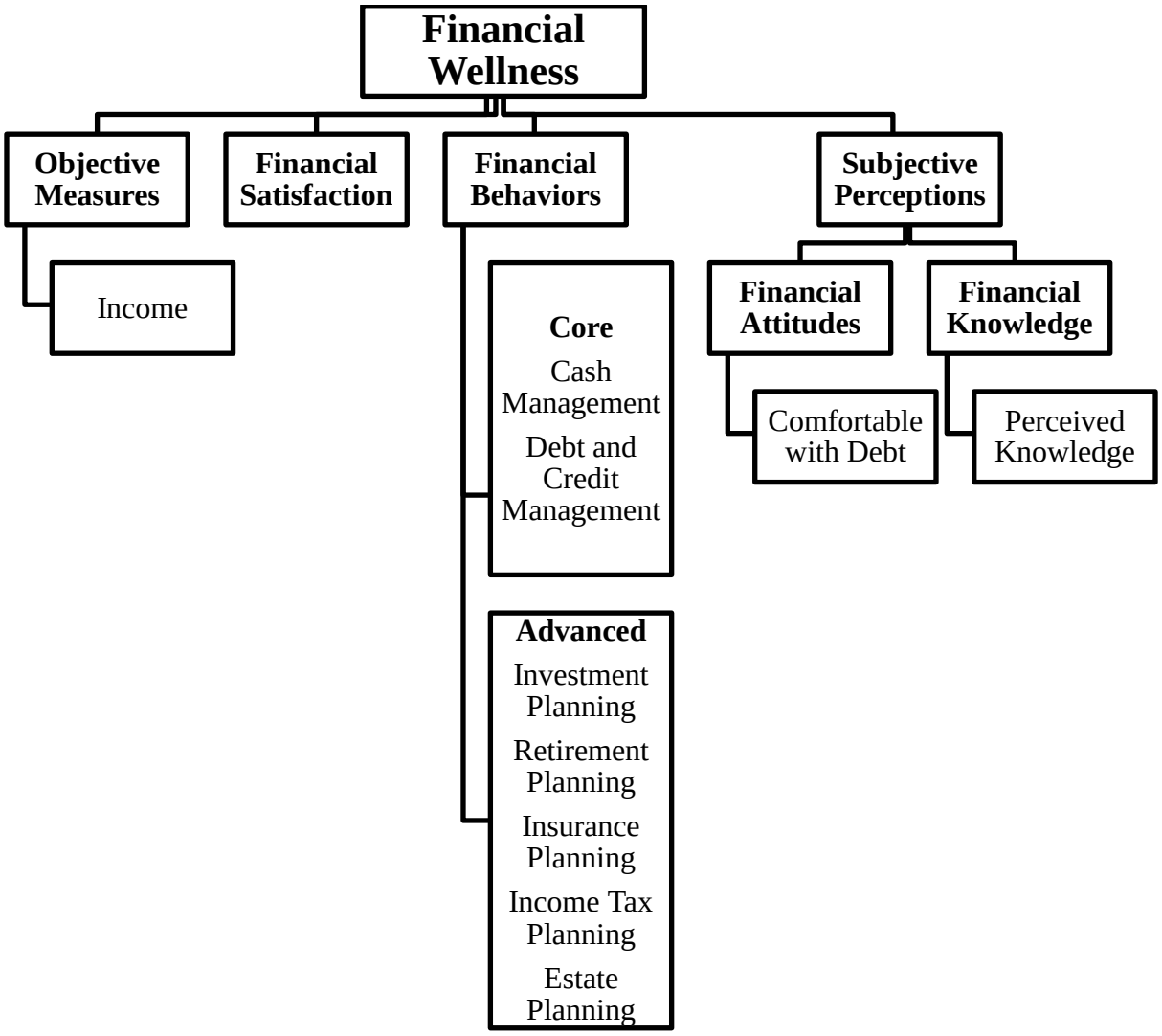
Subjective Perceptions. Subjective perceptions were measured with a subjective financial knowledge and a financial attitude item. General financial knowledge was not assessed in the survey, as a result a general tax related item was used as a proxy for perceived financial knowledge. This item captured knowledge of personal finance matters related to the taxation of investment and retirement accounts. Respondents were asked to respond yes or no to the following statement: I understand the tax implications of each of my investment and retirement accounts (yes = 1; no = 0). Respondents with a score of 1 represented those with higher perceived financial knowledge.

There were no general financial attitude questions available in the survey for use as predictor variables, so the following measure of financial attitude toward debt was used: I am comfortable with the amount of non-mortgage debt I have. A score of 1 indicates the respondent either has no debt or is comfortable with their debt level. A score of 0 indicates the respondent expressed a general lack of comfort with their current debt level.

Personal Factors. A total of six demographic factors were examined as control variables in this study including age, gender, marital status, presence of children in the household, homeownership, and race/ethnicity. Age was measured as a categorical variable coded 1 = 30 to 44, 2 = under 30, 3 = 45 to 54, and 4 = 55 and above. The 30 to 44 age group was used as the reference category. Gender was coded as 0 if female and 1 if male. Marital status was coded as 0 if not married and 1 if married. The presence of children in the household was coded as 0 if no and 1 if respondent reported one or more children. Homeownership was coded as 0 if no and 1 if yes. Race/ethnicity was coded based on self-identifying responses (1 = Caucasian/White, 2 = African American/Black, 3 = Hispanic/Latino, 4 = Asian American/Asian, 5 = Other, 6 = Prefer not to answer). Due to small group sizes for certain race/ethnicity groups the responses were

recoded as follows: 0 = Caucasian/White, 1 = African American/Black, 1 = Other/Prefer not to answer.

Figure 2.2: Conceptual Model Applying Joo's (2008) Framework



Method of Analysis

Statistical analyses were conducted using SPSS/PASW 22 for Windows. An ordinary least squares (OLS) regression analysis was used to examine the influence that financial planning behaviors, household income, perceived financial knowledge, financial attitude toward debt, and personal factors have on financial wellness. While the dependent variable is not truly a

continuous variable, an OLS regression was retained due to the ease of interpretation of the results.

To test for potential multicollinearity issues within the data, variables were analyzed using correlations (see Appendix A, Table A.1) and collinearity diagnostics within SPSS prior to running the hierarchical regression. Among these variables, all correlations among independent variables were under .60 and each of the VIF scores were less than 2.00 throughout the model with the comfortable with current non-mortgage debt variable representing the highest score (*VIF* = 1.84). According to Field (2006), correlations above .80 should be avoided and well as VIF values above 10. Therefore, no significant collinearity issues were identified.

Results

Descriptive Statistics

Results from the descriptive statistics are presented in Table 2.2 reflecting more women (75%) than men (25%) in the final sample. Approximately 61% of the sample was married and the median age group was 30 to 44 years of age. The median annual household income was between $75,000 and $99,999. The household income group with the largest frequency of participants in this study was the $100,000 to $149,999 income group and represented nearly 25% of the sample. Approximately 44% of the respondents reported having a minor child in their household. The majority of respondents were homeowners (77%). Caucasian/White individuals represented 76% of the sample; African American/Black individuals represented 9%; approximately 14% identified as other or preferred not to provide their race/ethnicity.

Table 2.2

Descriptive Statistics (N = 3,105)

Variables	*M*	*SD*	Range
Dependent Variable			
Financial wellness	5.80	2.20	1 to 10
Demographic Factors			
Age			
Under 30	.10	.30	
30 to 44	.41	.50	
45 to 54	.31	.46	
55 and over	.18	.46	
Male	.25	.43	
Married	.61	.49	
Homeowner	.77	.42	
Minor(s) in household	.44	.50	
Race/Ethnicity			
Caucasian/White	.76	.43	
Annual Household Income			
Under $35,000	.04	.21	
$35,000 to $59,999	.19	.40	
$60,000 to $74,999	.16	.37	
$75,000 to $99,999	.19	.39	
$100,000 to $149,999	.25	.43	
$150,000 and above	.16	.37	
Subjective Perceptions			
Perceived Financial Knowledge	.40	.49	
Comfort with Debt	.56	.50	

Table 2.2

Continued

Variables	*M*	*SD*	Range
Financial Planning Behaviors (1 = Yes)	8.80	3.03	0 to 16
Core Financial Behaviors			
Income exceeds expenses	.67	.47	
Pay bills on time each month	.88	.32	
Have an emergency fund	.52	.50	
Pay off credit cards in full	.50	.50	
Check credit report annually	.53	.50	
Advanced Financial Behaviors			
Have used a retirement calculator	.36	.48	
Contribute to retirement plan	.97	.18	
Risk tolerance assessment	.41	.49	
Rebalance investment accounts	.30	.46	
Adjust tax withholding each year	.37	.48	
Max tax credits and deductions	.44	.50	
Review insurance coverage	.79	.41	
Carry enough life insurance	.46	.50	
Have LTD insurance	.53	.50	
Have written legal documents	.29	.45	
Updated beneficiary designations	.79	.41	

Financial Wellness. Financial wellness was the outcome variable for this study and it was measured using the PFW Scale™, which consists of 8-items with mean scores that range from 1 (lowest financial wellness) to 10 (highest financial wellness). The Cronbach's alpha score for the PFW Scale™ ($\alpha = 0.94$), used to measure the dependent variable financial wellness, was consistent with previous research using the full 8-item scale. Prawitz et al. (2006) found through a national sample that the original PFW Scale™ produced a Cronbach's alpha of 0.96. PFW Scale™ items are presented in Table 2.3. For this study, the mean financial wellness score was 5.8 (*SD* = 2.2), which is slightly higher than results found during the development of the PFW Scale™ (*M* = 5.7, *SD* = 2.4).

Table 2.3

Dependent Variable Summary: Personal Financial Wellness Scale™ Items (*N* = 3,105)

PFW Scale™ Items	*M*	*SD*	Range	α
Level of financial stress today 1 = overwhelming stress; 10 = no stress at all	5.50	1.90	1 – 10	
Satisfaction with present financial situation 1 = dissatisfied; 10 = satisfied	5.14	2.41	1 – 10	
Feelings about current financial condition 1 = feel overwhelmed; 10 = feel comfortable	4.91	2.14	1 – 10	
Frequency of worry about monthly living expenses 1 = worry all the time; 10 = never worry	6.03	2.77	1 – 10	
Confidence regarding financial emergency 1 = no confidence; 10 = high confidence	7.41	3.02	1 – 10	
Can't afford to go out 1 = all the time; 10 = never	6.48	2.88	1 – 10	

Living paycheck to paycheck 1 = all the time; 10 = never	5.46	3.26	1 – 10	
General financial stress 1 = overwhelming stress; 10 = no stress at all	5.48	2.18	1 – 10	
PFW Scale™ Summary Score	5.80	2.20	1 – 10	.94

Financial Behaviors. Among the core financial behaviors 67% reported they had a handle on their cash flow situation and income exceeds expenses, nearly 88% pay their bills on time each month, 52% have an emergency fund in place, approximately 50% pay off their credit card balances in full each month, and 53% regularly check their credit report.

Responses to items related to retirement planning behaviors indicated that 97% of employees surveyed participate in a retirement plan at work. This is significantly higher than average retirement plan participation rates reported in national studies, such as the 2014 Retirement Confidence Survey which found that 77% of eligible employees contribute to a retirement plan at work (e.g., 401(k), 403(b), 457 plan; Helman, Adams, Copeland, & VanDerhei, 2014). One potential explanation for the higher participation rate found in this sample is the fact the retirement plan sponsor offered a 100% employer match with immediate vesting at the time of the study. Further examination of retirement planning behaviors indicated that only 36% of respondents have run a basic calculation to see if they are on track to meet income goals during retirement. This is consistent with previous findings from the 2014 Retirement Confidence Survey that found that less than half (44%) of employees and/or spouses have attempted to estimate retirement income needs.

Within the investment planning subcategory behavioral responses indicated that nearly 41% have taken a risk tolerance assessment and 30% rebalance their investment accounts regularly. Financial behaviors that were assessed related to income tax planning included

adjusting tax withholding each year (37%) and maximizing available tax credits and deductions (44%). Responses to insurance planning financial behavior statements revealed that over 79% report they regularly review their health insurance and auto/homeowner's policies to ensure adequate coverage. Nearly 46% indicated they carry enough life insurance and 53% have long-term disability insurance in place. Across the financial behavior items in the estate planning sub-category nearly 29% indicated they have written legal documents such as a will or trust in place and over 79% have verified that their beneficiary designations on insurance policies and retirement plans are up to date.

Subjective Perceptions. Forty percent of the sample reported they understand the tax implications of their investment and retirement accounts. This single-item was used as a proxy for perceived financial knowledge. Fifty-six percent of respondents expressed a positive financial attitude toward debt and reported they were comfortable with their current level of non-mortgage debt or had no debt.

Regression Results

An ordinary least squares (OLS) regression was conducted to assess the influence of financial behaviors, perceived financial knowledge, financial attitude toward debt, and personal demographic factors on the financial wellness of employees. Results indicated that all of these concepts were found to have a significant influence on employee financial wellness. The regression model produced an R^2 of .604 (F (31, 3104) = 151.01, $p < .001$), indicating that approximately 60% of the variance in financial wellness scores across respondents was explained by the variables in the model. The regression results are presented in Table 2.4.

Table 2.4

Multiple Regression Analysis for Variables Predicting Financial Wellness (*N* = 3,105)

Predictor	*B*	*SE B*	β
Age (reference = 30 to 44)			
Under 30	.33	.10	.05**
45 to 54	-.04	.06	-.01
55 and over	-.04	.08	-.01
Male (reference = female)	.12	.06	.02
Ethnicity (reference = Caucasian/white)			
Other/Prefer not to answer	-.01	.06	-.00
Married (reference = unmarried)	-.15	.06	-.03*
Children in Household	-.32	.06	-.08***
Homeownership	.18	.07	.03*
Income (reference = $35,000 to $59,000)			
Under $35,000	-.51	.14	-.05***
$60,000 to $74,000	.26	.09	.04**
$75,000 to $99,999	.31	.09	.06***
$100,000 to $149,999	.59	.09	.12***
$150,000 and over	1.03	.10	.17***
Subjective Perceptions			
Financial Knowledge	.15	.06	.03**
Comfort with Debt	.87	.07	.20***

Note: *$p < .05$. **$p < .01$. ***$p < .001$.

Table 2.4

Continued

Predictor	*B*	*SE B*	β
Financial Behaviors			
Handle on cash flow	.91	.06	.20***
Pay bills on time	.99	.09	.15***
Emergency fund	1.09	.07	.25***
Pay credit cards in full	.45	.07	.10***
Check credit report	.03	.05	.01
Used retirement calculator	-.01	.06	-.00
Contributes to retirement plan	.38	.14	.03**
Assessed risk tolerance	.11	.06	.02
Rebalance investments	.00	.06	-.00
Adjust tax withholdings	.10	.06	.02
Max tax credits and deductions	.16	.06	.04*
Review insurance coverage	.09	.07	.02
Enough life insurance	.06	.06	.01
Have LTD insurance	-.04	.05	-.01
Have written legal documents	-.03	.06	-.01
Updated beneficiary designations	.11	.07	.02
R^2		.604	
F		151.01***	

Note: $*p < .05$. $**p < .01$. $***p < .001$.

Financial behavior related to maintaining an emergency fund, holding all other factors constant, was the most important factor when ranked by the amount of explained variance in financial wellness scores. This was followed by the other "core" financial behaviors: (a) having a handle on cash flow; (b) positive financial attitude toward current debt level; (c) having a total household income of $150,000 or more; and (d) paying bills on time.

Personal Factors. Personal demographic factors were significantly related to financial wellness. Gender and homeownership had a significant and positive association with financial wellness. Financial wellness scores were slightly higher for men but these differences were not statistically significant. A significant association was also found between homeownership and financial wellness ($b = .03$, $p < .05$). Being married had a negative association with financial wellness ($b = -.03$, $p < .05$). The presence of minor children in the household was negatively related to financial wellness ($b = -.08$, $p < .001$). A statistically significant increase in financial wellness scores was noted for respondents under 30 when compared to the 30 to 44 age category ($b = .05$, $p < .01$). The other age categories did not have a statistically significant association with financial wellness..

Objective Financial Status. Household income was the primary objective measure of financial status analyzed in this study and had a statistically significant and positive association with financial wellness with coefficients ranging from .04 to .17. Excluding the under $35,000 income group which had a negative coefficient, all other household income categories compared to the reference category ($35,000 to $59,000) were positively related to increases in financial wellness. All categories had statistically significant coefficients at the $p < .001$ level with the exception of the $60,000 to $74,999 income group ($p < .01$).

Subjective Perceptions. Perceived financial knowledge and financial attitude toward debt were factors related to subjective perceptions that were significantly associated with financial wellness. While both measures of subjective perception were significant predictors of financial wellness, financial attitude toward debt was a more significant predictor of financial wellness. Respondents comfortable with their current level of non-mortgage debt reported increased financial wellness ($b = .20$, $p < .001$). A statistically significant increase in personal financial wellness was noted for respondents reporting a sense of perceived financial knowledge ($b = .03$, $p < .01$).

Financial Behaviors. Four of the five core financial management behaviors identified as statistically significant and positive predictors of financial wellness included the following: (a) maintaining an emergency fund ($b = .25$, $p < .001$), (b) having a handle on cash flow ($b = .20$, $p < .001$), (c) paying bills on time each month ($b = .15$, $p < .001$), and (d) regularly paying off credit card balances in full each month ($b = .10$, $p < .001$). Checking credit reports on a regular basis was not significantly associated with financial wellness. Fewer advanced financial behaviors made a significant contribution to the model with only 2 out of 11 advanced financial behaviors found to be significantly associated with financial wellness. Contributing to a retirement plan at work ($b = .03$, $p < .001$) and maximizing all federal tax credits and deductions to reduce tax liability ($b = .04$, $p < .05$) were the only advanced financial behaviors that had a statistically significant association with financial wellness.

The largest contributors to the financial wellness model in order of importance were core financial behaviors related to having an emergency fund and having and handle on cash flow (i.e., spending less than earnings). These significant associations were followed by a financial

attitude of being comfortable about current level of non-mortgage debt and total household income.

Discussion

The purpose of this study was to build on Joo's (2008) conceptual model of financial wellness and to deepen the understanding of how financial planning behaviors across a variety of different personal finance topic areas are associated with financial wellness. The current study is unique in that it examined factors associated with financial wellness with a sample of participants actively engaged in a workplace financial wellness program. Limited research exists that assesses factors that influence financial wellness among participants in employer sponsored financial education programs. Results from an ordinary least squares regression (OLS) analysis indicated that the model explained 60% of the variability of financial wellness scores around the mean. The findings suggest that financial behaviors, perceived financial knowledge, financial attitude toward debt, and personal factors all have a profound impact on financial wellness as posited by Joo's conceptual framework.

Results of the regression analyses support the first hypothesis that total household income is associated with financial wellness. This finding is consistent with other research studies using income as a predictor of financial wellness (Joo, 2008; Joo & Bagwell, 2003; Xiao, Tang, & Shim, 2009). Controlling for other variables total household income demonstrated a statistically significant association with financial wellness. The results are somewhat limited due to the fact that income was the only objective financial status variable measured in this study. Future workplace financial wellness studies should incorporate other measures of objective financial status for a more comprehensive understanding of how this factor influences financial wellness. Some examples of financial adequacy measures that provide additional insight into objective

financial status include net worth, debt to income ratio, liquidity, personal savings rates, and solvency measures.

As suggested by Hypothesis 2, financial behaviors were found to have a statistically significant impact on financial wellness controlling for personal factors, objective financial status (e.g., income), and subjective perception (e.g., financial knowledge and financial attitude). Maintaining an emergency fund was the financial behavior that had the biggest impact on financial wellness. Having a handle on individual cash flow and paying bills on time were the other financial behaviors that contributed the most to the model. These findings support the conceptual framework that includes financial behaviors as an integral component of financial wellness. Additionally, the study expanded on previous research exploring the association between financial behaviors and financial wellness by examining two groups of financial behaviors which were labeled for the purpose of this study as core and advanced. One compelling finding in the study was related to this particular categorization of financial behaviors. Core financial behaviors consisted of fundamental activities related to basic money management, debt management, and credit management. Each core financial behavior with the exception of checking a credit report regularly was statistically associated with financial wellness. These results were not unexpected due to the importance of spending less than income, paying bills on time, maintaining an emergency savings fund, and minimizing potentially problematic levels of non-mortgage related debt.

The unique relationship between financial behaviors and financial wellness was explored through the addition of advanced financial behaviors related to topics such as investment, retirement, income tax, insurance, and estate planning. Unlike the core financial behaviors previously mentioned, the association between these “advanced” financial behaviors and

financial wellness was found to be less statistically significant. The only independent variables in the advanced financial behavior category associated with financial wellness included participation in a retirement plan and maximizing income tax credits and deductions but the coefficients were minimal. While it was anticipated that individuals with a greater sense of financial wellness would be more likely to participate in their retirement plan, these results are somewhat limited due to high 401(k) participation rates of the sample group. Furthermore, it is not surprising to observe that seemingly proactive financial behavior related to income tax planning (e.g., maximizing credits and deductions) was associated with financial wellness in the study. Similar observations were not found in the other best practice financial behaviors. While the hypothesized relationship between financial behaviors and financial wellness was not rejected, the advanced financial behaviors reviewed in the study were less significant predictors of financial wellness in comparison to core financial management behaviors.

For this study, it was surprising to find that the retirement planning activity associated with calculating one's ability to replace retirement income needs was not significantly associated with financial wellness. Previous research studies has suggested that while estimating one's ability to meet future retirement income needs is a best practice financial planning behavior associated with increased retirement savings (Mayer, Zick, & Marsden, 2011), not enough people take the time to undergo this important retirement planning activity (Helman, Copeland, & VanDerhei 2012; Lusardi & Mitchell, 2005). A potential explanation of why running a retirement calculation was not associated with financial wellness in this study is that the actual behavior associated with running a basic retirement calculation may be conducted equally by those with low and high financial wellness due to the prominent focus of this activity.

Other best practice investment planning behaviors, such as rebalancing an investment portfolio and assessing risk tolerance, were also not associated with financial wellness despite the emphasis on these actions by most financial planning practitioners. A similar lack of association was found between financial behaviors related to insurance and estate planning and the outcome variable financial wellness. An interaction effect between other variables such as perceived financial knowledge, financial attitude, and objective financial status measures such as income may influence the impact advanced financial behaviors have on financial wellness. Additional research is needed to examine the unique relationship between different categories of financial behavior and financial wellness.

Based on the results of this study Hypothesis 3, which proposed that individuals comfortable with their current debt level would display higher financial wellness, was supported. Financial attitudes explained a significant amount of variance in financial wellness scores. This finding stresses the importance of subjective perceptions such as financial attitudes and specifically emphasizes how the perception of an individual's ability to manage debt influences financial wellness. Employees less comfortable with the amount of debt they have accumulated were associated with lower financial wellness. This finding underscores the importance of developing holistic financial wellness programs that help employees address debt concerns.

This study examined the relationship between subjective perception of financial knowledge and financial wellness finding a statistically significant relationship between perceived financial knowledge and financial wellness. Employees who reported perceived financial knowledge indicated a greater sense of financial wellness, providing support for Hypothesis 4. Previous studies have found that perceived financial knowledge is a stronger predictor of positive financial behaviors than objective knowledge (Robb & Woodyard, 2011).

Comparatively speaking, financial attitude toward debt explained more variance in financial wellness scores than perceived financial knowledge. In fact, the financial attitude variable followed two of the financial behaviors, having a handle on cash flow (i.e., income exceeds expenses) and having an emergency fund in place, as the predictor variables with the largest effect on the association with financial wellness. As a contributor to the financial wellness model examined in this study, perceived financial knowledge is an important component to assess in the workplace. Traditional financial education programs tend to focus on increasing participant knowledge but can be ineffective if they do not integrate all aspects of the financial planning process and promote behavioral change (Financial Finesse, 2013).

In addition to the results related to various subcomponents of financial wellness (e.g., financial behaviors, objective status, financial attitude, and financial knowledge), it was found that all of the personal factors related to demographic variables had a statistically significant association with financial wellness with the exception of the race/ethnicity variable. A statistically significant association between age and financial wellness was found but the directional nature of the relationship was somewhat surprising. Controlling for other variables such as income, subjective perception, and financial behaviors, the under 30 age group demonstrated a statistically significant and positive association with financial wellness when compared to employees in the 30 to 44 age group. No significant association was found between the 45 to 54 and the 55 and over age groups. Whereas previous studies have shown that financial wellness tends to increase with age (Joo, 1998; Porter & Garman, 1993), the opposite was observed in this study when controlling for other variables.

Gender was not found to be significantly associated and this is consistent with previous research that has shown that men tend to have higher financial wellness scores (Malone et al.,

2010). Results indicated a statistically significant and negative association between marital status and financial wellness as married respondents reported lower financial wellness. Findings indicated that having minor children in the household was negatively associated financial wellness. This finding is consistent with previous literature that has discussed the financial constraints children add to households (Ross & Huber, 1985). Another personal factor, homeownership, was linked to higher financial wellness scores. The recent housing crisis impacted millions of Americans and many households are still dealing with the aftermath of lower property values and mortgage debt. Homeownership was still found to have a positive association with financial wellness.

To summarize these findings, the present study used an existing conceptual framework to gain a deeper understanding of personal financial wellness (Joo, 2008). The research model examined 3 out of 4 components of financial wellness: objective financial status measure of income, financial behavior, and subjective perception (e.g., perceived financial knowledge and financial attitude). Findings provided support for Joo's conceptual framework as the subcomponents of financial wellness analyzed in the study (e.g., objective financial status, financial behaviors, and subjective perception) were significantly associated with financial wellness. This study expanded on Joo's conceptual framework through its categorization of financial behaviors as being either core money management behaviors (i.e., cash, debt, and credit management) or more advanced wealth management (i.e., investing and retirement planning) and wealth protection behaviors (i.e., insurance and estate planning). The present model did not allow for the analysis of all elements of Joo's (2008) conceptual framework because the PFW Scale™ used to measure financial wellness contains a specific item looking at the final

component: financial satisfaction. The further development of a comprehensive financial wellness measurement is needed to fully assess financial wellness in the workplace.

Limitations

The results of this study are limited to participants in a workplace financial wellness program provided by a large employer in the healthcare benefits industry. In general, the sample used in this current study represents individuals from different geographical regions of the United States. However, the sample was not representative of national averages and the majority of respondents were located in the northeast region of the country. The results are somewhat limited by the fact that respondents included in this study had to select either retirement planning or investing as their top financial planning priority in order for their responses to be included. This was due to the unique nature of the Financial Wellness Assessment that asks certain questions based on prior responses to create a unique experience for each employee. The sample size was further reduced by an additional 11% to eliminate non-credit card users. This created a slight increase in overall financial wellness scores potentially through the removal of employees who either do not qualify for credit cards or avoid using them altogether.

Other unique characteristics of the sample group must be taken into consideration when interpreting these results. For example, participation rates in the employer sponsored retirement plan are higher than national averages and the employees participating in the study are each eligible to receive matching contributions to their 401(k) plan, something not offered by all employers. Additionally, the study does not identify the level of participation in the workplace financial education for respondents to the Financial Wellness Assessment. Some employees have participated in multiple aspects of the financial education program, utilizing a variety of different service delivery methods (e.g., workshops, webcasts, individual meetings with a CFP®

professional and online content), while others may have simply just taken the Financial Wellness Assessment. Previous studies have shown that financial education programs are associated with increased financial wellness (Garman, Kim, Kratzer, Brunson, & Joo, 1999; Kim, 2007). Therefore, previous experience using financial wellness services introduced a potentially confounding variable. Additional research is needed to examine the impact that different types of financial education services have on financial behavior and the subsequent influence on overall financial wellness.

The results of this study are somewhat limited by the single-item measures used to assess the subjective perception variables. The single-items used to measure financial attitude (e.g., comfort about debt) and perceived financial knowledge have been used extensively but have not been subject to empirical testing. While a significant association was found between perceived financial knowledge and financial wellness, this finding is limited due to the scope of the item used as a proxy for general financial knowledge because it specifically focuses on subjective knowledge of taxation related to investments and retirement accounts. Further development of this item is needed to establish its utility as general proxy for perceived financial knowledge.

Another limitation of this study is the fact that total household income was the only objective financial status measure available. Additional information related to individual income in comparison to household income would have been useful. Income is the most commonly used objective financial status measure (Joo, 2008), but does not always provide the most accurate measure of actual financial capability. Future financial wellness research examining more comprehensive objective financial status measures, such as debt to income ratios and net worth, would provide additional insight into the understanding of financial wellness.

Implications

In conclusion, the emphasis on the relationship between financial behaviors and financial wellness addresses an area of concern that researchers and practitioners need to be aware of as financial wellness programs continue to be developed (Financial Finesse, 2013). This study is unique in that it is the first known attempt to measure the relationship between comprehensive financial planning activities and financial wellness using the PFW Scale™. In order to create financial education programs that promote behavioral change, it is important to understand how different types of financial behaviors influence overall financial wellness. It is also important to utilize comprehensive financial wellness assessment tools to identify the financial education needs of prospective participants in a workplace financial wellness program. Comprehensive financial wellness assessments that contain an inventory of financial behaviors such as the ones included in this study or found within existing financial behavior scales (see Grable, Archuleta, & Nazarinia, 2010) provide valuable information regarding the unique characteristics of these participant groups. Similarly, financial planning practitioners must assess the financial well-being of individuals before following the steps of the financial planning process to recommend and implement solutions.

Practitioners involved in the development and implementation of workplace financial education programs can use the findings of this study to help design specific financial wellness initiatives unique to a specific employee group or organization. For example, demographic variables can be used to identify sectors of an employee or organizational base with lower financial wellness and design ways to reach that particular group. This may include offering a variety of topics rather than just focusing on retirement planning or investing. When appropriate,

tiered levels of financial planning topic areas may be based on perceived financial knowledge (e.g., basic, intermediate, and advanced) or age-based groups (e.g., early, mid, and late-career).

The most meaningful contribution of this study is the exploration of how different categories of financial behaviors are associated with financial wellness. The present study supports an existing conceptual framework of financial wellness that includes financial behavior as one of the core components of financial wellness (Joo, 2008). From a practical standpoint, further exploration is needed to understand the association between best practice financial behaviors and financial wellness. Future research is needed to deepen the understanding of how financial behaviors that fall into categories other than money management or debt and credit management are related to financial wellness. Likewise, there is an additional need for future development of more comprehensive measures of financial wellness that goes beyond the basic assessment of core financial behaviors.

Chapter 3 - Retirement Planning Intentions at the Workplace

Introduction

The topic of retirement planning is a primary area of focus for many financial professionals. A fundamental question at the core of the financial planning profession relates to whether American households are doing enough to adequately prepare for retirement income. This main purpose of this study was to explore how factors of personal financial wellness are associated with the desire to engage in retirement planning activities.

According to the United States Department of Commerce (2010), by 2030 more than 1 out of 5 Americans will be 65 or older. This is a significant shift in comparison to 1994 when only 1 out of 8 individuals in the U.S. was 65 or older. In addition to the demographic trend resulting in more baby boomers (i.e., individuals born between 1946 and 1964) expected to leave the workforce, Americans have also experienced an increase in life expectancy and this trend is expected to continue. Longer life expectancies require additional financial resources to maintain pre-retirement standards of living and to minimize the risk of outliving assets designated for retirement income. Whereas the previous generation of retirees and their families had greater access to defined-benefit plans and seemingly stable and secure income, today's retirees have been increasingly burdened with the responsibility of saving for retirement themselves through defined-contribution plans and individual retirement accounts. Rising health care costs provide another significant concern for current and future retirees. Fidelity Benefits Consulting (2012) reported that a married couple retiring in 2012 at age 65 can expect to need an average of $240,000 for out of pocket medical expenses, excluding nursing-home care, throughout their retirement years.

The current economic landscape presents additional retirement planning concerns as the national debt in the United States as of 2013 stands at roughly $17 trillion (Congressional Budget Office, 2013), raising additional concerns about future economic growth, strength of the dollar, inflation, and future stock and bond market performance. Employees report that job uncertainty is one of their top financial concerns (Helman, Adams, Copeland, & VanDerhei, 2013). Despite the seemingly obvious importance of overall financial wellness and pre-retirement planning activities, many policy makers, researchers, and financial professionals pose serious concerns whether or not the average American is doing enough to prepare for retirement (i.e., Hershey & Jacobs-Lawson, 2012; Lusardi & Mitchell, 2005).

Retirement is a stage of life that is often the central focus of comprehensive financial planning activities. Therefore, it is not surprising that retirement preparedness dominates a great deal of research and financial planning activities. Retirement is often cited as the top priority for individuals and empirical evidence generally supports the notion that retirement goals commonly top the list of reasons why people seek financial planning guidance (Certified Financial Planner Board of Standards, 2009). For individuals and families already using the services of a financial planner, retirement is the most frequently chosen financial goal people are motivated to discuss (Certified Financial Planner Board of Standards, 2010). Planning for retirement may be a top priority, but few people actually follow through and create a financial plan containing specific retirement goals. According to a study conducted by Brucker and Leppel (2013), only 44% of survey participants actually reported they had a retirement plan. Other findings suggest that an insufficient number of Americans are actively saving enough for retirement to maintain their current expense needs throughout their retirement years (Helman et al., 2013).Various studies have suggested that the activity of running a retirement calculation to estimate retirement needs

is a recommended financial behavior, but not enough pre-retirees take the time to complete this important step (Helman, Copeland, & VanDerhei 2012; Lusardi & Mitchell, 2005; Mayer, Zick, & Marsden, 2011).

Pre-retirement decisions are often made among a challenging array of obstacles, such as navigating health care options, longevity, investing in uncertain markets, and economic concerns to name just a few of the most common challenges. Perhaps the biggest obstacles pre-retirees face as they make important retirement planning decisions are procrastination, lack of financial literacy, and debt concerns that drastically impact overall sense of financial wellness (Ward, Davidson, Robertson, Spann, & Spencer, 2013). Over the past two decades, retirement planning has grown in importance as the number of employers offering defined benefit plans has dropped significantly placing the burden of funding retirement goals on employees (Wiatrowski, 2012). Despite an increased focus on retirement planning among researchers, practitioners, retirement plan sponsors, and financial services providers, retirement preparedness remains low in this country (Helman et al., 2013; Munnell, Webb, & Golub-Sass, 2012; Ward et al., 2013). Even with heightened concerns about income security during retirement, studies consistently find the majority of people have not calculated their income needs for retirement (Helman et al., 2012; Mayer et al., 2011). This general lack of awareness is likely related to insufficient retirement savings. An Employee Benefit Research Institute study (EBRI) found that one-third of all workers or their spouses have not saved anything for retirement (Helman et al., 2013). Excluding any equity in their primary residence, 56% of workers surveyed had accumulated less than $25,000 in savings and investments. Perceived retirement preparedness is a serious concern with just over half (51%) of the respondents in the EBRI Retirement Confidence Survey reporting some level of confidence about being able to maintain a comfortable standard of living during

retirement. Perceived retirement confidence is consistent with a recent report of objective retirement preparedness that indicated over half of U.S. households are at risk of not having sufficient retirement income sources to maintain a comfortable standard of living in retirement (Munnell et al., 2012).

Retirement is defined differently by each individual and the reasons for engaging in the retirement planning process vary considerably as do the unique retirement goals of individuals. No matter how each individual chooses to define retirement, the ability to achieve personal financial goals is largely dependent on the pre-retirement planning activities that are taken to navigate the financial demands, longevity risk, and physical and psychological changes that occur during retirement (Adams & Rau, 2011). The process of preparing for retirement involves planning for a successful transition from the accumulation phase. Retirement planning behaviors directly influence personal savings (Lusardi, 1999) and people that actively engage in planning behaviors accumulate significantly more wealth than non-planners (Lusardi, 1999; Ameriks, Caplin, & Leahy, 2002).Pre-retirees must first make a cognitive decision to define goals for retirement. The motivation to seek retirement planning guidance can be viewed as a precursor to establishing goals for a desired retirement lifestyle. Retirement goal clarity has been linked to desirable retirement planning behaviors and these best practice retirement planning behaviors have further been linked to increased retirement savings (Stawski, Hershey, & Jacobs-Lawson, 2007). Additionally, retirement planning activities, such as running a basic retirement needs calculation and estimating projected retirement income to replace lifestyle expenses, can significantly improve retirement planning outcomes (Mayer et al., 2011). Despite evidence that retirement planning is commonly cited as the top financial planning priority (Certified Financial Planner Board of Standards, 2009), more than one-third of retirees surveyed (38%) actually

indicate that they did little or no planning to prepare for retirement (Jacobs-Lawson & Hershey, 2005).

The retirement planning process is complicated because there are nearly as many different pathways to save and prepare for retirement as there are unique definitions of how individuals and families plan on utilizing their financial resources during retirement. However, one thing that is certain is the belief that an individual's overall financial health impacts their subsequent standard of living during retirement (Baek & Devaney, 2004). Financial health is commonly identified by the concept of personal financial wellness (Joo, 2008). Therefore, it is conceivable that specific sub-constructs of financial wellness have a direct impact on retirement well-being and pre-retirement planning behaviors.

The financial-decision making activities related to retirement have become increasingly important as a result of demographic and economic factors that present significant obstacles on the path to retirement. Many large employers provide retirement planning seminars and other financial education services to improve the financial wellness of their employees (Kim, 2008). Traditionally, the majority of financial education offerings have focused on retirement and many retirement plan sponsors have relied on retirement plan providers to educate employees about their retirement plan and investment options. However, very little is known about the factors of financial wellness that potentially influence people to seek retirement planning guidance at their place of employment.

The main purpose of this study was to identify financial wellness factors that contribute to retirement planning intentions among individuals utilizing self-directed financial planning and education program provided by their employer. This study examined the role that demographic factors, financial attitudes, financial satisfaction, and financial behaviors have on the intention to

plan for retirement. A goal of this study was to determine if factors that contribute to overall financial wellness (i.e., objective financial status, financial satisfaction, financial behaviors, and subjective perceptions) increase the likelihood of expressing retirement planning intentions. Furthermore, the study specifically targeted the retirement planning intentions of employees participating in a workplace financial education program. This study intended to gain a deeper understanding of the influence financial wellness has on retirement planning intentions. Information obtained from this study will aid in the design and implementation of financial wellness programs in the workplace that address issues of retirement preparedness and other aspects of financial health.

Literature Review

Financial wellness is a concept used as a descriptor of financial health and is expected to play a critical role in retirement preparedness activities. Joo (2008) conceptualized financial wellness to consist of sub-components such as financial satisfaction, financial attitudes, financial behaviors, and objective financial status. Financial attitudes toward retirement are important during the actual transition process to retirement and influence retirement confidence (Atchley, 1991). Retirement attitudes are shaped by current financial state and factors related to objective financial status such as income, assets, and liabilities have on these attitudes. Financial attitudes toward debt have an influence on retirement planning. Kim, Sorhaindo, and Garman (2006) identified the need for financially distressed consumers to implement debt management strategies prior to engaging in retirement planning. Attitudes toward debt are an important aspect of retirement preparedness as debt use among older individuals has increased dramatically since the 1990's (Mann & Mann, 2011). Financial attitudes have been demonstrated to be related to financial management behaviors. Past studies have found that preparation and planning for

retirement is a predictor of positive attitude in retirement (Atchley, 1991; Helman & Paladino, 2004).

Retirement Planning Intention

According to Theory of Planned Behavior, a link exists between individual beliefs and behavior with the intention to perform a particular behavior being a predictor of behavior. As an antecedent of behavior, intention is determined by attitude toward the specific behavior, subjective norms, and perceived behavioral control (Ajzen, 1991). The determination of motivational factors that influence retirement planning behaviors is important because most future retirees will increasingly rely on personal savings to reach desired income replacement standards. The motivational desire and ability to save for retirement is influenced by numerous factors, which have been categorized as environmental influences, individual differences, and psychological process thinking (Engel, Blackwell, & Miniard, 1990; Joo & Grable, 2005). The intention to engage in retirement planning activities and save for retirement is most commonly viewed as a conscious decision. Demographic factors also play role in financial preparation activities for retirement. Age, income, investment experience, and being married are demographic factors previously found to be positively associated with retirement planning intention (Ng, Tay, Tan, & Lim, 2011). Multidimensional components of financial wellness have also been associated with the intent to engage in retirement planning. Previous studies have found that employees seeking retirement planning and education had higher incomes, lower financial stress, and exhibited fewer negative financial behaviors (Joo & Grable, 2000).

Research suggests that self-assessed planning preparedness and perceived importance of planning are associated with perceived behavioral control of retirement saving intentions (Croy, Gerrans, & Speelman, 2010). The perceptions of planning importance were an antecedent of

planning preparedness and perceived behavioral control. Other studies have concentrated on the importance of goal-setting, the essential foundation of the financial planning process. Research has identified retirement goal clarity as a predictor of planning activities and that planning subsequently predicts the likelihood of savings (Stawski, Hershey, & Jacobs-Lawson, 2007). Additional research provides evidence that self-regulatory state also plays a role in the development of consumer evaluations and intentions associated with investing for retirement (Howlett, Kees, & Kemp, 2008). Self-regulation is a psychological term referring to the process through which people demonstrate control over thoughts, feelings, and behaviors. The majority of research on retirement planning intentions has focused on intended retirement age. Few studies have directed their attention on motivational factors that are associated with an intention to engage in retirement planning activities. Another area of focus that few studies have comprehensively examined includes the exploration of objective and subjective subcomponents of financial wellness as potential predictors of retirement planning intention.

Financial Attitudes

Financial attitudes are subjective perceptions and a subcomponent of financial wellness that hold an integral role in the display of positive financial behaviors (Joo, 2008). Financial attitudes toward debt have been examined in previous research as well as the examination of the relationship between attitude toward credit and actual credit usage (Chien & Devaney, 2001). Consumer credit has long been a method of consumption smoothing for American households. Over the last two decades household debt has seen considerable growth. Individuals with relatively low financial wellness/high financial distress tend to report having little or no savings and higher total household debt. Participation in retirement savings programs and the amount of savings is associated with carrying a balance on credit cards and installment debt (Cavanagh &

Sharpe, 2002). As debt holdings increase retirement savings have been shown to decrease. According to the 2014 Retirement Confidence Survey, 58% of employees indicated they have a problem with their debt level and 24% had an increase in overall debt over the past 5 years (Helman, Adams, Copeland, & VanDerHei, 2014). More favorable attitudes toward the use of credit are associated with higher installment loan debt and specific credit attitudes that were favorable to credit use have been found to be related to outstanding credit balances (Chien & Devaney, 2001). Financial attitude toward debt is assumed to have an impact on retirement confidence. Few studies were identified that explored whether comfort level with non-mortgage debt is a predictor of participating in retirement planning activities and perceived retirement preparedness.

Hypothesis 1: As comfort with current debt level increases, respondents will be more likely to report retirement planning intentions.

Financial Stress

Subjective factors such as financial stress, anxiety, and related fears are examples of psychological variables that influence retirement planning behavior (Neukam & Hershey, 2003). In previous studies, financial stress has been conceptualized as the subjective perception of an individual's personal finances (Kim & Garman, 2003). There is a general assumption that financial stressors influence financial wellness. Joo and Grable (2004) identified the most common sources of financial stress as being personal, family, and financial situations. Research literature suggests that increased levels of financial stress tend to result in lower reported financial satisfaction levels (Archuleta, Britt, Tonn, & Grable, 2011; Joo, 1998). Financial Finesse conducted a 2012 survey of employees in the workplace that indicated 84% of all respondents reported some degree of financial stress with 16% reporting high or overwhelming

financial stress (Robertson, Ward, Davidson, & Anderson, 2012). Minimal research was found exploring financial stress as a predictor of retirement planning intention.

Hypothesis 2: As financial stress decreases, respondents will be more likely to report retirement planning intentions.

Financial Satisfaction

Overall financial satisfaction is an important sub-construct of financial wellness (Joo, 2008). Financial satisfaction is commonly defined as one's general sense of contentment with their personal financial situation (Joo & Grable, 2004). Financial satisfaction is generally viewed as an individual's subjective perception of the adequacy of their financial resources (Hira & Mugenda, 1998) and is contributing factor to financial wellness and general well-being (Joo, 2008). Previous research has emphasized the importance of financial satisfaction among retirees and pre-retirees due to the impact financial satisfaction has on overall life satisfaction (Andrew & Withey, 1976; Hira & Mugenda, 1998).

Hypothesis 3: As financial satisfaction increases, respondents will be more likely to report retirement planning intentions.

Financial Knowledge

Personal financial knowledge has been conceptualized as a vital element of financial wellness (Joo, 2008). Financial knowledge has been included along with financial attitudes into a subcomponent of financial wellness that was labeled "subjective perception". Increased levels of financial knowledge have been associated with greater financial satisfaction (Joo & Grable, 2004). A vast body of research has provided evidence of an association between financial knowledge and behavior (Hilgert, Hogarth, & Beverly, 2003; Robb & Woodyard, 2011). Previous studies have examined financial knowledge using objective and subjective measures,

and Robb and Woodyard (2011) noted that many studies do not show a direct link between knowledge and financial behaviors. Robb and Woodyard (2011) found that subjective financial knowledge has a stronger influence on financial behaviors than objective financial knowledge. Financial knowledge is associated with future goal oriented activities related to thinking about retirement (Lusardi & Mitchell, 2007). Financial knowledge is also associated with retirement planning activities and successful retirement outcomes.

Hypothesis 4: As perceived financial knowledge increases, respondents will be more likely to report retirement planning intentions.

Retirement Planning Behaviors

Retirement planning behaviors related to saving and investment activities have been a primary area of interest and concern as researchers identified that a significant number of people are at risk of not reaching their retirement income goals (Helman et al., 2013; Munnell et al., 2012; Ward et al., 2013). Retirement planning activities include other factors in addition to saving and investment activities. Some examples of retirement behaviors that have been examined in previous studies include the level of participation in employer sponsored retirement plans, retirement savings rates, participation in individual retirement accounts, information seeking activities (e.g., financial planner search activities, attendance at retirement planning seminars), calculating estimated retirement needs, investment related activities, and discussing retirement plans with others.

Retirement planning activities, such as calculating projected retirement income needs (Garman & Forgue, 2010; Mayer, Zick, & Marsden, 2011) and engaging in information search activities (e.g., financial planner consultations and attendance at retirement planning workshops) (Elder & Rudolph, 1999), have been linked to retirement preparedness. It has been demonstrated

that higher likelihood to completing a retirement savings needs calculation exists among those with higher income, education, and financial assets (Helman et al., 2013). Participation in retirement planning seminars has also been show to display a positive association with net worth (Lusardi & Mitchell, 2007). Participation rates in employer sponsored retirement plans increase with age, income, and education (Chatterjee, 2010).

With such a high incidence of households reportedly "at risk" of a retirement income shortfall (Munnell et al., 2012) and a high percentage of individuals reporting they are not confident in their retirement preparedness (Ward et al., 2013), it is necessary for these at risk households to increase their personal savings rates. The reality is that many households do not have access to retirement plans through their employers and married couples may only have one spouse eligible to contribute to retirement plans at work. Individual retirement accounts provide a retirement savings vehicle for these households as well as allowing people already participating in a defined contribution plan to set aside additional assets for retirement. Individual retirement accounts consist of more than one quarter of all retirement assets in the United States (Copeland, 2013). A significant portion of these retirement assets were originally sourced in employer sponsored retirement plans such as pension plans and 401ks. Despite widespread attention to individual retirement accounts (IRAs) in the media and financial services companies, only 13% of individuals with traditional or Roth IRA accounts made contributions in 2011. Minorities and lower income employees have a decreased likelihood of IRA participation (Chatterjee, 2010). Individuals with more education are more likely to participate in an IRA. According to EBRI (Copeland, 2013), no significant gender differences were found in the likelihood of contributing to an IRA.

Calculating retirement savings needs is associated with increased retirement savings behaviors (Mayer et al., 2011). Additionally, VanDerhei and Adams (2013) noted that individuals using online retirement calculators were more likely to set realistic savings targets. Various plan design strategies are utilized by retirement plan sponsors to encourage employee participation. One of the most common approaches is matching contributions provided by the employer, which the majority of large corporations now offer (Profit Sharing Council of America, 2012). It is generally considered best practice for employees with access to an employer sponsored retirement plan with a matching feature to take full advantage of the employer match. Theory of Planned Behavior suggests that the likelihood an individual performs a specific behavior is influenced by their intentions to take action (Ajzen, 1991). According to this theory, retirement planning behavior is a function of attitude toward the behavior, subjective norms, and perceived behavioral control.

Hypothesis 5: Respondents who run a basic retirement calculation will be more likely to report retirement planning intentions.

Core Financial Management Behaviors

Financial behaviors are a component of financial wellness, which is a construct used to describe an individual's overall financial health (Joo, 2008). Financial behaviors associated with personal financial wellness include maintaining reasonable and low debt, having an active savings plan, having and intentionally following a budget, money related agreements with family or partner, financial satisfaction, and experiencing low levels of financial stress (Joo & Grable, 2004). Davis and Hustvedt (2012) found that retirement saving behaviors of individuals with lower levels of perceived behavioral control was more likely to be influenced by money management behaviors than those with higher perceived behavioral control.

Hypothesis 6a: Respondents who spend less than they make each month will be more likely to report retirement planning intentions.

Hypothesis 6b: Respondents who pay their bills on time each month will be more likely to report retirement planning intentions.

Hypothesis 6c: Respondents who maintain an emergency fund will be more likely to report retirement planning intentions.

Hypothesis 6d: Respondents who regularly pay off their credit card balances in full each month will be more likely to report retirement planning intentions.

Demographic Variables

Various demographic variables have been linked to retirement planning intentions and behaviors, such as respondent income (Joo & Grable, 2001; Joo & Grable, 2005) and age (Ekerdt et al., 2001; Hogarth, 1991; Zhong, 1994). Age plays an influential role in the financial decision making process and has consistently been linked with income and net worth. Age has also been demonstrated to exhibit a positive correlation with retirement plan participation (DeVaney & Zhang, 2001). Age has a significant influence on retirement planning and savings behavior. According to lifecycle hypothesis people tend to borrow more while they are young and increase their savings rate throughout their working years (Ando & Modigliani, 1963). Existing literature suggests that age is associated with retirement savings decisions with older people typically saving more than younger people (Hogarth, 1991; Zhong, 1994). Ekerdt et al. (2001) found that retirement planning activities increase as individuals approach retirement age. Zick, Mayer, and Glaubitz (2012) examined generational differences in response to recession and found that older individuals were more likely to seek help of a planner but less likely to spend time educating themselves about financial topics. Age has a significant influence on retirement planning and

savings behavior and retirement planning activities as retirement age nears. According to lifecycle hypothesis, people tend to borrow more while they are young and increase their savings rate throughout their working years (Ando & Modigliani, 1963). Existing literature suggests that age is associated with retirement savings decisions with older people typically saving more than younger people (Hogarth, 1991; Zhong, 1994). Ekerdt et al. (2001) found that retirement planning activities increase as individuals approach retirement age.

Hypothesis 7: As age increases, respondents will be more likely to report retirement planning intentions.

Income is an objective financial status measure commonly used to assess the financial resources an individual has available to meet financial life goals. Income is associated with retirement planning intentions and behaviors (Joo & Grable, 2001). Income has also been found to be associated with the decision to participate in defined contribution retirement plans at work with financial constrained employees reporting a decreased likelihood of 401(k) plan participation (Munnell, Sunden, & Taylor, 2000).

Hypothesis 8: As household income increases, respondents will be more likely to report retirement planning intentions.

Gender differences exist in retirement planning activities with women being more disadvantaged (Noone, Alpass, & Stephens, 2010) and less confident in their ability to replace desired income during retirement (Financial Finesse, 2013). Loibl and Hira (2006) looked at employer provided financial media and gender perspectives. Women on average have been found to save less than men and are less likely to follow regular savings plans (Fisher, 2010). The importance of active engagement in the retirement planning process is enhanced by the increased likelihood that women will spend more time in retirement due to longer life

expectancies (Gottschalck, 2008; U.S. Department of Commerce, 2010). Hershey and Jacobs-Lawson (2012) found that single women were least prepared for retirement compared to men and married individuals. Malone, Stewart, Wilson, and Korsching (2010) found that single mothers indicated a lower likelihood of retirement confidence and higher financial worry compared to women of various marital statuses. Gender differences have also been identified across other factors that impact retirement preparedness such as income, risk aversion, wealth accumulation, and investment confidence (Noone et al., 2010). Research demonstrates that men tend to display greater financial knowledge and this has direct implications on retirement savings behavior and portfolio selection (Lusardi & Mitchell, 2007).

Hypothesis 9: Male respondents will be more likely to report retirement planning intentions.

Marital status is another subjective norm that has been explored in previous literature using Theory of Planned Behavior as the guiding conceptual framework. Married couples are more likely to save than single individuals (DeVaney & Zhang, 2001). The presence of minor children in the household is another factor that has an influence on the intention to perform financial behaviors. Having children in the household is linked to having a retirement savings plan in place with smaller households more likely to save for retirement (Joo & Grable, 2005).

Hypothesis 10: Married respondents will be more likely to report retirement planning intentions.

Having children in the household is linked to having a retirement savings plan in place with smaller households more likely to save for retirement (Joo & Grable, 2005).

Hypothesis 11: Respondents without minor children in the household will be more likely to report retirement planning intentions.

Summary of Research Questions

The current study examines the factors influencing the retirement planning intention of individuals participating in a workplace financial wellness program. Specifically, the study explores the impact financial satisfaction, financial attitudes, financial planning behaviors, and demographic variables have on the likelihood that employees will express retirement planning intention. The ultimate goal of this study is to provide practical implications to better understand the financial wellness challenges faced by employees in the workplace and to use this information to create more effective financial education and wellness programs that support the development of proactive retirement planning behaviors.

Methods

Sample Description

This study used a data set from a patent pending Financial Wellness Assessment used in conjunction with an employer sponsored financial education program. A total of 3,620 financial wellness assessments were used in this study. The data file consisted of employed individuals actively seeking online financial guidance through a multi-faceted financial wellness program provided as an employee benefit. Respondents included employees from a large health care benefits corporation. Financial Wellness Assessments were completed via the internet between January 1, 2012 and December 31, 2012. The convenience sample includes respondents from different regions of the U.S., but is not a representative sample. However, the sample was not representative of national averages and the majority of respondents were located in the northeast region of the country. Only current workers were included in the sample. The sample overrepresented women and was comprised of 76% females and 24% males. According to the

2010 Census Bureau, the national gender distribution across the population of the United States consists of 51% females and 49% males.

The median age group for respondents in this study fell into the age range of 35 to 44 years of age. Fifty-nine percent of respondents were married. The highest frequency household income group fell in a range of $100,000 to $149,999. Nearly 44% of employees surveyed had minor(s) in their household. Approximately 74% of the participants in this study reported they were homeowners comparable to the national homeownership rate of 65% (U.S. Department of Commerce, 2010).

Dependent Variable

Retirement planning intention was the outcome variable of this study. It was operationally defined as the intention to engage in retirement planning activities in a goal oriented process of evaluating if one's retirement plan is on track and taking action to meet important goals during retirement years. Survey data examining the services commonly provided by financial planning professionals included retirement planning, investing, tax planning, and other advanced planning needs (Collins, 2010; Elmerick, Montalto, & Fox, 2002). Similarly, workplace financial wellness programs also provide comprehensive financial planning guidance and advice although they most commonly focus on retirement planning. Retirement planning intention was assessed with responses to a single-item statement that asks employees to select the three most important topics for their situation. Options included: (a) getting out of debt; (b) managing cash flow; (c) retirement planning; (d) investing; (e) estate planning—wills, trusts, and beyond; (f) learning about insurance—life, disability, and long-term care; (g) reducing income taxes; and (h) college funding. Scoring on this item was based on a dichotomous choice of selecting retirement planning as a priority item. If an employee indicated retirement was one of

the most important topics for them the response was coded as 1 and all other topics of interest were coded as 0.

Independent Variables

Explanatory variables included financial stress, financial satisfaction, debt attitude, perceived financial knowledge, core financial management behaviors, and personal demographic factors (i.e., age, income, marital status, homeownership, and minors in household).

Financial Attitudes

Financial attitudes included debt attitude and financial stress. Debt attitude was measured using a question regarding whether respondents are comfortable with the amount of non-mortgage debt they currently have. Response choices included yes (coded 1), don't have debt (coded 1), and no (coded 0). The mean reported score for comfort with debt was .54 (*SD* = .50).

Financial Stress

Financial stress is another predictor variable used in this study and was measured by a two item scale adapted from the Personal Financial Wellness (PFW) Scale™ (Prawitz, Garman, Sorhaindo, O'Neill, Kim, & Drentea, 2006):

1. What do you feel is the level of your financial stress today?
2. How stressed do you feel about your personal finances in general?

The potential responses to each item ranged in value from 1 (overwhelming stress) to 10 (no stress at all). Items were summed for a total score of 2 to 20 and subsequently divided by 2 to obtain a mean score. The mean reported financial stress score was 5.42 (*SD* = 1.99), which is interpreted to mean that the average respondent reported moderate financial stress.

Financial Satisfaction

The financial satisfaction measure included the following item adapted from the PFW Scale™ (Prawitz et al., 2006): How satisfied are you with your present financial situation? Response values range from 1 (dissatisfied) to 10 (satisfied). Respondents reported mean financial satisfaction of 5.04 (*SD* = 2.43), meaning the average person was slightly dissatisfied with their present financial situation.

Perceived Financial Knowledge

Perceived financial knowledge was assessed using a single-item measure related to general understanding of taxes. This item was selected as a proxy for perceived financial knowledge. Respondents were asked to respond yes or no to the following statement: I understand the tax implications of each of my investment and retirement accounts (yes = 1; no = 0). Respondents with a score of 1 represented those with higher perceived financial knowledge. The mean score on this item was .39 (*SD* = .49).

Retirement Planning Behavior

Another independent variable examined in this study is previous retirement planning behavior. Retirement planning and savings behaviors are complex and often associated with age, income, and financial knowledge. Running a basic retirement calculation at least once per year is generally viewed as a best practice retirement planning activity. Employees were asked if they have used a retirement calculator and given the following response options: I know I am on target to replace at least 80% of my income in retirement. (1= Yes, I have used a retirement calculator and I know I am on target to retire comfortably, 0= No, I have not used a retirement calculator and don't know whether I am on track, 1= No, I know I am not on track based on the projections I have run). The means score on this item was .36 (*SD* = .48).

Core Financial Management Behaviors

According to Joo's (2008) conceptual framework, financial wellness consists of objective and subjective components, including objective financial status, financial satisfaction, subjective perceptions (financial attitudes, financial knowledge), and financial behaviors. Core financial management behaviors were used to assess financial planning behaviors that contribute to overall financial wellness. Core financial planning behaviors related to basic money management may also be predictors of retirement planning activities. Based on this hypothesized relationship, core financial wellness behaviors were added to the model to measure the mediating role of core financial management behaviors on the intention to engage in retirement planning behaviors and the actual self-reporting of desirable retirement planning behaviors. Five core financial management behaviors were assessed using the following statements:

1. I have a handle on my cash flow so I spend less than I make each month. (1= Yes, 0= No)
2. I pay my bills on time each month. (1= Yes, 0= No)
3. I have an emergency fund to pay bills for a few months if I lose my job. (1= Yes, 0= No)
4. I regularly pay off my credit card balances in full. (1= Yes, 0= No)
5. I check my credit report on an annual basis. (1 = Yes, 0 = No)

The response options to the core financial management behavior item related to paying off credit card balances in full (see #4 above) originally included a third response ("I don't use credit cards"). In order to maintain a yes or no response to this question, Financial Wellness Assessments with an "I don't use credit cards" response were removed from this study.

Demographic Variables

A total of six demographic variables were examined in this study including age, gender, marital status, presence of children in the household, homeownership, and race/ethnicity. Age was measured as a categorical variable coded 1 = under 30, 2 = 30 to 44, 3 = 45 to 54, 4 = 55 and above. Gender was coded as 0 if female and 1 if male. Marital status was coded as 0 if not married and 1 if married. The presence of children in the household was coded as 0 if no and 1 if respondent reported one or more children. Homeownership was coded as 0 if no and 1 if yes. Race/ethnicity was coded based on self-identifying responses (1= Caucasian/White, 2= African American/Black, 3= Hispanic/Latino, 4= Asian American/Asian, 5= 6= Prefer not to answer). Due to small group sizes for certain race/ethnicity groups the responses were recoded as follows: Caucasian/White = 1 and Non-Caucasian/White responses were coded as 0 and used as the reference category during the regression analyses.

Methods of Analysis

Statistical analyses were conducted using SPSS/PASW 22 for Windows. Logistic regression analysis was used to identify factors associated with expressing retirement planning intentions.

Results

Results from the descriptive statistical analysis (Table 3.1) indicated that 73% reported retirement planning was a top priority. Responses across other financial planning topics of interest are illustrated in Table 3.2. A correlation matrix of all variables is displayed in Appendix Table A.2 to test for multicollinearity issues. Field (2006) noted that correlations above .80 should be avoided along with VIF values above 10. Financial satisfaction and financial stress had a moderate correlation $r = .77$ and the respective VIF scores were 2.85 and 2.72, which remained

below the recommended threshold for removal. Other moderate correlations above .60 included the relationship between being comfortable with debt and the financial behavior paying off credit card balances in full (r = .61). Logistic regression results are presented in Table 3.4.

Table 3.1

Descriptive Statistics (N = 3,620)

Variables	*M*	*SD*	Range
Dependent Variable			
Retirement Planning Intention	.73	.44	
Demographic Factors			
Age			
Under 30	.12	.33	
30 to 44	.41	.49	
45 to 54	.29	.45	
55 and over	.17	.38	
Male	.24	.43	
Married	.59	.49	
Homeowner	.74	.44	
Minor(s) in household	.44	.50	
Race/Ethnicity			
Caucasian/White	.74	.44	
Annual Household Income			
Under $35,000	.06	.23	
$35,000 to $59,999	.21	.41	
$60,000 to $74,999	.16	.37	
$75,000 to $99,999	.18	.39	
$100,000 to $149,999	.23	.42	

Table 3.1

Continued

Variables	*M*	*SD*	Range
$150,000 and above	.15	.36	
Financial Satisfaction	5.04	2.43	1 to 10
Subjective Perceptions			
Comfortable with Debt	.54	.50	
Financial Stress	5.42	1.99	1 to 10
Perceived Financial Knowledge	.39	.49	
Core Financial Behaviors (1 = Yes)	3.02	1.47	0 to 5
Handle on cash flow	.66	.48	
Pay bills on time each month	.87	.34	
Have an emergency fund	.49	.50	
Pay off credit cards in full	.49	.50	
Check credit report annually	.53	.50	
Has run a basic retirement calculator (1 = Yes)	.36	.48	

The binary logistic regression was used to account for observations resulting from the addition of variables into the model predicting retirement planning intention. A logistic model is believed to provide a better fit to the data if it demonstrates an improvement over the intercept-only model (also referred to as the null model). An intercept only model serves as an acceptable baseline because it does not contain any predictor variables. Findings in this study indicate that the logistic model is more effective than the null model. When all of the variables were entered, the model was statistically significant ($\chi^2 = 817.90$, $p < .001$), with the Cox and Snell pseudo R^2 statistic (.20) indicating an acceptable but moderate model fit. The concordance between the

predicted probability of demonstrating retirement planning intention and the observed response was 77.4%.

Results from the model indicated that debt comfort attitude was significantly associated with retirement planning intention. Holding all else equal, respondents who were comfortable with the amount of their non-mortgage debt were more likely to express retirement planning intention ($e^B = 1.21$). However, financial stress, the other financial attitude variable, financial satisfaction, and perceived financial knowledge were not significantly associated with retirement planning intention. Analyses of financial management behaviors revealed that having a handle on cash flow, paying bills on time, and paying off credit card balances in full were each statistically significant predictors of retirement planning intention. Among the core financial management behaviors paying bills on time explained the greatest amount of variance in retirement planning intention (standardized estimate = 0.13). Checking credit reports was not a significant predictor but the direction of the association was negative and employees selecting this behavior were less likely to be exhibit retirement planning intention. Results from the model also revealed that holding all else equal the demographic variables of age, income, race/ethnicity, and the presence of children in household were statistically significant predictors of individuals who were more likely to have retirement planning intentions. Age was found to be a statistically significant predictor of retirement planning intention with older respondents more likely to choose retirement planning as a primary topic of interest. Holding all else equal, the odds of an individual under the age of 30 expressing an intention to engage in retirement planning were 60% less than those age 30 to 44. The 45-54 age group had predicted odds of selecting retirement planning 2.28 times higher than those in the 30 to 44 age group. Those in the 55 and over age group had predicted odds of exhibiting retirement planning intention 4.91 times higher than the

reference group (age 30-44). In terms of income, each category demonstrated an increased likelihood of retirement planning intention in comparison to the reference category ($35,000 to $59,999). Race/ethnicity was a significant predictor of retirement planning intention with Caucasian/White respondents more likely than the reference group (Non-Caucasian/White) to choose retirement as a planning priority. Individuals with children living at home had predicted odds of expressing retirement planning intention 55% lower than individuals with no children living at home ($p < .001$).

Table 3.2

Financial Planning Intentions by Category (N = 3,620)

Select the most important topics for you (choose up to 3)	*Frequency*	*%*
Dependent Variable		
Retirement Planning	(*n* = 2,639)	72.9%
Other Financial Topics		
Managing Cash Flow	(*n* = 1,918)	53.0%
Getting out of Debt	(*n* = 1,731)	52.2%
Investing	(*n* = 1,474)	40.7%
College Funding	(*n* = 792)	21.9%
Reducing Income Taxes	(*n* = 753)	20.8%
Estate Planning	(*n* = 687)	19.0%
Insurance- Life, Disability, and LTC	(*n* = 174)	4.8%

Table 3.3

Summary of Logistic Regression Analysis for Variables Predicting Retirement Planning Intention (N = 3,620)

Predictor	*B*	*SE B*	e^B
Age (reference = 30 to 44)			
Under 30	-.92***	.13	.40
45 to 54	.82***	.11	2.28
55 and over	1.59***	.20	4.91
Gender (reference = female)	.00	.11	1.00
Marital status (reference = not married)	.10	.11	1.11
Homeowner	.03	.11	1.03
Minor(s) in household	-.79***	.10	.45
Caucasian/White	.23*	.10	1.25
Household Income (reference = $35,000 to $59,999)			
Under $35,000	.42*	.18	1.51
$60,000 to $74,999	.37**	.13	1.44
$75,000 to $99,999	.34*	.14	1.40
$100,000 to $149,999	.77***	.15	2.16
$150,000 and above	.72***	.18	2.05
Financial Satisfaction	.03	.03	1.03
Financial Stress	.06	.03	1.06
Comfortable with Debt Level	.19*	.11	1.21
Perceived Financial Knowledge	.09	.09	1.09
Handle on Cash Flow	.24*	.10	1.27
Pay Bills on Time	.39**	.13	1.47
Emergency Fund	.11	.11	1.12
Pay Credit Cards in Full	.29*	.12	1.33
Check Credit Report	-.17	.09	.85
Has Run a Basic Retirement Calculator	-.04	.09	.96
Constant	-.59		
χ^2		817.90	
df		23	

Note: e^B = exponentiated *B*.

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

Discussion

The current study conceptualizes the act of selecting retirement planning as a primary financial topic of interest as the intention to engage in actual retirement planning behaviors. The data used in this study allows for the opportunity to examine active participants in an employer sponsored financial wellness program. The concept of financial wellness has become increasingly popular, but remains poorly understood. The results of this study can help researchers, practitioners, and human resource professionals understand how financial wellness factors and other demographic variables influence the desire for employees to engage in retirement planning activities. Financial wellness data can be used to describe who is likely to engage in retirement planning activities. This information may also be used to identify potential obstacles on the pathways to retirement. Using a final sample of 3,620 employees who completed a patent pending online Financial Wellness Assessment (Financial Finesse, 2013), the results indicate that different components of financial wellness influence the likelihood that employees will indicate an interest in retirement planning. Factors of financial wellness were hypothesized to have a strong influence on retirement planning behavior. The construct of financial wellness has been conceptualized to consist of subcomponents—financial satisfaction, financial behaviors, subjective perceptions (financial knowledge and financial attitudes), and objective financial status (e.g., income, net worth, financial ratios; Joo, 2008).

One of the statistically significant predictors of retirement planning intention was financial attitude toward debt. Employees who did not have any non-mortgage debt and those who have a positive attitude toward their current debt level are more likely to express intent to participate in retirement planning activities and this finding supports Hypothesis 1. This was expected based on previous research that has demonstrated the negative relationship between

debt and aspects of financial wellness (Baek & DeVaney, 2004; Joo & Garman, 1998). Approximately 52% of respondents indicated that getting out of debt was a current priority making it the third most commonly chosen financial planning topic of interest behind retirement planning and managing cash flow. Concerns about paying off debt obligations are growing for many Americans and regularly monthly debt payments limit the amount of resources available to contribute to retirement plans and save for other financial goals. The findings related to financial attitude toward debt provide evidence that subjective perceptions among employees in the workplace should be assessed prior in order to design and implement comprehensive financial education programs. The topics of retirement planning and investing have historically been a predominant area of focus among retirement plan sponsors. Successful incorporation of financial wellness programs in the workplace can be enhanced with a holistic assessment of the organization's members in order to effectively design financial education programs that will help balance short-term financial concerns such as paying off debt with longer term priorities such as retirement planning.

Hypothesis 2 predicted that individuals with greater financial stress would be less likely to demonstrate retirement planning intention. Controlling for other variables the results of the logistical regression model suggested that this hypothesis be rejected. This result was surprising because it was expected that higher financial stress would lower the likelihood of retirement planning intention due to the focus on more immediate financial concerns. While retirement planning intention actually increased slightly with higher employee scores on the financial stress measure the results were not statistically significant. The direction of the relationship was opposite from the original hypothesis that postulated the likelihood of retirement planning intention would be inversely related to financial stress. One possible explanation is that many

individuals with higher financial stress may realize the need to engage in retirement planning activities and they are seeking guidance prioritizing their financial resources. Hypothesis 3, which proposed that individuals with greater financial satisfaction will be more likely to demonstrate an intention to engage in retirement planning, was also rejected. Financial satisfaction has been conceptually viewed as a critical component of financial wellness. This result contradicts previous studies that found financial satisfaction to be associated with retirement planning behaviors. A separate logistic regression analysis not included in the actual results of this study indicated that each financial attitude variable was a significant predictor of retirement planning intention. However, when all independent variables were accounted for financial satisfaction and financial stress were no longer important.

It was anticipated that perceived financial knowledge would increase the likelihood of retirement planning intention (Hypothesis 4). This was based on prior research that has shown that perceived financial knowledge is linked with desirable financial behaviors including saving for retirement (Robb & Woodyard, 2011). No significant association was found between perceived financial knowledge and the intention to engage in retirement planning behaviors.

Hypothesis 5 predicted that retirement planning intention would increase among individuals who report prior use of a basic retirement calculator. Retirement planning is a complex and ongoing process and as such it was anticipated that prior experience with specific retirement planning activities such as running a basic retirement calculation to assess progress toward retirement income goals would predict intention to participate in additional retirement planning behaviors. However, a statistically significant difference was not found. Reasons for this result may be related to the low frequency of individuals running a basic retirement

calculation in general. Many employees with and without the intention of engaging in retirement planning activities have not estimated their future retirement income needs.

Financial behavior has been conceptualized as a core component of financial wellness (Joo, 2008) and core money management behaviors are linked to greater financial wellness. Hypothesis 6a-d proposed that core financial management behaviors will be predictors of retirement planning intentions. This hypothesis was partially supported with employees who reported that they perform core financial behaviors such as having a handle on their cash flow and spending less than they earn, paying bills on time, and paying off credit cards in full more likely to want to plan for retirement. However, financial behavior related to maintaining an emergency fund was not found to be a statistically significant predictor of retirement planning intention.

Hypothesis 7 predicted that retirement planning intention will increase with age. This hypothesis was fully supported as expected. Previous studies have documented that retirement planning behavior increases with age. According to lifecycle hypothesis (Ando & Modigliani, 1963) people tend to borrow more when they are younger and increase savings as the aging process occurs. From a retirement planning perspective this can be troublesome when setbacks occur that delay retirement savings or debt constraints significantly limit the ability to save early in life to take advantage of compounding growth of investment returns. The data set revealed that employees age 55 and older were significantly more likely to express an intention to engage in retirement planning activities. Practitioners are challenged with the task of developing financial education and wellness programs that balance the need for retirement planning with other financial topic areas such as debt management, managing cash flow, and investing. Younger workers lower likelihood of expressing an interest in retirement planning requires financial

educators, retirement plan sponsors, and financial planning practitioners to design holistic financial wellness programs that help employees prioritize among competing financial goals and priorities. An increased focus on the financial wellness of employees, including younger employees, can be coordinated with effective retirement plan design to encourage positive retirement planning behaviors. Behavioral finance studies have demonstrated the ability to encourage workers to save for retirement through effective plan design and features such as automatic enrollment, contribution rate escalation, and matching contributions (Bernatzi, 2012).

Hypothesis 8 projected that individuals with higher household income will be more likely to have retirement planning intentions. Income is one of the most common measures of objective financial status used in research studies on financial wellness. As hypothesized all income groups earning above $60,000 were more likely to demonstrate retirement planning intention in comparison to the reference group ($35,000 to $59,999). Surprisingly, employees in the under $35,000 age group also were more likely to have retirement planning intentions than the reference group. This finding could provide an indication that employees in the $35,000 to $59,999 have a higher frequency of factors that impact their overall financial wellness and as a result deter them from focusing on retirement planning as much as other age groups.

Hypothesis 9 postulated that men would be more likely to express retirement planning intentions. The results support this hypothesis as gender was found to be a statistically significant predictor of retirement planning intention. The positive coefficient suggests that men are more likely to demonstrate the intention to perform retirement planning tasks. However, no support was found for Hypothesis 10, which anticipated that married individuals would be more likely to intend to plan for retirement as findings in the study did not provide support for this hypothesis. Despite the lack of statistical significance as a predictor of retirement planning intention, marital

status is an important demographic factor associated with specific retirement planning behaviors such as savings (DeVaney & Zhang, 2001).

Hypothesis 11 predicted that children in the household will be less likely to express an intention of planning for retirement. The presence of children in the household was associated with retirement planning intention. The negative coefficient suggests that those with children are less likely to be interested in retirement planning than those without children.

Implications

The results support existing research, indicating that retirement planning is the most frequently selected financial planning priority of individuals. A goal of this study is to gain a deeper understanding of the financial wellness challenges faced by employees in the workplace for the purpose of improving the design and implementation of workplace financial wellness programs. These findings provide insight into the factors associated with the desire to engage in retirement planning activities. These results also highlight the importance of taking a comprehensive approach to understanding financial wellness in the workplace. Retirement planning intention may be the most common financial planning topic of interest among employees but it is not the only area of concern for employees. In fact, findings suggest that improvements in certain areas that impact overall financial wellness may actually clear the path for employees to begin focusing on long-term retirement planning behaviors.

In addition to identifying retirement planning as the top priority for employees, this study also identified managing cash flow and getting out debt as other key financial planning topic areas for which employees intend to seek additional guidance and financial education. Core financial management behaviors, such as maintaining a budget or personal spending plan, actively saving for emergencies, and paying bills on time, are specific financial behaviors that

are associated with financial wellness. The desire to make improvements in one's financial life may also prompt many employees to seek guidance to improve their financial wellness. In fact, these core financial management behaviors are of fundamental importance for employees seeking to find additional ways to save and/or pay down debt. While most financial planning practitioners generally recommend that employees take full advantage of the employer match if one is provided, it often makes sense to shift the focus from contributing to a retirement plan at work once the employee contributions reach the amount need to obtain the maximum employer match. High interest consumer debt can often cost more than the historical average for investment gains in capital markets over long periods of time. It is based on this premise that practitioners generally view consumer debt management as a precursor to certain retirement planning behaviors such as making contributions that go beyond the threshold needed to get an employer match if one is provided. Other financial topics of interest such as investing, college planning, reducing income taxes, estate planning, and insurance planning round out the list of financial planning intentions by category in their order of importance to employees in this study.

This study also helps bring to light just how critical a comprehensive financial wellness assessment is during the development and implementation of workplace financial education programs. Comprehensive assessment of financial wellness across various employee groups may be used to help educators and practitioners determine financial planning intentions. Financial wellness assessments also allow researchers and practitioners to evaluate the efficacy of financial education and wellness programs in the workplace.

Limitations and Recommendations

The results of the current study are somewhat limited in that it examines the outcome variable of retirement planning intention without the ability to assess the priority ranking of this

intention. Respondents are asked to choose their top three most important financial planning topics but the dataset did not allow for the rank ordering of topics. It would be more informative to be able to see how users of the Financial Wellness Assessment (Financial Finesse, 2013) rank-order the financial planning topics. This development would allow researchers to interpolate more from the data set.

Another limitation of the study is that it only includes active participants in a comprehensive financial wellness program. The generalization of these results is limited to employees of a large employer in the health care plan industry. Furthermore, respondents to the patent pending Financial Wellness Assessment (Financial Finesse, 2013) and the PFW Scale ™ (Prawitz et al., 2006) had a wide range of previous exposure to workplace financial education or prior work with a financial planner or investment professional outside of employer sponsored retirement plan. The data set did not allow for the differentiation between various levels of current or prior exposure to workplace financial education. The data set also excluded employees who stated they did not use credit cards. This limited the results to only include credit card users. As a result the final data set experienced a slight increase in overall financial wellness scores. This was potentially due to the removal of employees who either do not qualify for credit cards or avoid using them altogether.

A few of the measurements used to test variables in this study have not been empirically tested. In addition, the study does not measure previous exposure to financial wellness programming in the workplace. Additional research is needed to examine if retirement planning intention is indeed associated with actual retirement planning activities such as calculating retirement income needs, creating a budget plan for retirement, or talking to a spouse or partner about future life goals. Future retirement planning research should identify the effectiveness of

different types of financial education programs in encouraging holistic retirement planning. Furthermore, this data set does not have the ability to measure other extraneous variables, such as working with a financial advisor or the extent of prior retirement planning activities.

Despite the inherent limitations of this study, the findings provide suggestions for further research. This dataset is valuable in that it measures a sample of participants actively engaged in a workplace financial wellness program. Future studies would benefit from the use a more comprehensive measurement of financial wellness. According to Joo (2008), financial wellness consists of the following subcomponents: objective financial status, financial satisfaction, subjective perception (e.g., financial attitude, financial knowledge), and financial behaviors. Exploratory studies of the PFW Scale™ (Prawitz et al., 2006) generally acknowledge that this frequently used assessment tool measures 3 out of 4 components of financial wellness (e.g., financial satisfaction, objective financial status, and financial attitudes). Predictor variables such as core financial management behaviors should also be included to obtain a comprehensive assessment of financial wellness. The items used in this study from the Financial Wellness Assessment created by Financial Finesse (2013), a provider of workplace financial wellness programs, primarily measures subjective perceptions and financial behaviors. Future research studies exploring financial wellness in the workplace could include other potential variables of interest that adequately fit Joo's (2008) conceptual model of personal financial wellness. Some examples of these variables include perceived and objective financial knowledge, core and advanced financial behaviors, and objective measures of financial status that look beyond positive cash flow and maintaining emergency funds.

Additionally, these findings suggest that financial wellness programs in the workplace should not be created with a "one-size-fits-all" mindset. In order to encourage individuals in

certain demographic groups to engage in retirement planning activities a more holistic approach is needed that addresses other financial planning priorities. As mentioned previously retirement planning and investing have traditionally been the most common areas of focus within workplace financial education programs. Fortunately, the advancement of financial education programs that address the personal financial wellness of employees and program participants has shifted the focus to a more comprehensive range of financial planning topics. This study provides additional evidence that many financial wellness gaps still exist across many different employee groups based on the significant differences found using a combination of financial wellness and demographic variables. One way to address this is to provide employees with access to financial education content that includes search by topic features and also provides guidance based on key life events such as buying a home, having a child, getting married, etc. Other methods of delivering financial education and wellness guidance to employees include a broad range of services such as webinars, live workshops, online videos, and interactive financial wellness assessments that provide immediate feedback accompanied by tools and resources that participants can use to implement financial planning recommendations.

Although this study aids in understanding the factors that influence retirement planning behavior, future research is needed to gain a deeper understanding of the impact financial wellness factors have on retirement planning intention. Given the fact that the study only looks at participants in an employer provided financial wellness program, readers need to recognize the lack of generalizability of the sample. It is possible that due to the sample's current access to financial education in the workplace these findings may not translate to employees without access to employer provided financial guidance.

Despite these inherent limitations, the findings of this study demonstrate the influence that subcomponents of financial wellness have on the desire to engage in retirement planning activities. Additional research is needed to understand the most effective methods to comprehensively assess financial wellness. More research is also needed to examine the association between personal financial wellness and retirement planning intention. Future studies of specific retirement behaviors and subjective perceptions associated with positive retirement planning outcomes would also provide additional insight toward understanding motivators for retirement planning. Some of the potential explanatory variables that merit further exploration include financial knowledge (objective and subjective), future time perspective (Finke & Huston, 2013), and cognitive factors such as optimism. From a practical perspective financial planning practitioners, human research professionals, and retirement plan consultants can use these results to design and implement behavior changing financial wellness programs.

References

Adams, G. A., & Rau, B. L. (2011). Putting off tomorrow to do what you want today. *American Psychologist*, *66*(3), 180-192.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179-211.

Ameriks, J., Caplin, A., & Leahy, J. (2002). Wealth accumulation and the propensity to plan. *National Bureau of Economic Research*, Working Paper #8920.

Ando, A., & Modigliani, F. (1963). The" life cycle" hypothesis of saving: Aggregate implications and tests. *The American Economic Review*, 55-84.

Andrew, F. M., & Withey, S. B. (1976). Social indicators of well-being. *New York and London: Plenum*, 20-31.

Archuleta, K. L., Britt, S. L., Tonn, T. J., & Grable, J. E. (2011). Financial satisfaction and financial stressors in marital satisfaction. *Psychological Reports*, *108*(2), 563-576.

Atchley, R. C. (1991). Social forces and aging (6th ed.). Belmont, CA: Wadsworth.

Baek, E., & DeVaney, S. A. (2004). Assessing the baby boomers' financial wellness using financial ratios and a subjective measure. *Family and Consumer Sciences Research Journal*, *32*, 321-348.

Benartzi, S. (2012). *Save More Tomorrow: Practical Behavioral Finance Solutions to Improve 401 (k) Plans*. Penguin.

Brucker, E., & Leppel, K. (2013). Retirement plans: Planners and nonplanners. *Educational Gerontology*, *39*(1), 1-11.

Cavanagh, J. A., & Sharpe, D. L. (2002). The impact of debt levels on participation in and level of discretionary retirement savings. *Financial Counseling and Planning*, *13*(1), 47-62.

Certified Financial Planner Board of Standards (2009). 2009 National consumer survey on personal finance. Retrieved from http://www.cfp.net/media/consumersurveys.asp.

Certified Financial Planner Board of Standards (2010). American's views on the economy and financial system. Retrieved from http://www.cfp.net/downloads/cfpboard_public_opinion_survey2010-07.pdf

Chatterjee, S. (2010). Retirement savings of private and public sector employees: A comparative study. *Journal of Applied Business Research, 26*(6), 95-102.

Chien, Y., & DeVaney, S. A. (2001). The effects of credit attitude and socioeconomic factors on credit card and installment debt. *The Journal of Consumer Affairs, 35*(1), 162-179.

Collins, J. (2010). A review of financial advice models and the take-of financial advice. Center for Financial Security WP, 10, 5.

Congressional Budget Office (2013). Federal Debt and the Statutory Limit, June 2013. Retrieved from: http://www.cbo.gov/sites/default/files/cbofiles/attachments/44324-FederalDebt.pdf

Copeland, C. (2013). Individual Retirement Account Balances, Contributions, and Rollovers, 2011: The EBRI IRA Database. EBRI Brief #386. Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_05-13.No386.IRAs.pdf

Croy, G., Gerrans, P., & Speelman, C. (2010). The role and relevance of domain knowledge, perceptions of planning importance, and risk tolerance in predicting savings intentions. *Journal of Economic Psychology*, *31*(6), 860-871.

Davis, K., & Hustvedt, G. (2012). It's a matter of control: Saving for retirement. *International Review of Social Sciences, 3*(2), 248-261.

DeVaney, S. A., & Zhang, T. C. (2001). A cohort analysis of the amount in defined contribution and individual retirement accounts. *Financial Counseling and Planning, 12*(1), 89-102.

Ekerdt, D. J., Hackney, J., Kosloski, K., & DeViney, S. (2001). Eddies in the stream the prevalence of uncertain plans for retirement. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *56*(3), S162-S170.

Elder, H. W., & Rudolph, P. M. (1999). Does retirement planning affect the level of retirement satisfaction? *Financial Services Review*, *8*(2), 117-127.

Elmerick, S. A., Montalto, C. P., & Fox, J. J. (2002). Use of financial planners by US households. *Financial Services Review*, *11*(3), 217-231.

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1990). Consumer Behavior (6th ed.). Orlando, FL: Dryden Press.

Fidelity Benefits Consulting (2012). 2012 Retiree Health Care Cost Estimate. Retrieved from: http://www.fidelity.com/inside-fidelity/indivdiual-investing/retiree-health-care-costs-2012

Field, A. (2006). *Discovering statistics using SPSS* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Financial Finesse (2013). *Best Practices Guide: How to Design and Implement Behavior Changing Financial Wellness Programs*. Financial Finesse: El Segundo, California.

Finke, M. S., & Huston, S. J. (2013). Time preference and the importance of saving for retirement. *Journal of Economic Behavior & Organization, 89,* 23-34.

Fisher, P. J. (2010). Gender differences in personal saving behaviors. *Journal of Financial Counseling and Planning*, *21*(1), 14-24.

Garman, E. T., & Forgue, R. (2010). *Personal Finance.* Mason, OH: Southwestern Cengage.

Gottschalck, A. O. (2008). Net worth and the assets of households: 2002. (Current Population Reports P70-115). Washington, DC: U.S. Census Bureau.

Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2014). The 2014 Retirement Confidence Survey: Confidence rebounds- for those with retirement plans. *EBRI Issue Brief*(397). Retrieved from http://ebri.org/pdf/surveys/rcs/2014/EBRI_IB_397_Mar14.RCS.pdf

Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2013). The 2013 Retirement Confidence Survey: Perceived savings needs outpace reality for many. *EBRI Issue Brief*, (384). Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-13.No384.RCS1.pdf

Helman, R., Copeland, C., & VanDerhei, J. (2012). The 2012 retirement confidence survey: Job insecurity, debt weigh on retirement confidence, savings. *EBRI Issue Brief*, (369). Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-2012_No369_RCS2.pdf

Helman, R., & Paladino, V. (2004). Will Americans ever become savers? The 14th Retirement Confidence Survey, Issue Brief 268. Washington D.C.: Employee Benefit Research Institute: Author.

Hershey, D. A., & Jacobs-Lawson, J. (2012). Bridging the gap: Anticipated shortfalls in future retirement income. *Journal of Family and Economic Issues*, *33*(3), 306-314. doi: http://dx.doi.org/10.1007/s10834-012-9281-8

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, *89*, 309-322.

Hira, T. K., & Mugenda, O. M. (1998). Predictors of financial satisfaction: Differences between retirees and non-retirees. *Financial Counseling and Planning*, *9*(2), 75-83.

Hogarth, J. M. (1991). Asset management and retired households: Savers, dissavers, and alternators. *Financial Counseling and Planning*, *2*(2), 97-121.

Howlett, E., Kees, J., & Kemp, E. (2008). The role of self-regulation, future orientation, and financial knowledge in long term financial decisions. *The Journal of Consumer Affairs, 42*(2), 223-242.

Jacobs-Lawson, J., & Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement saving behaviors. *Financial Services Review, 14*(4), 331-344. Retrieved from http://search.proquest.com.er.kib.k-state.edu/docview/212016099?accountid=11789

Joo, S. (1998). Personal financial wellness and worker job productivity. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University. Blacksburg.

Joo, S. (2008). Personal financial wellness. In J.J. Xiao (Ed.), *Handbook of consumer finance research* (pp.21-33). New York: Springer.

Joo, S., & Garman, T. (1998). Workers want more than retirement education at their workplace: A report of research findings. *Personal finances and worker productivity, 2*(2), 156-161.

Joo, S., & Grable, J. E. (2000). Improving employee productivity: The role of financial counseling and education.*Journal of Employment Counseling, 37*(1), 2-15. Retrieved from http://search.proquest.com.er.lib.k-state.edu/docview/237022345?accountid=11789

Joo, S. H., & Grable, J. E. (2001). Factors Associated with Seeking and Using Professional Retirement-Planning Help. *Family and Consumer Sciences Research Journal, 30*(1), 37-63.

Joo, S., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues, 25*(1), 25-50. Retrieved from http://search.proquest.com.er.lib.k-state.edu/docview/197960519?accountid=11789

Joo, S., & Grable, J. E. (2005). Employee education and the likelihood of having a retirement saving program. *Financial Counseling and Planning*, *16*(1), 37-49.

Kim, J. (2008). Workplace financial education. In J.J. Xiao (Ed.), *Handbook of consumer finance research* (pp.375-386). New York: Springer.

Kim, J., & Garman, E. T. (2003). Financial stress and absenteeism. An empirically derived model. *Financial Counseling and Planning*, *14*(1), 31-42.

Kim, J., Sorhaindo, B., & Garman, E. T. (2006). Relationship between financial stress and workplace absenteeism of credit counseling clients. *Journal of Family and Economic Issues*, *27*(3), 458-478.

Loibl, C., & Hira, T. (2006). A workplace and gender-related perspective on financial planning information sources and knowledge outcomes. *Financial Services Review*, *15,* 21-42. http://www2.stetson.edu/fsr/abstracts2/V15-1%20A2.pdf

Lusardi, A. (1999). Information, expectations, and savings for retirement. In H. J. Aaron (Ed.), Behavioral dimensions of retirement (pp. 81-115). Washington, DC: Brookings Institution Press.

Lusardi, A., & Mitchell, O. S. (2005). Financial literacy and planning: Implications for retirement wellbeing (No. w17078). *National Bureau of Economic Research*.

Lusardi, A., & Mitchell, L. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education. *Business Economics*, *42*(1), 35-44.

Malone, K., Stewart, S. D., Wilson, J., & Korsching, P. F. (2010). Perceptions of financial well-being among American women in diverse families. *Journal of Family and Economic Issues*, *31*(1), 63-81.

Mann, A. L., & Mann, R. J. (2011). Debt, Financial Distress, and Bankruptcy over the Life Course.

Mayer, R. N., Zick, C. D., & Marsden, M. (2011). Does calculating retirement needs boost retirement savings? *Journal of Consumer Affairs, 45*(2), 175-200.

Munnell, A. H., Sunden, A., & Taylor, C. (2000). What Determines 401(k) Participation and Contributions? Center for Retirement Research at Boston College CRR WP 2000-12, December.

Munnell, A. H., Webb, A., & Golub-Sass, F. (2012). The national retirement risk index: An update. *Center for Retirement Research Report,* 12-20.

Neukam, K. A., & Hershey, D. A. (2003). Financial inhibition, financial activation, and saving for retirement. *Financial Services Review, 12*, 19-37.

Ng, T., Tay, W., Tan, N., & Lim, Y. (2011). Influence of investment experience and demographic factors on retirement planning intention. *International Journal of Business and Management, 6*(2), 196-203. Retrieved from http://search.proquest.com.er.lib.k-state.edu/docview/848413217?accountid=11789

Noone, J., Alpass, F., & Stephens, C. (2010). Do men and women differ in their retirement planning? Testing a theoretical model of gendered pathways to retirement preparation. *Research on Aging November, 32*(6), 715-738.

Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). InCharge financial distress/financial well-being scale: Development, administration, and score interpretation. *Financial Counseling and Planning, 17*(1), 34-50.

Profit Sharing Council of America. (2012). *55th Annual Survey: PSCA's Annual Survey of Profit Sharing and 401(k) Plans.* Plan Sponsor Council of America, Chicago, IL.

Robb, C. A., & Woodyard, A. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning*, *22*(1), 60-70.

Robertson, L., Ward, G. A., Davidson, L., & Anderson, N. (2012). Financial Finesse Reports: 2012 Research on Financial Stress. Retrieved from: http://www.financialfinesse.com/wp-content/uploads/2012/05/2012_Financial_Stress_Report.pdf

Stawski, R. S., Hershey, D. A., & Jacobs-Lawson, J. M. (2007). Goal clarity and financial planning activities as determinants of retirement savings contributions. *The International Journal of Aging and Human Development*, *64*(1), 13-32.

U. S. Department of Commerce, Bureau of the Census. (2010). *The next four decades. The older population in the United States: 2010 to 2050* (CB Publication No. P25-1138). Retrieved from http://www.census.gov/prod/2010/pubs/p25-1138.pdf

VanDerhei, J., & Adams, N. E. (2013). A little help: The impact of on-line calculators and financial advisors on setting adequate retirement-savings targets: Evidence from the 2013 Retirement Confidence Survey (March 1, 2013). EBRI Notes, 34(3). Available at SSRN: http://ssrn.com/abstract=2244409

Ward, G. A., Davidson, L., Robertson, L., Spann, S., & Spencer, D. (2013). State of U.S. employee retirement preparedness. Financial Finesse: Research on Financial Trends. Retrieved on February 22, 2014 from: http://www.financialfinesse.com/wp-content/uploads/2013/09/2013_Retirement_Preparedness_Research_Report_FINAL.pdf

Wiatrowski, W. J. (2012). The last private industry pension plans: A visual essay, December 2012. *Monthly Labor Review, 12,* 3-18. Retrieved from: http://www.bls.gov/opub/mlr/2012/12/art1full.pdf

Zhong, L. X. (1994). Factors associated with bond and stock holdings. *Consumer Interests*

Annual, 40, 359-360.

Zick, C. D., Mayer, R. N., & Glaubitz, K. (2012). The kids are all right: Generational differences in responses to the great recession. *Journal of Financial Counseling and Planning Volume, 23*(1), 3-16.

Chapter 4 - Exploring the Association between Financial Wellness and Retirement Preparedness

Introduction

In recent years a substantial body of research has focused on the retirement concerns of Americans (see Helman, Adams, Copeland, & VanDerhei, 2013; Hershey & Jacobs-Lawson, 2012; Lusardi & Mitchell, 2006; Munnell, Golub-Soss, Soto, & Webb, 2008) and the majority of individuals need to make significant changes to improve their retirement outlook. The retirement landscape has changed dramatically in the past couple of decades with the decreasing percentage of pension plans available through employers (Wiatrowski, 2012). As a result, the burden of providing retirement income rests primarily on the shoulders of the retiree. The importance of retirement preparedness is paramount as increased life expectancies create the likelihood that future retirees will need to meet their consumption needs over a longer period of time requiring greater wealth accumulation. Additional concerns, such as the rapid rise health care costs and concerns about the long-term financial stability of Social Security (Social Security and Medicare Boards of Trustees, 2013), place increased pressure on individuals and families preparing for financial independence beyond their working years. The purpose of this study is to explore the relationship between various components of financial wellness and perceived retirement preparedness among employees participating in a workplace financial wellness program.

The combined factors of reduced access to employer provided pension plans, increased longevity, rising health care costs, and uncertainty regarding the long-term stability of Social Security has increased the focus on individual retirement savings. This recent shift places a growing concern on the retirement planning behaviors of future retirees. Research studies have focused a great deal of emphasis on the retirement savings behaviors of pre-retirees. Despite

increased focus on retirement preparedness in recent decades many employees in the workforce do not appear adequately prepared for retirement. A significant body of research on the topic of retirement preparedness exists with most published studies focusing actual financial stability and the amount of retirement income generated from various sources such as pension income, Social Security, and personal savings (Jacobs-Lawson & Hershey, 2003; Munnell et al., 2008). According to the National Risk Index (Munnell, Webb, & Golub-Sass, 2012), over half of the households in the United States are at risk of being unable to maintain the retirement income to meet their current lifestyle expenses. A recent examination of the 2010 Survey of Consumer Finances looked at the financial ratios for employees using an objective measure (wealth-to-income ratio) to assess retirement preparedness and found that this ratio dropped significantly in 2010 after remaining stable during 1983-2007 (Munnell et al., 2012). Most recently, the 2013 Retirement Confidence Survey by the Employee Benefit Research Institute (Helman et al., 2013) indicated that 28% of American workers were not at all confident about their ability to live a comfortable retirement. Additional research provides support for the findings that retirement confidence levels are low for many Americans and their ability to achieve financial independence in retirement is in jeopardy (Helman, Copeland, & VanDerhei, 2012; Ward, Davidson, Robertson, Spann, & Spencer, 2013). A 2013 Financial Finesse survey indicated that only 20% of employees reported confidence in their ability to meet retirement income goals (Ward et al., 2013).

The term retirement preparedness is commonly used to assess the ability to meet future retirement planning goals. Some studies view retirement preparedness primarily in terms of financial adequacy measurements that use objective financial status to determine if people are "at risk of being unable to maintain their standard of living in retirement" (Munnell et al., 2008, p.

1). Other studies, such as the Employee Benefit Research Institute's Retirement Confidence Survey, focus on subjective measures of retirement confidence (Helman et al., 2012). With retirement preparedness concerns so prevalent amidst the changing landscape of retirement in this country, it is important to examine both objective and subjective elements of the retirement planning process. In the past, retirement preparedness research studies have primarily focused on objective measures of financial adequacy prior to and during retirement. On the subjective side, Hershey, Jacobs-Lawson, McArdle, and Hamagami (2007) noted a general lack of research on psychosocial factors that influence financial planning for retirement.

This study conceptualizes retirement preparedness as consisting of objective financial status factors and subjective factors. The subjective component is referred to in this study as perceived retirement preparedness and it is synonymous with the concept of retirement confidence (Joo & Grable, 2005; Kim, Kwon, & Anderson, 2005; Helman et al., 2013). The study of perceptions surrounding retirement preparedness is supported by a substantial body of research across multiple disciplines indicating that perception is associated with actual behavior (e.g., Ajzen, 1991; Bandura, 1977; Perry & Morris, 2005). In the context of retirement planning, perceived retirement preparedness is associated with financial preparedness (Noone, Alpass, & Stephens, 2010) and affects retirement planning behaviors (Joo & Pauwels, 2002). Munnell et al. (2008) found that most households have a general sense of their retirement preparedness when comparing perceptions with actual data using the National Retirement Risk Index. In general, individuals who are better prepared for retirement develop more positive attitudes toward the concept of retirement itself. In a retirement planning context these positive attitudes are generally referred to as retirement confidence or retirement preparedness. Retirement confidence has been found to be associated with confidence in programs such as Social Security and Medicare (Kim,

Kwon, & Anderson, 2005), as well as the availability of defined benefit pension plans (Chatterjee, Salter, & Harness, 2011). Previous studies have demonstrated that good health was one of the strongest predictors of retirement attitudes (Kim et al., 2005; Taylor & Shore, 1995). Not surprisingly, wealth and income are also significant contributors to positive retirement attitudes (Kim et al., 2005). Previous studies have also demonstrated that higher education and being married are associated with better preparedness for retirement (Chatterjee, Finke, & Harness, 2009; Joo & Pauwels, 2002; Taylor & Doverspike, 2003).

Pre-retirement financial planning behaviors have been found to be positive predictors of perceived retirement preparedness. Research studies have shown that a relationship exists between financial knowledge and retirement preparedness (Lusardi & Mitchell, 2006). Many of the contributing factors to retirement preparedness that have been examined in the literature such as financial status, financial behaviors, and financial knowledge have been conceptualized as subcomponents of personal financial wellness (Joo, 2008). Financial wellness is a prevalent term used to describe an individual's financial health and is also an important factor that contributes to one's overall sense of well-being (Joo, 2008). However, there is little research specifically applying Joo's (2008) conceptual model of financial wellness to predict the likelihood of perceived retirement preparedness.

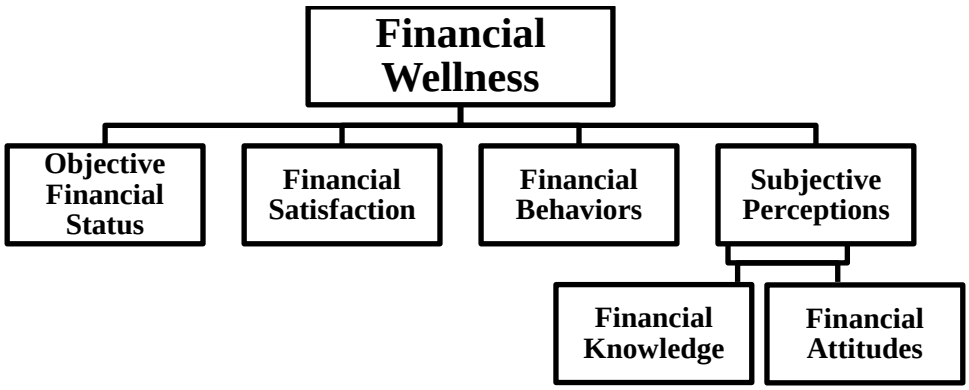
The purpose of this study is to explore the association between subcomponents of financial wellness (i.e., objective financial status, financial satisfaction, financial behaviors, and subjective perceptions) on the perceived retirement preparedness of individuals participating in a workplace financial wellness program. The majority of research related the concept of financial wellness has focused on money management, credit, and debt management. However, few studies have specifically examined the relationship between objective and subjective components

of financial wellness as predictors of perceived retirement preparedness. Due to the growing interest in financial wellness in the workplace it is important to gain a deeper understanding of how various factors of financial wellness contribute to perceived retirement preparedness of employees actively engaged in retirement planning activities. Results of this study will be useful in helping financial professionals design and implement financial wellness programs in the workplace. Further exploration of factors that influence the likelihood of expressive subjective retirement preparedness will help deepen the understanding of ways to increase retirement planning and saving behaviors.

Theoretical Review and Related Literature

Financial wellness refers to the assessment of an individual's financial health and is also related to the overall sense of well-being. The concept of financial wellness includes objective and subjective measures of financial status. According to Joo (2008), the primary components of financial wellness consist of objective measures, financial satisfaction, financial behaviors, and subjective perceptions. Financial attitudes and financial knowledge are additional sub-components of subjective perceptions. An illustration of the complete conceptual framework is presented in Figure 4.1.

Figure 4.1. Joo's (2008) Financial Wellness Model



Objective Financial Status

The term objective financial status refers to the assessment of quantitative measures of an individual's financial health. Objective financial status is a component of financial wellness and these objective financial measures include income, assets, debt, household net worth, total wealth, and financial ratios (Joo, 2008). Numerous studies have found that higher household income has a positive association with retirement confidence (Helman et al., 2013; Joo & Pauwels, 2002; Kim et al., 2005).

Financial Satisfaction

Financial satisfaction is an individual's assessment of financial resource adequacy (Hira & Mugenda, 1998). As a component of financial wellness (Joo, 2008), financial satisfaction is also viewed as a component of overall life satisfaction and well-being (Plagnol, 2011). Researchers have defined financial satisfaction as an overall level of satisfaction with one's financial situation (Joo & Grable, 2004) and this often includes an assessment of financial measures such as income and net worth (Plagnol, 2011) as well assets that can be used to meet future life goals (Hira & Mugenda, 1998). Financial satisfaction consists of one's sense of

contentment with material (objective) and non-material (subjective) aspects of their financial situation (Joo & Grable, 2004). Financial satisfaction has been found to have a positive association with age, income, and education. Individuals with higher levels of financial knowledge and positive financial management behaviors have a greater tendency to report increased financial satisfaction (Joo & Grable, 2004; Loibl & Hira, 2005). Previous research also suggests that when compared to household income and other demographic factors, financial behaviors have a more significant effect on financial satisfaction (Joo & Grable, 2004).

Financial Behaviors

Financial wellness has been linked to positive financial management behaviors (Joo, 2008). Hilgert, Hogarth, and Beverly (2003) examined the relationship between actual financial behaviors and financial knowledge and found that knowledgeable consumers act more prudently. Financial behaviors commonly associated with increased financial wellness include having manageable debt, following a systematic savings plan, following a budget, money related agreements with family or partner (Joo & Grable, 2004). Financial behaviors have consistently been examined with regards to their relationship with achieving financial goals (Joo, 1998; Kim, 2000). Some of the financial behaviors related to financial wellness include maintaining reasonable and low debt (Gutter & Copur, 2011). Individuals who actively contribute to savings on a regular basis report higher financial wellness. Research studies also identified a relationship between financial wellness and activities related to creating and following a personal spending plan. The retirement security of Americans has become increasingly dependent on frequency, duration, and amount of individual savings throughout an individual's working career. The majority of retirement studies have focused on financial behaviors related to saving for retirement. The act of establishing a retirement savings program and being financially prepared

for retirement are related concepts. The financial behaviors associated with saving for retirement are also related to retirement confidence (Joo & Grable, 2005). Joo and Pauwels (2002) found that people who actively save for retirement have increased levels of retirement preparedness and retirement confidence. Desire and ability to save for retirement has been associated with factors related to environmental influences, individual differences, and psychological factors (Engel, Blackwell, & Miniard, 1990).

Many retirement planning activities, such as calculating one's projected income needs during retirement (Garman & Forgue, 2010; Mayer, Zick, & Marsden, 2011) and information search actions (e.g., attending a retirement seminar and consulting a financial professional) (Elder & Rudolph, 1999), have been shown to improve the likelihood of positive retirement planning outcomes. Joo and Grable (2005) found that the financial behavior of having a retirement savings program in place has the ability to increase retirement confidence. Calculating one's ability to meet income objectives during retirement is another financial planning behavior positively related to retirement preparedness (Garman & Forgue, 2010; Mayer et al., 2011). Kim and associates (2005) found that individuals who calculate their retirement needs have higher retirement confidence. Financial planning behaviors are significantly associated with age as older individuals have been shown to exhibit more engagement in all aspects of the financial planning process including retirement planning (Hershey, Henkens, & Van Dalen, 2010).

Other studies regarding financial behaviors related to retirement preparedness have focused on investor risk tolerance. This is especially important as women tend to have lower risk tolerance than men (Byrnes, Miller, & Schaefer, 1999). However, women on average tend to live longer and will tend to spend more years in retirement than men requiring greater focus on financial behaviors related to assessing their tolerance for risk.

Subjective Perceptions

The subjective perception of an individual's financial status is a component of financial wellness (Joo, 2008). According to Joo's conceptual framework of financial wellness, subjective perceptions include financial attitudes and financial knowledge.

Financial Attitudes. Financial attitude is a component of financial wellness and is related to subjective perceptions of financial health. Financial attitudes examined in previous financial wellness studies include financial stress (Prawitz et al., 2006), financial anxiety (Archuleta, Dale, & Spann, 2013), debt-related attitudes, and optimism (Norvilitis et al., 2006). Financial stress is often cited as a leading source of distress in people's lives and it is negatively associated with measures of personal health (Drentea & Lavrakas, 2000), family relationships, and work productivity (Kim & Garman, 2003). Debt related research identified a moderate relationship between debt and psychological problems, such as depression and anxiety (see Archuleta et al., 2013). Research studies demonstrate debt is associated with lower reported financial well-being and greater overall stress (Norvilitis et al., 2006). Risk tolerance is another financial attitude that has been extensively reviewed and is related to financial satisfaction (Joo & Grable, 2004). Risk aversion has been shown to have a negative association with retirement confidence (Joo & Pauwels, 2002). Robb and Woodyard (2011) suggested that financially confident individuals are more likely to take action and perform best practice financial planning behaviors. Investor confidence is an example of a financial attitude that changes over time (Shiller, 2000) and has been defined as a feeling that nothing can go wrong. Another financial attitude related to investing is confidence that a current investment portfolio is properly allocated across different asset classes such as stocks, bonds, and cash.

Financial Knowledge. Financial knowledge is another significant component of subjective perception (Joo, 2008). Knowledge related to retirement concepts has been found to be positively associated with attitudes related to retirement itself (Hershey & Mowen, 2000). Hogarth, Beverly, and Hilgert (2003) argued that increased financial knowledge and experiential learning opportunities lead to improvements in the display of positive financial planning behaviors. Lusardi and Mitchell (2006) found that only about half of individuals surveyed had sufficient financial knowledge to allow them to calculate interest rates over a five-year period. Low financial knowledge becomes a significant retirement planning concern when employees with low levels of domain specific knowledge are faced with complex decisions like choosing pension options, selecting a retiree medical insurance plan, or determining when to begin receiving Social Security income (Pension Research Council, 2010). Robb and Woodyard (2011) identified that both objective and subjective financial knowledge have an impact on personal financial behaviors. However, subjective financial knowledge was found to have a larger influence on financial behavior demonstrating the importance of financial confidence.

Research Questions and Hypotheses

This study looks at how the subcomponents of financial wellness influence retirement preparedness among individuals in the workforce using retirement confidence as the outcome variable. The current study examines the association between subcomponents of financial wellness and perceived retirement preparedness among individuals in the workplace. Joo's (2008) conceptual model of financial wellness was used to broaden the understanding of how various factors that contribute to financial wellness influence an individual's perception of whether they are on track to meet their retirement planning goals. Financial satisfaction, objective financial status (e.g., income), subjective perception (e.g., financial knowledge and

financial attitudes), and financial behaviors are subcomponents of financial wellness according to Joo's (2008) conceptual framework used in this study to predict the likelihood of perceived retirement preparedness. Additionally, the study seeks to determine if specific financial planning behaviors across different personal finance topic areas are predictors of retirement preparedness. Based on the conceptual framework, hypotheses were developed for each subcomponent of financial wellness. Demographic variables were also examined based on related literature. The specific hypotheses to be tested in the study are listed below:

Financial Satisfaction

Hypothesis 1: As financial satisfaction increases, respondents will be more likely to report a sense of retirement preparedness.

Subjective Perception

Hypothesis 2: As subjective financial knowledge increases, respondents will be more likely to report a sense of retirement preparedness.

Hypothesis 3: As financial stress decreases, respondents will be more likely to report a sense of retirement preparedness.

Hypothesis 4: As confidence in one's investment plan increases, respondents will be more likely to report a sense of retirement preparedness.

Hypothesis 5: As comfort with non-mortgage debt increases, respondents will be more likely to report a sense of retirement preparedness.

Financial Behavior

Hypothesis 6: As adherence to financial planning behaviors increase, respondents will be more likely to report a sense of retirement preparedness.

Objective Financial Status

Hypothesis 7: As household income increases, respondents will be more likely to report a sense of retirement preparedness.

Demographic and Socioeconomic Factors

Hypothesis 8: Male respondents will be more likely to report a sense of retirement preparedness.

Hypothesis 9: Married respondents will be more likely to report a sense of retirement preparedness.

Hypothesis 10: Respondents without minor children in the household will be more likely to report a sense of retirement preparedness.

Hypothesis 11: Homeowners will be more likely to report a sense of retirement preparedness.

Methods

Sample Description

This study used a convenience sample of employees participating in a workplace financial wellness program provided by their employer as a voluntary employee benefit. Employees completed a Financial Wellness Assessment (FWA) for the purposes of assessing their current financial status and to identify priorities and vulnerabilities in their personal financial management. Respondents included employees from a large U.S. based corporation in the health care benefits industry. This study used data collected between January 1, 2012 and December 31, 2012. A total of 3,542 financial wellness assessments were used in this study. Individuals in this sample were provided voluntary access to an online financial learning center as part of an employer sponsored financial wellness benefit program.

The FWA is structured to include core questions that every employee receives and subsequent questions based on financial planning priorities and potential areas of vulnerabilities. This creates a personalized experience where respondents may not be presented with all questions. The financial wellness program was available to employees on an ongoing basis and repeat usage was encouraged. In the event an employee completed multiple FWAs during the time period of this study the final assessment was used to avoid multiple responses from the same respondent.

Dependent Variable

Perceived retirement preparedness was the dependent variable of this study. The single item used to measure the outcome variable of perceived retirement preparedness emphasized the intention of being able to replace current income during retirement. The question was as follows: "How likely are you to be able to replace 80% of your current income (or your own goal) during retirement?" This question is rooted in Modigliani's life cycle model which states that households attempt to smooth consumption over a lifetime (Modigliani & Brumberg, 1954). Therefore, it is realistic to make the assumption that households plan on replacing the same amount of pre-retirement income during their retirement years (Hanna & Chen, 2008). Selecting an appropriate and desirable retirement income rate is an important aspect of developing a solid and reliable financial plan for retirement. An income replacement rate is defined as the amount of pre-retirement income one expects to receive in retirement to adequately meet lifestyle expense needs (Hershey & Jacobs-Lawson, 2012). Replacement rates are generally expressed as a percentage of pre-retirement income. Although there is no absolute income replacement rate that is acceptable since income needs vary across different households, most financial educators and planners recommend replacement rate benchmarks that range between 70% and 90% of pre-retirement income (Brady, 2008; Reno & Lavery, 2007). The Financial Wellness Assessment

(Financial Finesse, 2013) item used to measure the dependent variable is based on this retirement planning heuristic. Financial Finesse has measured the state of employee retirement preparedness using this item on an annual basis since 2009 with positive responses that range from 14 percent in 2009 to 20 percent in 2013 reporting they are on track to meet retirement income goals (Ward et al., 2013). The item has been presented to employees from January 1, 2009 to present.

Independent Variables

As guided by Joo's (2008) conceptual framework, the independent variables selected represented subcomponents of personal financial wellness—objective financial status, financial satisfaction, financial behaviors, and subjective perceptions. Other predictor variables ancillary to the conceptual framework included the following demographic and socioeconomic variables: age, gender, marital status, presence of dependent children in household, homeownership, and race/ethnicity. The method of operationalizing each variable is described below.

Objective Financial Status. Annual household income was measured as a categorical variable. The six categories were coded as follows: 1 = under $35,000; 2 = $35,000 to $59,000; 3 = $60,000 to $74,999; 4= $75,000 to $99,999; 5 = $100,000 to $149,999; and 6 = over $150,000.

Financial Satisfaction. The financial satisfaction measure included a single item from the Personal Financial Wellness Scale™ (Prawitz et al., 2006), which asked respondents how satisfied they are with their present financial situation. Response values range from 0 (dissatisfied) to 10 (completely satisfied). Respondents reported a mean financial satisfaction of 5.01 (SD = 2.43), which is interpreted to mean that the average respondent reported being moderately satisfied with their present financial situation.

Financial Behaviors. Six categories of financial planning behaviors commonly viewed as best practice behaviors were identified with the intent of determining the behaviors with the strongest association to financial wellness. These include (a) money management, (b) debt and

credit management, (c) tax planning, (d) retirement planning, (e) insurance planning, and (f) estate planning. The financial behaviors were chosen based on their relevance to the major personal finance areas commonly addressed during the financial planning process. To further explore the relationship between financial behaviors and financial wellness, the financial behaviors were divided into two categories for a separate analysis. The categories were identified as core money management behaviors (money management, debt, and credit management) and more advanced financial behaviors (income tax planning, insurance planning, retirement planning, and estate planning). No specific investment planning behaviors were included due to an excessive amount of missing cases in the data set. In addition, the Financial Wellness Assessments available for use in this study were reduced to exclude respondents who indicated they did not use credit cards. This was done to ensure that each financial behavior item was measured with binary responses to account for whether the specific behavior had been performed by an individual (1) or not (0). The specific behavior items are shown in Table 4.1.

Table 4.1

Financial Behavior Items by Personal Finance Topic Area

Core Financial Behaviors
Money Management
1. I have a handle on my cash flow so I spend less than I make each month.
2. I pay my bills on time each month.
3. I have an emergency fund to pay bills for a few months if I lose my job.
Debt and Credit Management
1. I regularly pay off my credit card balances in full.
2. I check my credit report on an annual basis.
Advanced Financial Behaviors
Retirement Planning
1. I have used a retirement calculator.
2. I contribute to my retirement plan at work such as a 401(k), 457 or 403(b) plan.
Income Tax Planning
1. I adjust my withholding each year so I neither owe a large amount nor receive a large refund.
2. I maximize all available federal tax credits and deductions to reduce my tax liability.
Insurance Planning
1. I review my insurance coverage on an annual basis and I am confident that I am adequately covered by my health insurance and auto/homeowner's policies.
2. I carry enough life insurance to replace my income, pay for college expenses, and create an emergency fund for my beneficiaries.
3. I have long-term disability insurance in place to replace my salary in case I am ill or have an accident and am unable to work at my current job.
Estate Planning
1. I have written up legal documents such as a will or trust and made decisions about who should receive my assets and who should raise my children.
2. I have made sure that my beneficiary designations on insurance policies and retirement plans are up to date.

Note. Responses to each item were coded 1 = yes and 0 = no.

Subjective Perceptions. Subjective perceptions were measured with one subjective financial knowledge and three financial attitude items. General financial knowledge was not assessed in the survey, so a measure of perceived financial knowledge was used. Respondents were asked to respond to the following statement: I understand the tax implications of each of my investment and retirement accounts. Response options included no (coded as 0) and yes (coded as 1) with a score of 1 representative of higher perceived financial knowledge. The mean score for this item was .38 (*SD* = 49).

The first financial attitude was assessed using the following measure of financial stress adapted from the PFW Scale™:

1. What do you feel is the level of your financial stress today?
2. How stressed do you feel about your personal finances in general?

The potential responses to each item range in value from 1 (overwhelming stress) to 10 (no stress at all). Items are summed for a total score of 2 to 20 and subsequently divided by 2 to obtain a mean score. The financial stress scores range in value from 1 (overwhelming stress) to 10 (no stress at all). The mean reported financial stress score was 5.39 (*SD* = 1.98), which is interpreted to mean that the average respondent reported moderate financial stress.

The second financial attitude variable contained a measure of debt comfort from the Financial Wellness Assessment developed by Financial Finesse. Respondents were given the following statement regarding debt comfort: I am comfortable with the amount of (non-mortgage) debt I have. Response options included no (coded as 0), yes (coded as 1), or "I don't have debt" (coded as 1). The mean score for this item was .54 (*SD* = .50), which is interpreted to mean that just over half of the respondents reported being comfortable with their current non-mortgage debt levels.

The final financial attitude variable was an investment confidence measure adapted from Financial Finesse's (2013) Financial Wellness Assessment. Respondents were provided with the following statement: I feel confident that my investments are allocated appropriately between stocks, bonds, and cash based on my risk tolerance and time horizon. Response options included no (coded as 0), don't know (coded as 0), no, I don't currently have any investments (coded as 0), and yes (coded as 1). The mean score for this item was .28 (*SD* = .45), which is interpreted to mean the average respondent did not report confidence in their current asset allocation.

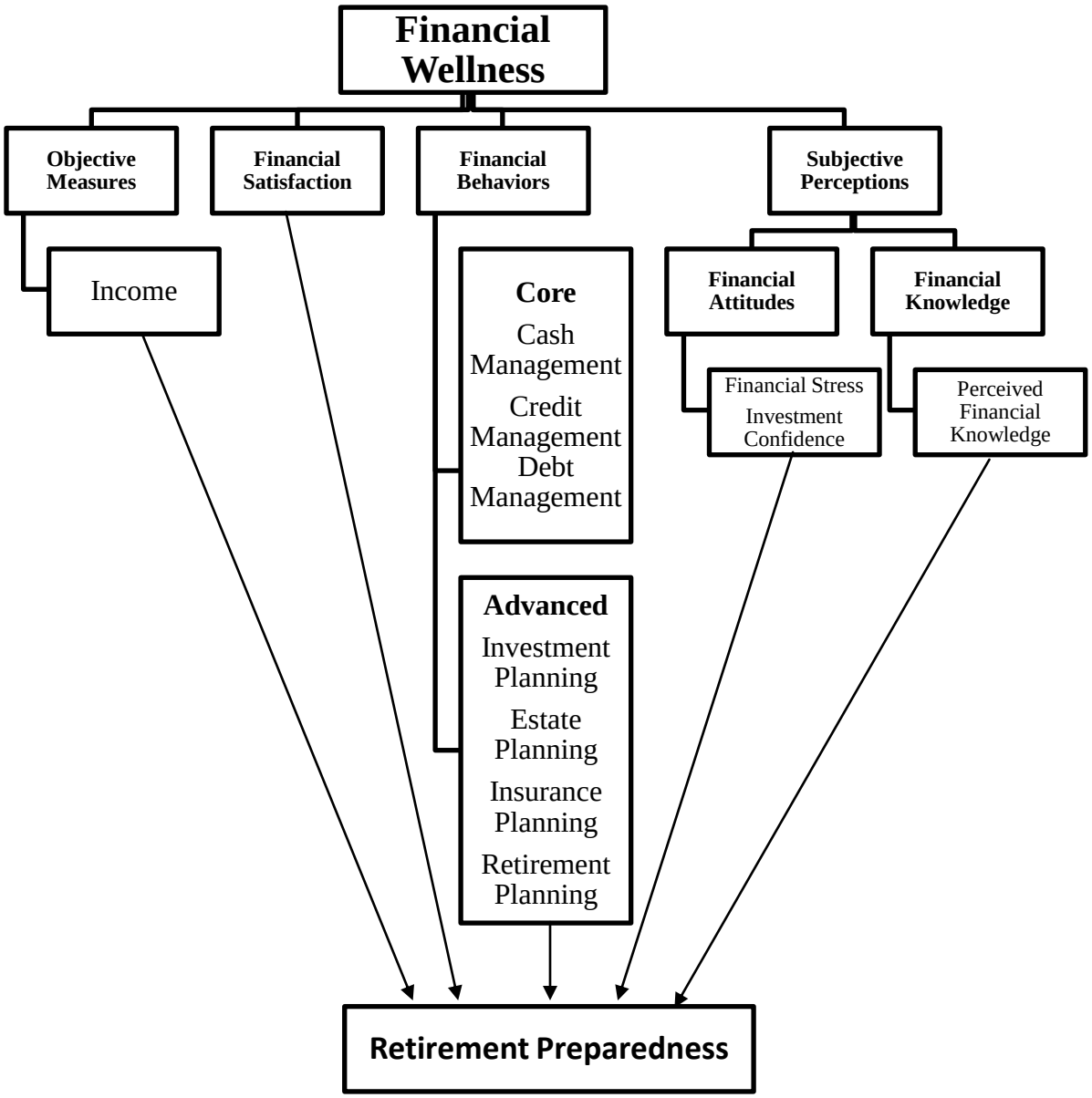
Demographic Characteristics. A total of six demographic variables were examined in this study including age, gender, marital status, presence of children in the household, homeownership, and race/ethnicity. Age was measured as a categorical variable coded 1 = under 30, 2 = 30 to 44, 3 = 45 to 54, 4 = 55 and above. Gender was coded as 0 if female and 1 if male. Marital status was coded as 0 if not married and 1 if married. The presence of children in the household was coded as 0 if no and 1 if the respondent reported one or more children. Homeownership was coded as 0 if no and 1 if yes (1= Yes, 0= No). Race/ethnicity options included the following: 0= Caucasian/White, 1= African American/Black, 2= Hispanic/Latino, 3= Asian American/Asian, 4 = other, and 5= Prefer not to answer. Due to small group sizes for certain race/ethnicity groups the responses were recoded as follows: Caucasian/White = 0 and Non-Caucasian/White responses were coded as 1. The reference category included respondents identifying as Caucasian/White.

Methods of Analysis

Statistical analyses were conducted using SPSS/PASW 22 for Windows. Logistic regression analysis was used to identify factors associated with perceived retirement preparedness. To test for potential multicollinearity issues within the data, variables were

analyzed using correlations (see Appendix A, Table A.3) and collinearity diagnostics within SPSS prior to running the logistic regression. Field (2006) noted that correlations above .80 should be avoided as well as VIF values above 10. Financial satisfaction and financial stress had a moderate correlation $r = .77$ and the respective VIF scores were 2.85 and 2.74. While these VIF scores were over 2.0 and potentially problematic they were below the recommended threshold for removal. The other moderate correlation above .60 was the relationship between being comfortable with current non-mortgage debt and the financial behavior paying off credit card balances in full ($r = .61$).

Figure 4.2: Conceptual Model Applying Joo's (2008) Framework



Results

The full sample characteristics are shown in Table 4.2. The sample was overrepresented by females (76%). Approximately 59% of the sample was married. Forty-four percent had a minor in the household. Results from the descriptive statistical analysis indicated that 14.1% reported being confident in their ability to meet retirement income goals. The median age group for

Table 4.2

Descriptive Statistics (N = 3,542)

Variables	*M*	*SD*	Range
Dependent Variable			
Perceived Retirement Preparedness	.14	.35	
Personal Demographic Factors			
Age			
Under 30	.12	.33	
30 to 44	.42	.49	
45 to 54	.29	.45	
55 and over	.16	.37	
Male	.24	.43	
Married	.59	.49	
Homeowner	.74	.44	
Minor(s) in household	.44	.50	
Race/Ethnicity			
Non-Caucasian/White	.26	.44	
Annual Household Income			
Under $35,000	.06	.24	
$35,000 to $59,999	.21	.41	
$60,000 to $74,999	.16	.37	
$75,000 to $99,999	.18	.39	
$100,000 to $149,999	.23	.42	
$150,000 and above	.15	.35	
Financial Satisfaction	5.01	2.43	1 to 10
Subjective Perceptions			
Perceived Financial Knowledge	.38	.49	
Financial Stress	5.39	1.98	1 to 10
Comfortable with Debt	.54	.50	
Investment Confidence	.28	.45	

Table 4.2

Continued

Variables	*M*	*SD*	Range
Financial Planning Behaviors (1 = Yes)	7.53	2.49	0 to 13
Core Financial Behaviors			
Handle on cash flow	.65	.48	
Pay bills on time each month	.87	.34	
Have an emergency fund	.49	.50	
Pay off credit cards in full	.48	.50	
Check credit report annually	.53	.50	
Advanced Financial Behaviors			
Contribute to retirement plan	.94	.24	
Adjust tax withholding each year	.37	.48	
Max tax credits and deductions	.44	.50	
Review insurance coverage	.79	.41	
Carry enough life insurance	.44	.50	
Have LTD insurance	.52	.50	
Have written legal documents	.27	.44	
Updated beneficiary designations	.77	.42	

respondents in this study fell into the age range of 30 to 44 years of age. The highest frequency household income group fell in the range of $100,000 to $149,999 followed by the $35,000 to $59,999 income group.

A forced entry logistic regression model was created for the purpose of identify factors associated with the likelihood of individuals perceiving they are on target to meet retirement income goals. Logistic regression was used to account for observations resulting from the addition of variables into the model predicting perceived retirement preparedness.

Logistic regression results are presented in Table 4.3. Without any predictor variables, the model classification accuracy was 85.9%, with the model specifying that 100% of respondents would demonstrate perceived retirement preparedness. When all of the variables were entered, the model was significant ($\chi^2 = 601.51$, $p < .001$), with the Cox and Snell pseudo R^2 statistic (.156) indicating the data were an acceptable fit to the model. Overall, the model showed moderate improvements in predicting group membership. The concordance between the predicted probability respondents demonstrated perceived retirement preparedness and the observed response was 86.5%. The exponentiated *B* column of Table 4.3 presents the odds ratio for each variable. Holding all else equal, analysis of the financial wellness variables indicated that financial satisfaction, financial knowledge, investment confidence, and income were significantly associated with retirement preparedness. Every one-point increase in financial satisfaction scores resulted in an approximate 16% increase in the predicted odds of demonstrating a sense of retirement preparedness. Respondents who reported being financially knowledgeable had predicted odds of reporting perceived retirement preparedness 1.29 times higher than those who did not report perceived financial knowledge. Analysis of financial attitude associated with investment confidence indicated that respondents with positive responses

had predicted odds to exhibit perceived retirement preparedness 3.37 times higher than those who were not confident their investment assets were allocated appropriately. Financial stress and debt comfort, the other financial attitude variables in the model, were not found to be statistically significant predictors of retirement preparedness. Household income was the only variable used in the study that measured objective financial status and was significantly associated with perceived retirement preparedness ($p < .01$). Higher household income categories demonstrated an increased likelihood of retirement preparedness in comparison to the reference category ($35,000 to $59,999) with statistically significant results found for the $100,000 to $149,000 income group ($p < .05$, $e^B = 1.36$) and for household income over $150,000 ($p < .001$, $e^B = 2.19$).

Holding all else equal, analysis of the final set of financial wellness variables, core and advanced financial behaviors, revealed that maintaining an emergency fund, checking credit reports regularly, contributing to a retirement plan, using available income tax credits and itemized deductions, carrying enough life insurance, having long term disability insurance, and having written legal documents (e.g., will and trusts) were also significantly associated with perceived retirement preparedness. Age was the only demographic variable other than household income found to be significantly associated with retirement preparedness. Younger employees were more likely to report feeling prepared for retirement. Holding all else equal, the odds of an individual under the age of 30 indicating they are on track to meet their retirement income goals were 2.06 times higher than those age 30 to 44. The 45 to 54 age group were less likely to perceive their retirement plans were on track ($e^B = 0.56$). Statistically significant differences were also found between the 55 and over age group and the reference group as this age category was also less likely to report being prepared for retirement compared to employees age 30 to 44.

Table 4.3

Logistic Regression Analysis for Variables Predicting Perceived Retirement Preparedness (N = 3,542)

Predictor	*B*	*SE B*	e^B
Male (reference = female)	.27	.12	1.31
Age (reference = 30 to 44)			
Under 30	.72***	.19	2.06
45 to 54	-.58***	.14	.56
55 and up	-.19***	.17	.82
Married (reference = not married)	-.18	.14	.84
Income (reference = $35,000 to $59,999)			
Less than $35,000	.12	.32	1.13
$60,000 to $74,999	.10	.21	1.11
$75,000 to $99,999	.26	.21	1.30
$100,000 to $149,999	.31*	.20	1.36
$150,000 and over	.78***	.22	2.19
Homeowner (reference = no)	.13	.16	1.14
Children in household (reference = no)	-.21	.13	.82
Non-Caucasian/White (reference = Caucasian/White)	.05	.14	1.06
Financial Satisfaction	.15***	.04	1.16
Subjective Perceptions			
Perceived Financial Knowledge	.26*	.12	1.29
Financial Stress	-.04	.05	.96
Comfortable with Debt	.20	.16	1.22
Investment Confidence	1.22***	.12	3.37

Note: e^B = exponentiated *B*.

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

Table 4.3

Continued

Predictor	*B*	*SE B*	e^B
Core Financial Behaviors			
Handle on cash flow	.17	.15	1.19
Pay bills on time	-.17	.23	.84
Has emergency fund	.30*	.15	1.35
Pay off credit card in full	-.04	.15	.96
Check credit report	.39**	.11	1.48
Advanced Financial Behaviors			
Contribute to a retirement plan	.93*	.39	2.53
Adjust tax withholding each year	.18	.11	1.20
Max tax credits and deductions	.30*	.12	1.35
Review all types of insurance coverage	.28	.17	1.32
Carry enough life insurance coverage	.48***	.12	1.61
Have long term disability coverage	.22*	.11	1.25
Have written legal documents	.30*	.13	1.35
Updated beneficiary designations	-.02	.15	.98
Constant	-5.52		
χ^2		601.51***	
df		31	

Note: e^B = exponentiated *B*.

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

Discussion

The present study identified and examined how subcomponents of financial wellness affect perceived retirement preparedness. Previous studies have found that different aspects of financial wellness are associated with perceived retirement preparedness. However, this study is

unique because it used Joo's (2008) conceptual framework of financial wellness to investigate predictors of retirement preparedness. As hypothesized, financial wellness components had a significant influence on perceived retirement preparedness. Guided by Joo's (2008) conceptual framework, variables representing each of the four subcomponents of financial wellness (e.g., financial satisfaction, objective financial status, subjective perception, and financial behaviors) were statistically significant and positive predictors of retirement preparedness.

As expected, financial satisfaction was identified as a statistically significant predictor of perceived retirement preparedness supporting Hypothesis 1. This positive and significant association was anticipated considering financial satisfaction is commonly viewed as a critical component of financial wellness. Findings in this study suggest that as individuals become increasingly satisfied with their current financial situation they are more likely to demonstrate confidence regarding their retirement plans. Financial satisfaction contributes to overall life satisfaction and retirement is an important life goal for the majority of Americans. Recent findings also suggest that financial education has a positive association with financial capability (Xiao, Chen, & Chen, 2014). Higher financial capability is related to performing less problematic or risky financial behaviors and more desirable financial actions such as saving for retirement and other long-term financial goals (Xiao, 2008). Financial satisfaction may be influencing retirement preparedness in a variety of ways including the increased likelihood that as people feel content about their current financial status they will be more likely to perform retirement planning behaviors.

Perceived financial knowledge was also identified as a statistically significant predictor of perceived retirement preparedness. As such, Hypothesis 2 was supported indicating that increases in subjective knowledge are positively and significantly associated with perceived

retirement preparedness. It is important to note the important distinction between different types of financial knowledge. Objective financial knowledge refers to actual responses to knowledge related questions while subjective financial knowledge relates to perceived knowledge or confidence in one's actual financial knowledge. Robb and Woodyard (2011) identified that a low correlation exists between objective and subjective financial knowledge. They also found that perceived financial knowledge has a stronger influence on financial behaviors than objective knowledge.

Hypothesis 3 was rejected as financial stress was not associated with perceived retirement preparedness while controlling for financial satisfaction. Interpreting this result is complicated due to the high correlation between financial satisfaction and financial stress. Similarly, no association was found between financial attitude regarding current non-mortgage debt level and retirement preparedness. Findings indicated that investment confidence has a strong impact perceived retirement preparedness. This result lends support to Hypothesis 4 which stated that respondents with confidence in their investment plan are more likely to demonstrate perceived retirement preparedness. Similar to the relationship between perceived financial knowledge and retirement preparedness these constructs all relate to confidence measures.

The current findings also indicate that core and advanced financial behaviors are important factors in developing confidence in the ability to meet retirement income goals. Core financial management behaviors are conceptualized as basic activities related to money management, debt management, and credit management. Although these financial behaviors are important contributors to financial wellness, maintaining an emergency fund and checking credit reports were the only core financial behaviors associated with retirement preparedness when controlling for other variables. Individuals with more financial knowledge and financial

confidence are more likely to report maintaining an emergency fund (Babiarz & Robb, 2014). The ability to save for emergencies reduces the financial shock of unforeseen expenses and can help reduce the likelihood of incurring consumer debt. In essence, saving for emergencies is a proactive financial planning activity and a best practice behavior. Checking credit reports on a regular basis is another proactive financial behavior. Credit management as a whole has previously been associated with financial knowledge (Hilgert et al., 2003). An examination of advanced financial behaviors focuses on other comprehensive financial topic areas related to retirement, insurance, tax, and estate planning. Not surprisingly, contributing to a retirement plan was a significant predictor of perceived retirement preparedness. Unfortunately, the data set did not provide information regarding contribution rates to employer sponsored retirement plans or individual retirement accounts. Other advanced financial behaviors found to influence retirement preparedness included activities related to tax planning, life insurance, long term disability insurance, and having legal documents created related to an estate plan. With the exception of contributing to a retirement plan, none of these financial behaviors have a direct impact on retirement savings. However, they are a comprehensive list of important financial behaviors and help differentiate between planners and non-planners. Individuals who perform more of these best practice financial behaviors are more likely to be confident in their retirement outlook.

Prior research indicates that individuals generally have a good sense of their actual retirement preparedness when compared to actual financial capability (Munnell et al., 2008). Based on this assumption the sample clearly did not feel adequately prepared for retirement. Whether accurate or not perception does indeed have an impact on retirement planning realities for employees. As hypothesized, perceived retirement preparedness is affected by actual retirement preparation activities and also influences the likelihood of participating in future

retirement planning behaviors (Joo & Pauwels, 2002). The logistic regression model included variables representing each of the subcomponents of financial wellness. Findings that financial wellness is associated with perceived retirement preparedness is not surprising given the importance of financial wellness as a measure of overall financial health.

These results show that while income is a contributing factor to perceived retirement preparedness, other factors are involved. Hypothesis 7 stated that individuals with higher levels of income are more likely to perceive they are prepared to meet their desired retirement income goals. This hypothesis was partially supported with positive and statistically significant associations found for household income groups above $100,000. No significant association between income and retirement preparedness was found for people reporting household income below $100,000. No other objective financial status measures were available to examine key differences in retirement assets, net worth, and key financial ratios to explore other aspects of financial status.

The study explored other demographic and socioeconomic factors and their relationship with perceived retirement preparedness. Age and race were associated with perceived retirement preparedness. The age factor provides additional insight into the challenges faced by financial educators and financial planning practitioners. Younger employees were more likely to perceive they are on track to meet their retirement income goals. This is consistent with previous findings that younger individuals and those with higher education levels are more likely to express positive feelings toward being retirement preparedness (Joo & Pauwels, 2002). This is somewhat surprising due to the widely publicized troubles with long-term sustainability of Social Security, expectations of rising taxes and inflation, and rising health care costs. It is plausible that younger households are less aware of the challenges they will face while preparing for retirement. No

statistically significant association was found between race/ethnicity or homeownership and perceived retirement preparedness. The presence of children in the household was expected to add financial constraints and thus decrease the likelihood of perceived retirement preparedness. However, this expectation was not confirmed by the findings of this study.

In summary, the components of financial wellness examined in this study were found to have a significant influence on perceived retirement preparedness. Employees who were more likely to show confidence in their ability to meet retirement goals reported more financial satisfaction, had higher perceived financial knowledge, reported greater investment confidence, and demonstrated more positive financial behaviors than employees without a sense of preparedness. Younger employees and those with higher total household income were also more likely to have achieved perceived retirement preparedness.

Limitations

This study has numerous limitations which may have influenced the results. First, the generalizability of this study should be taken into consideration. The sample consisted of employees actively participating in an employer provided financial wellness program. The data contains an overrepresentation of females. Missing cases were found reducing the original sample size (n = 4,442) to a final model of 3,542 respondents. This resulted in 20.3% missing cases. Over half of these missing cases were related to the removal of non-credit card users thus limiting the results to only employees with credit cards. While the demographics did not change significantly as a result of the missing cases being removed from the final model it is possible this altered the nature of the sample. Limitations also exist surrounding the lack of empirical testing of a few measures used in the study. Despite similarities to other measurement tools used to assess personal financial management behaviors, the Financial Wellness Assessment

(Financial Finesse, 2013) has not been empirically tested. For example, perceived financial knowledge was measured using a specific tax related question as a proxy for subjective financial knowledge. A more generalized perceived financial knowledge measure would have been a preferred alternative. Perceived financial knowledge related to retirement planning in general would have been even more informative and should be considered for future research.

Another potential limitation is the measure used to assess perceived retirement preparedness. Due to the binary nature of the single-item measure the respondents indicating they are confident in their ability to meet retirement income goals obviously have greater perceived retirement preparedness than those that do not answer with a positive response. However, if a Likert-type scale measure such as the one used in the Retirement Confidence Survey (Helman et al., 2013) different degrees of perceived preparedness could be assessed. Measuring perceptions about retirement preparedness is important because confidence levels are associated with actual retirement planning behaviors.

Additional limitations are related to the response options for these behavioral measures. Measuring financial behaviors on a Likert-type scale as opposed to the binary questions used in this study could provide additional information regarding the frequency certain behaviors are demonstrated. Perhaps one of the biggest data limitations is the inability to compare perceived retirement preparedness with objective measures of financial status. The addition of specific retirement planning behaviors such as retirement account balances, contribution rates, net worth, and financial ratios would provide additional insight into understanding perceived retirement preparedness. This study is also limited by the reliance on self-reported financial data and respondents may not be willing or comfortable accurately representing their actual financial situation. There were a large number of respondents who did not provide their race/ethnicity

information thus limiting the results of this variable. The relatively small sample size of the non-Caucasian/White respondents also limits the interpretation of results for the race/ethnicity variable. Despite these limitations the study presents a meaningful analysis into the contributing factors to the perceived retirement preparedness of employees.

Implications

These findings support previous studies that suggest employees do not think they are adequately prepared for retirement (Helman et al., 2013; Munnell et al., 2012; Ward et al., 2013). However, this study builds on previous research that has examined retirement preparedness. Using Joo's (2008) conceptual framework of financial wellness as guidance, this study demonstrated the importance of examining how comprehensive financial behaviors are associated with retirement preparedness. Core and advanced financial behaviors were found to be valid predictors of retirement preparedness. This suggests that policies and programs that are supportive of a holistic approach to comprehensive financial planning and education should be used to help employees prepare for retirement. With retirement planning concerns continuing to grow in this country the workplace environment has the potential to help employees become better prepared for retirement. The results can be used to understand the factors that contribute to the confidence level of employees regarding their current level of retirement preparedness. Financial wellness has been identified as a significant predictor of perceived retirement preparedness. As such, workplace financial education programs are well-positioned to evoke meaningful change in the display of retirement planning behaviors. Findings suggest that due to the complex nature of the retirement planning process holistic financial wellness programs need to address a comprehensive array of financial planning topics to have the biggest impact on perceived retirement preparedness. However, in order to increase the likelihood of success it is

important that financial education programs go beyond simply trying to increase financial knowledge. They also need to focus on improving financial confidence and encourage employees to take action to develop positive financial behaviors.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50,* 179-211.

Archuleta, K. L., Dale, A., & Spann, S. M. (2013). College students and financial distress: Exploring debt, financial satisfaction, and financial anxiety. *Financial Counseling and Planning*, *24*(2), 50-62.

Babiarz, P., & Robb, C. A. (2014). Financial literacy and emergency saving. *Journal of Family and Economic Issues*, *35*(1), 40-50.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191-215.

Brady, P. J. (2008). Measuring retirement resource adequacy. *Journal of Pension Economics and Finance*, *9*(2), 235-262.

Byrnes, J. P., Miller, D. C., & Schaefer, W. D. (1999). Gender differences in risk taking: A meta-analysis. *Psychological Bulletin*, *125*, 367-383.

Chatterjee, S., Finke, M. S., & Harness, N. J. (2009). Individual wealth management: Does self esteem matter? *Journal of Applied Business and Economics*, *10*(2), 1-14.

Chatterjee, S., Salter, J. R., & Harness, N. J. (2011). Financial confidence among retirees: The role of financial advice and planning duration. *Economics Bulletin,* 31(1), 315-323.

Drentea, P., & Lavrakas, P. J. (2000). Over the limit: The association among health status, race and debt. *Social Science & Medicine, 50,* 517-529.

Elder, H. W., & Rudolph, P. M. (1999). Does retirement planning affect the level of retirement satisfaction? *Financial Services Review*, *8*, 117-127.

Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1990). *Consumer behavior* (6th ed.). Orlando, FL: Dryden Press.

Field, A. (2006). *Discovering statistics using SPSS* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Financial Finesse (2013). *Best practices guide: How to design and implement behavior changing financial wellness programs*. Financial Finesse: El Segundo, California.

Garman, E. T., & Forgue, R. (2010). *Personal finance.* Mason, OH: Southwestern Cengage.

Gutter, M., & Copur, Z. (2011). Financial behaviors and financial well-being of college students: Evidence from a national survey. *Journal of Family and Economic Issues*, *32*(4), 699-714.

Hanna, S. D., & Chen, S. C. C. (2008). Retirement savings. In J.J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 35-46). Springer: New York.

Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2013). The 2013 Retirement Confidence Survey: Perceived savings needs outpace reality for many. *EBRI Issue Brief*, (384). Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-13.No384.RCS1.pdf

Helman, R., Copeland, C., & VanDerhei, J. (2012). The 2012 retirement confidence survey: Job insecurity, debt weigh on retirement confidence, savings. *EBRI Issue Brief*, (369). Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-2012_No369_RCS2.pdf

Hershey, D. A., Henkens, K., & Van Dalen, H. P. (2010). Aging and financial planning for retirement: Interdisciplinary influences viewed through a cross-cultural lens. *The International Journal of Aging and Human Development*, *70*(1), 1-38.

Hershey, D. A., & Jacobs-Lawson, J. (2012). Bridging the gap: Anticipated shortfalls in future retirement income. *Journal of Family and Economic Issues, 33*(3), 306-314. doi: http://dx.doi.org/10.1007/s10834-012-9281-8

Hershey, D. A., Jacobs-Lawson, J. M., McArdle, J. J., & Hamagami, F. (2007). Psychological foundations of financial planning for retirement. *Journal of Adult Development, 14,* 26-36.

Hershey, D. A., & Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist, 40,* 687-697.

Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, 309-322.

Hira, T. K., & Mugenda, O. M. (1998). Predictors of financial satisfaction: Differences between retirees and non-retirees. *Financial Counseling and Planning, 9*(2), 75-83.

Hogarth, J. M., Beverly, S. G. & Hilgert, M. A. (2003) Patterns of financial behaviors: implications for community educators and policy makers. Paper presented at Federal Reserve System Community Affairs Research Conference.

Jacobs-Lawson, J. M., & Hershey, D. A. (2003). Perceptions of financial stability in retirement: Do Americans really know what to expect. *Advances in Psychology Research, 22,* 123-136.

Joo, S. (1998). Personal financial wellness and worker job productivity. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg.

Joo, S. (2008). Personal financial wellness. In J.J. Xiao (Ed.), *Handbook of Consumer Finance Research* (pp. 21-33). New York: Springer.

Joo, S., & Grable, J. E. (2004). An explanatory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues, 25*, 25-50.

Joo, S., & Grable, J. E. (2005). Employee education and the likelihood of having a retirement savings program. *Financial Counseling and Planning, 16*(1), 37-49.

Joo, S., & Pauwels, V. W. (2002). Factors affecting workers' retirement confidence: A gender perspective. *Financial Counseling and Planning, 13*(2), 1-10.

Kim, J. (2000). The Effects of Workplace Financial Education on Personal Finances and Work Outcomes. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.

Kim, J., & Garman, E. T. (2003). Financial education and advice change worker attitudes and behaviors. *Journal of Compensation and Benefits, 19*(5), 7-13.

Kim, J., Kwon, J., & Anderson, E. A. (2005). Factors related to retirement confidence: Retirement preparation and workplace financial education. *Financial Counseling and Planning, 16*(2), 77-89.

Loibl, C., & Hira, T. K. (2005). Self-directed financial learning and financial satisfaction. *Financial Counseling and Planning, 16*(1), 11-21.

Lusardi, A., & Mitchell, O. S. (2006). Financial Literacy and Planning: Implications for Retirement Wellbeing. Working Paper No. 2006-1, Pension Research Council, Wharton School, University of Pennsylvania.

Mayer, R. N., Zick, C. D., & Marsden, M. (2011). Does calculating retirement needs boost retirement savings? *Journal of Consumer Affairs, 45*(2), 175-200.

Modigliani, F., & Brumberg, R. (1954). Utility analysis and the consumption function. In K. Kurihara, (Ed.), *Post-Keynesian Economics,* (pp. 338-436). New Brunswick, NJ: Rutgers University Press.

Munnell, A. H., Webb, A., & Golub-Sass, F. (2012). The national retirement risk index: An update. *Center for Retirement Research Report,* 12-20.

Munnell, A. H., Golub-Sass, F., Soto, M., & Webb, A. (2008). Do households have a good sense of their retirement preparedness? Chestnut Hill, MA: Center for Retirement Research at Boston College. Retrieved on February 22, 2014 from: http://crr.bc.edu/wp-content/uploads/2008/08/ib_8-11.pdf

Noone, J., Alpass, F., & Stephens, C. (2010). Retirement planning? Testing a theoretical model of gendered pathways to retirement preparation. *Research on Aging, 32*(6), 715-738.

Norvilitis, J., Merwin, M., Osberg, T., Roehling, P., Young, P., & Kamas, M. (2006). Personality factors, money attitudes, financial knowledge, and credit-card debt in college students. *Journal of Applied Social Psychology, 36,* 1395-1413.

Pension Research Council (2010). Financial literacy: Implications for retirement security and the financial marketplace. Pension Research Council Working Paper #2010-11.

Perry, V. G., & Morris, M. D. (2005). Who is in control? The role of self-perception, knowledge, and income in explaining consumer financial behavior. *Journal of Consumer Affairs*, *39*(2), 299-313.

Plagnol, A. (2011). Financial satisfaction over the life course: The influence of assets and liabilities. *Journal of Economic Psychology, 32*(1), 45-64.

Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). InCharge financial distress/financial well-being scale: Development, administration, and score interpretation. *Financial Counseling and Planning, 17*(1), 34-50.

Reno, V. P., & Lavery, J. (2007). Social security and retirement income adequacy. *Social Security Brief, 25*, 1–12.

Robb, C. A., & Woodyard, A. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning, 22*(1), 60-70.

Shiller, R. J. (2000). Measuring bubble expectations and investor confidence. *Journal of Psychology and Financial Markets, 1*(1), 49-60.

Social Security and Medicare Boards of Trustees (2013). Status of the Social Security and Medicare programs: A summary of the 2013 annual reports. Baltimore, MD: Office of the Actuary. Retrieved from: www.ssa.gov/oact/trsum/

Taylor, M. A., & Doverspike, D. (2003). Retirement planning and preparation. In A. Adams & T. A. Beehr (Eds.), *Retirement: Reasons, processes, and results* (pp.53-82). New York: Spring Publishing.

Taylor, M. A., & Shore, L. M. (1995). Predictors of planned retirement age: An application of Beehr's model. *Psychology and Aging, 10*, 76-83.

Ward, G. A., Davidson, L., Robertson, L., Spann, S., & Spencer, D. (2013). State of U.S. employee retirement preparedness. Financial Finesse: Research on Financial Trends. Retrieved on February 22, 2014 from: http://www.financialfinesse.com/wp-content/uploads/2013/09/2013_Retirement_Preparedness_Research_Report_FINAL.pdf

Wiatrowski, W. J. (2012). The last private industry pension plans: A visual essay, December 2012. *Monthly Labor Review, 12*, 3-18. Retrieved from: http://www.bls.gov/opub/mlr/2012/12/art1full.pdf

Xiao, J. J. (2008). Applying behavior theories to financial behavior. In J. J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 69–81). New York: Springer.

Xiao, J. J., Chen, C., & Chen, F. (2014). Consumer financial capability and financial satisfaction. *Social Indicators Research, 118*(1), 415-432. doi: http://dx.doi.org/10.1007/s11205-013-0414-8

Chapter 5 - Conclusions

This dissertation explored three studies that examined financial wellness in the workplace with an emphasis on understanding more about the impact financial wellness has on the intention to engage in retirement planning activities and perceived retirement preparedness. Each paper explores various subcomponents of financial wellness as reported by employees actively participating in a financial wellness program available through their employer. The initial study explored the association between different financial behaviors that are commonly viewed as best practice financial planning activities. Next, the second study looked specifically at the role various subcomponents of financial wellness have in the decision making process of choosing to engage in retirement planning activities. The third and final study addressed the factors that influence perceived retirement preparedness.

The three studies were guided by Joo's (2008) conceptual framework of financial wellness, which is conceptualized to consist of the following subcomponents: objective financial status, financial satisfaction, financial behaviors, and subjective perceptions. Each paper approached the construct of financial wellness from a different perspective in an attempt to help financial educators, financial planning practitioners, researchers, and policy makers better understand the relationship between financial wellness and retirement preparedness. This research is the first to use the Financial Finesse (2014) Financial Wellness Assessment (FWA) to explore various components of financial wellness with employees actively participating in an employer sponsored financial wellness program. This is important because of the growing need to research the usefulness of financial wellness tools in a workplace setting including this popular financial wellness assessment. This study also helps deepen the understanding of the

financial wellness construct itself and how its various subcomponents are associated with retirement planning behaviors.

Essay One

The first study explored the association between financial behaviors and financial wellness. The Personal Financial Wellness Scale ™ (Prawitz, Garman, Sorhaindo, O'Neill, Kim, & Drentea, 2006) was used to model the outcome variable in this study—financial wellness. The study was guided by Joo's (2008) conceptual framework of financial wellness. The subcomponents of financial wellness examined in the study were financial behaviors, subjective perceptions—financial knowledge and financial attitudes, and an objective financial measure of household income. An ordinal least squares (OLS) regression analysis was used to control for the following personal factors and demographic variables: age, gender, race/ethnicity, marital status, children in the household, and homeownership.

Controlling for other variables the majority of the core financial management behaviors examined had a significant and positive relationship with financial wellness. Core financial behaviors related to money management with a statistically significant association with financial wellness included maintaining an emergency fund to pay bills for a few months, having a handle on cash flow (e.g., income exceeds expenses), and paying bills on time each month. The only financial behavior linked to credit and debt management found to be associated with financial wellness was the activity of paying credit card balances off in full each month. Checking credit reports on a regular basis is a commonly recommended financial behavior but was not associated with an overall sense of financial wellness.

Advanced financial behaviors consisted of activities not directly related to core money management, debt, and credit management. The only advanced financial behaviors with a

statistically significant relationship with financial wellness were contributing to a retirement plan and income tax planning behaviors related to maximizing all available tax credits and deductions. Other financial behaviors, while still important aspects of personal financial planning, were not found to have a significant relationship with financial wellness as measured by the PFW Scale™ (Prawitz et al., 2006). Most notably, the retirement planning activity of running a basic retirement calculator was not found to be associated with financial wellness. Investment planning behaviors such as assessing one's risk tolerance and rebalancing investments on a regular basis were also not related to financial wellness. Financial behaviors involving insurance planning activities such as reviewing current insurance coverage and maintaining adequate life insurance coverage were not significantly associated with financial wellness. Similarly, other wealth protection behaviors that are part of the estate planning process such as having written legal documents prepared (e.g., wills and trusts) and updating beneficiary designations on life insurance contracts and retirement accounts were not associated with financial wellness. These findings build on Joo's (2008) conceptual framework by exploring how different categories of financial behavior are associated with financial wellness. Additional research is needed to examine the influence that non-core financial management behaviors have on financial wellness. This study also discusses the need to further develop comprehensive financial wellness assessment tools that are more inclusive of comprehensive financial behaviors.

In addition to the exploration of the relationship between financial behaviors and financial wellness, other subcomponents of financial wellness were examined in this study. Household income had a significant and positive association with financial wellness. This finding was consistent with previous research using income as measure of objective financial status which is a subcomponent of financial wellness (Joo, 2008). Another subcomponent of

financial wellness is subjective perception and this aspect of financial wellness has been conceptually viewed to consist of financial knowledge and financial attitudes. Both of these factors were associated with financial wellness as perceived financial knowledge and financial attitude toward non-mortgage debt had a positive and statistically significant relationship with financial wellness. These findings are important because other studies have shown that perceived financial knowledge is strongly associated with best practice financial behaviors (Robb & Woodyard, 2011). Financial knowledge is a precursor to the development and continued practice of positive financial management behaviors that aid in reducing debt to a manageable level. The importance of having manageable debt levels is a critical component of financial wellness (Joo & Grable, 2003).

In addition to the findings that financial behaviors, household income, perceived financial knowledge, and financial attitude toward current non-mortgage debt were related to financial wellness, other personal factors were also associated with this measure of financial health. Results from the regression model indicated that the following demographic controls were associated with financial wellness: marital status, age, and presence of children in the household. Financial wellness had a negative association with being married and having children present in the household. The only age group with a significant association with financial wellness compared to the 30 to 44 age category was the under 30 age group. These results can be used to help financial professionals understand the importance of assessing the unique group dynamics of a workplace environment while designing and implementing comprehensive financial education programs. These findings also highlight the importance of assessing both objective and subjective components of financial wellness with an emphasis on the measurement of financial behaviors that encompass all aspects of holistic financial planning.

Essay Two

The second study expanded on the examination of the subcomponents of financial wellness and specifically looked at how these factors influence retirement planning intentions. Shifting the focus of financial wellness from the role of outcome variable to a predictor variable allowed for a comprehensive study of how various financial wellness factors are associated with a desire to plan for retirement. This desire to engage in retirement planning activities was labeled "retirement planning intention." Similar to the first study, this research also employed Joo's (2008) conceptual framework to examine the relationship between financial wellness and retirement planning activities. This study represented the first known attempt to use this conceptual framework of financial wellness to predict the likelihood of retirement planning intention. Individual items from the PFW Scale™ were used along with the Financial Wellness Assessment to explore how specific components of financial wellness (i.e., objective financial status, financial satisfaction, financial behaviors, and subjective perceptions) are associated with retirement planning intention.

The subcomponents of financial wellness that were tested as predictors of retirement planning intention included financial attitude toward current non-mortgage debt level, financial satisfaction, financial stress, retirement planning behavior, and core financial management behaviors. As expected, a favorable financial attitude toward current non-mortgage debt had a significant and positive association with retirement planning intention. The other financial attitude examined in the study, financial stress, was not significantly associated with retirement planning intention. Surprisingly, no significant association was found between financial satisfaction and retirement planning intention. Core financial management behaviors were statistically significant predictors of retirement planning intention. Respondents self-reporting

financial behaviors such as having a handle on cash flow, paying bills on time, and paying off credit card balances in full were more likely to intend to engage in retirement planning activities. An examination of the financial behaviors revealed that paying bills on time explained the greatest amount of variance in retirement planning intention. This was followed by paying off credit card balances in full each month. Staying away from revolving credit card debt is a best practice financial behavior that helps people to avoid the potential costs of high interest consumer debt. These findings when viewed together with the important role financial attitude toward debt has on increasing the likelihood employees will express retirement planning intention highlight the importance of debt management as part of the retirement planning process. Financial wellness programs that only focus on personal finance topics related to retirement and investing may fall short of reaching their full potential to promote positive behavioral change if they are not holistically designed to address other financial planning topics such as debt and credit management that have a direct and indirect influence on retirement and investment outcomes.

Demographic variables were found to influence the likelihood of expressing retirement planning intention. Age, income, homeownership, race/ethnicity, and the presence of children in household were each identified as statistically significant predictors of individuals who were more likely to have retirement planning intentions. As expected, older employees were more likely to choose retirement planning as a primary topic of interest. This finding is consistent with other studies that have shown retirement planning behaviors increase as people get older and closer to their desired retirement age (Chatterjee, 2010). Household income also was associated with retirement planning intention as each income group was more likely than the reference group ($35,000 to $59,999) to express a desire to plan for retirement. For the most part the

likelihood of expressing retirement planning intention increased with age. However, one interesting finding was that the under $35,000 age also had a greater likelihood of choosing retirement planning as a topic of interest in comparison to the $35,000 to $59,999 household income group. As expected, homeownership was associated with an increased likelihood of intention to plan for retirement. Caucasian/White respondents were more likely than non-Caucasian/White respondents and those who did not provide their race/ethnicity to choose retirement as a priority. Additionally, having children in the household decreased the likelihood of retirement planning intention.

This essay contributes to the literature by demonstrating the important role that financial wellness has in the desire to engage in retirement planning activities in a workplace environment. The findings from this study can be used to aid researchers, financial planning practitioners, financial educators, and human resource professionals understand how specific financial wellness factors and other demographic variables influence employee intentions to participate in the retirement planning process. In particular, this study broadens the awareness of how financial attitude toward debt and core financial management behaviors influence the desire to engage in retirement planning activities. The identification of potential barriers to retirement planning intention such as debt management concerns can be used to help improve employee financial wellness through the awareness that improvements in one area of their financial lives can open pathways to planning for retirement.

Essay Three

Finally, the third study examined financial wellness factors that influence the perceived retirement preparedness of employees in the workplace. It was hypothesized that subcomponents of financial wellness would be significantly associated with perceived retirement preparedness.

The subcomponents of financial wellness analyzed in the study were based on Joo's conceptual framework and included financial satisfaction, four measures of subjective perception (perceived financial knowledge, financial stress, financial attitude toward debt, and investment confidence), core financial management behaviors, and advanced financial behaviors. This study is unique in its examination of factors that fit an existing conceptual framework of financial wellness that were used to predict the likelihood of perceived retirement preparedness. Results provide additional evidence that retirement confidence remains low as the majority of respondents exhibited a general lack of perceived retirement preparedness. The findings of this study may be utilized to identify the subcomponents of financial wellness that are significantly associated with retirement preparedness.

As hypothesized, financial satisfaction was found to have a significant and positive association with perceived retirement preparedness. Employees who expressed satisfaction about their current financial situation had a higher likelihood of expressing confidence about their ability to meet future retirement income goals. Perceived financial knowledge and investment confidence were subjective perceptions found to be associated with perceived retirement preparedness. Surprisingly, the other subjective perceptions examined in the study, financial stress and financial attitude toward debt, were not statistically significant predictors of perceived retirement preparedness.

Financial behaviors are another component of financial wellness that were analyzed in this study. The core financial behaviors related to money management and credit management significantly associated with perceived retirement preparedness were having an emergency fund and checking credit reports regularly. Advanced financial management behaviors (e.g., non-core financial behaviors) associated with a sense of perceived retirement preparedness included

contributing to a retirement plan, using available income tax credits and itemized deductions, carrying enough life insurance, having long term disability insurance, and having written legal documents. These findings emphasize the importance of using comprehensive financial planning and education strategies that use a holistic approach to improve financial wellness.

Results indicated that household income was associated with perceived retirement preparedness for employees with household income levels of $100,000 and above. Age was the only other demographic variable significantly associated with retirement preparedness. Somewhat surprising was the observation that younger employees were more likely to demonstrate perceived retirement preparedness compared to older cohorts.

Summary

The growth of financial wellness programs in the workplace is causing a fundamental shift in how financial planning is delivered to employees actively engaged in these services. Financial planning guidance and coaching has previously been viewed as only being available to those who could afford these services. According to Aon Hewitt (2013), approximately 80% of employers are interested in developing or expanding programs to promote financial wellness of employees. The shift toward financial wellness programs in the workplace has created an alternative to the traditional financial planning model as these programs are increasingly being offered as an employee benefit to all employees regardless of income or net worth. However, widespread interest in personal financial wellness underscores the need to promote a better understanding of how to define the construct of financial wellness.

These three essays contribute to the understanding of financial wellness and emphasize the importance of using comprehensive measurement tools to assess financial wellness in a workplace setting. The findings provide additional insight into how financial wellness

influences retirement preparedness and the desire to engage in retirement planning behaviors. Chapter 2 assessed comprehensive financial behaviors as predictors of financial wellness. This study also examined financial behaviors using Financial Finesse's (2014) Financial Wellness Assessment (FWA), a financial wellness assessment tool from the Financial Finesse Online Learning Center that had not been previously tested. The results demonstrate the importance of examining comprehensive financial behaviors during the financial wellness assessment process. Findings from the study build on Joo's (2008) conceptual framework through the classification of financial behaviors as either "core" or "advanced". Future research should build on these findings to better understand how different financial behaviors are associated with financial wellness. As financial wellness programs continue to develop with an emphasis on promoting positive behavioral change related to financial management, it is essential for employers and service providers (i.e., financial educators, retirement plan providers, and financial planners) to understand how to measure financial behaviors and other subcomponents of financial wellness.

The combined results of the final two studies show that financial wellness is an important factor in understanding what motivates employees in the workplace to want to engage in retirement planning activities. The second study adds to an existing body of research in the area of retirement preparedness and is unique due to the exploration of financial wellness factors as a predictor of retirement planning intention among employees actively engaged in a financial wellness program at work. The examination of various factors that encourage or inhibit employees to want to plan for retirement may be used by financial educators, financial planning practitioners, and policy makers to develop programs and strategies to reach employees who are not presently engaged in the process of planning for retirement. The third study is one of the first attempts to apply Joo's (2008) conceptual framework to the understanding of perceived

retirement preparedness. Perceptions of retirement preparedness can have an effect on future retirement planning behaviors and also may influence actual saving levels for retirement. Based on the rising popularity of financial wellness programs being sponsored by various corporations and organizations in this country the ability to deepen the understanding of how financial wellness impacts retirement planning is paramount.

References

Aon Hewitt. (2013). 2013 Hot topics in retirement: Focusing on financial wellness. Retrieved from http://www.aon.com/attachments/human-capital-consulting/US_2013_hot-topics-in-retirement.pdf

Chatterjee, S. (2010). Retirement savings of private and public sector employees: A comparative study. *Journal of Applied Business Research, 26*(6), 95-102.

Financial Finesse. (2014). *Online Financial Learning Center.* Retrieved from http://www.financialfinesse.com/online-financial-learning-center/

Helman, R., Adams, N., Copeland, C., & VanDerhei, J. (2013). The 2013 Retirement Confidence Survey: Perceived savings needs outpace reality for many. *EBRI Issue Brief,* (384). Retrieved from http://www.ebri.org/pdf/briefspdf/EBRI_IB_03-13.No384.RCS1.pdf

Joo, S. (2008). Personal financial wellness. In J.J. Xiao (Ed.), *Handbook of consumer finance research* (pp.21-33). New York: Springer.

Joo, S., & Grable, J. E. (2003). The meaning and measurement of personal financial wellness: A summary of professional insights. *Consumer Interests Annual, 40,* 1.

Munnell, A. H., Webb, A., & Golub-Sass, F. (2012). The national retirement risk index: An update. *Center for Retirement Research Report,* 12-20.

Prawitz, A. D., Garman, E. T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). InCharge financial distress/financial well-being scale: Development, administration, and score interpretation. *Financial Counseling and Planning, 17*(1), 34-50.

Robb, C. A., & Woodyard, A. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning, 22*(1), 60-70.

Ward, G. A., Davidson, L., Robertson, L., Spann, S., & Spencer, D. (2013). State of U.S. employee retirement preparedness. Financial Finesse: Research on Financial Trends. Retrieved on February 22, 2014 from: http://www.financialfinesse.com/wp-content/uploads/2013/09/2013_Retirement_Preparedness_Research_Report_FINAL.pdf

Appendix A- Correlation Matrices

Table A.1

Correlation Matrix for all Variables- Chapter 2 (N = 3,105)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Financial wellness	–												
2. Age	.17***	–											
3. Gender	.19***	-.02	–										
4. Marital Status	.09***	-.01	.09***	–									
5. Caucasian/White	.18***	.15***	.02	.07***	–								
6. Child(ren) in household	--.13***	-.35***	.05**	.32***	-.07***	–							
7. Own home	.20***	.17***	.01	.32***	.16***	.13***	–						
8. Income	.37***	.11***	.19***	.48***	.19***	.17***	.38***	–					
9. Perceived Fin Knowledge	.19***	.06**	.20***	.05*	.07***	.02	.07***	.12***	–				
10. Comfortable with debt	.58***	.14***	.15***	.05*	.13***	-.07***	.12***	.26***	.11***	–			
11. Handle on Cash Flow	.55***	.11***	.12***	.05*	.16***	-.13***	.12***	.22***	.12***	.43***	–		
12. Pay bills on time	.43***	.12***	.10***	.05*	.17***	-.07***	.15***	.19***	.07***	.28***	.35***	–	
13. Emergency Fund	.61***	.17***	.14***	.08***	.15***	-.09***	.18***	.29***	.11***	.53***	.42***	.31***	–

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
14. Pay credit cards in full	.54***	.10***	.17***	.06**	.13	-.07***	.13***	.24***	.09**	.61***	.40***	.29***	.53***
15. Check credit report	.07***	-.06**	.05*	-.03	-.03	.01	-.04	.04*	.12***	.04*	.05**	.08***	.02
16. Use retirement calculator	.05*	.08***	.06**	-.02	.01	-.02	.06**	.06**	.19***	.01	.03	-.01	.02
17. Contributes to retirement plan	.12***	.03	.02	.03	.03	-.03	.05**	.09***	.06**	.06**	.07***	.07***	.09***
18. Assessed risk tolerance	.23***	.10***	.17***	.04*	.08**	-.04*	.10***	.20***	.29***	.14***	.13***	.13***	.18***
19. Adjust tax withholding	.16***	.04*	.08***	.04*	-.01	-.02	.05**	.07***	.25***	.11***	.14***	.06***	.10***
20. Max tax credits and deductions	.13***	.06**	.08***	.05**	.07***	.05*	.08***	.07***	.32***	.03*	.10***	.06**	.06**
21. Review total insurance coverage	.13***	.01	.04*	.00	.08***	.01	.01	.06**	.20***	.11***	.11***	.07***	.08***
22. Carry enough life insurance	.10***	.07***	.07***	.13***	.08***	.08***	.12***	.18***	.21***	.05**	.05**	.06**	.07***
23. Have long term disability coverage	.03	-.02	.05*	-.03	-.01	-.01	-.01	.06**	.14***	.02	.01	-.01	.02
24. Update Beneficiary Information	.06**	.07***	.02	.13***	.07***	.08***	.09***	.12***	.14***	.01	.02	.05**	.01
25. Have written legal documents	.17***	.28***	.06**	.07***	.14***	-.01	.20***	.21***	.14***	.14***	.11***	.12***	.16***

Note. ***p <.001; **p < .01; *p < .05

Variables	14	15	16	17	18	19	20	21	22	23	24	25
18. Assessed Risk Tolerance	.15***	.14***	.24***	.09***	–							
19. Adjust tax withholdings	.11***	.11***	.11***	.00	.19***	–						
20. Max tax credits and deductions	.03	.11***	.14***	.03	.15***	.21***	–					
21. Review total insurance coverage	.08***	.13***	.11***	.03	.13***	.14***	.17***	–				
22. Carry enough life insurance	.02	.09***	.16***	.01	.17***	.13***	.17***	.21***	–			
23. Have long term disability insurance	.01	.05**	.08***	.05*	.07***	.08***	.07***	.11***	.16***	–		
24. Update beneficiary information	-.00	.08***	.10***	.04*	.10***	.07***	.11***	.20***	.19***	.11***	–	
25. Have written legal documents	.16***	.06*	.11***	.01	.20***	.10***	.11***	.10***	.20***	.09***	.19***	–

Note. *** p < .001; ** p < .01; * p < .05

Table A.2

Correlations Among all Variables – Chapter 3 (N = 3,620)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Retirement Planning Intention	–														
2. Age	.34***	–													
3. Gender	.05**	-.03	–												
4. Marital Status	.08***	.11***	.09***	–											
5. Child(ren) in Household	-.19***	-.21***	.04*	.30***	–										
6. Homeowner	.18***	.34***	.02	.34***	.11***	–									
7. Income	.23***	.23***	.19***	.49***	.14***	.41***	–								
8. Caucasian	.17***	.18***	.03	.08***	-.09***	.19***	.21***	–							
9. Financial Stress	.23***	.13***	.14***	.04*	-.14***	.15***	.25***	.11***	–						
10. Financial Satisfaction	.24***	.14***	.16***	.08***	-.12***	.20***	.31***	.16***	.77***	–					
11. Comfortable with Debt	.22***	.15***	.16***	.05**	-.09***	.13***	.27***	.13***	.51***	.52***	–				
12. Financial Knowledge	.07***	.07***	.19***	.05**	.02	.09***	.13***	.09***	.16***	.19***	.11***	–			
13. Handle on Cash Flow	.21***	.21***	.14***	.07***	-.14***	.12***	.23***	.16***	.47***	.47***	.44***	.12***	–		
14. Maintains an Emergency Fund	.23***	.18***	.15***	.10***	-.10***	.20***	.31***	.16***	.49***	.52***	.53***	.12***	.43***	–	
15. Pay Bills on Time	.21***	.10***	.11***	.06**	-.09***	.17***	.21***	.17***	.39***	.38***	.29***	.07***	.37***	.32***	–

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16. Pay Off Credit Card Balances	.21***	.10***	.18***	.07***	-.09***	.15***	.26***	.14***	.46***	.47***	.61***	.10***	.41***	.55***	.31***
17. Check Credit Report	-.03	-.05**	.05**	-.03	.02	-.03	.04*	-.03	.05**	.05**	.02	.11***	.05**	.03	.09***
18. Run a basic retirement calculation	.02	.10***	.05**	-.01	-.01	.02	.05**	-02	.03	.04	-.00	.18***	.01	.01	-.04*

Note. ***p <.001; **p < .01; *p < .05

Variables		16	17	18
1.	Retirement Planning Intention	.21***	-.03	.02
2.	Age	.10***	-.05**	.10***
3.	Gender	.18***	.05**	.05**
4.	Marital Status	.07	-.03	-.01
5.	Child(ren) in Household	-.09***	.02	-.01
6.	Homeowner	.15***	-.03	.02
7.	Income	.26***	.04*	.05**
8.	Race/Ethnicity	.14	-.03	.02
9.	Financial Stress	.46***	.05**	.03
10.	Financial Satisfaction	.47***	.05**	.04
11.	Comfortable with Debt	.61***	.02	-.00
12.	Financial Knowledge	.10***	.11***	.18***
13.	Handle on Cash Flow	.41***	.05***	.01
14.	Maintains an Emergency Fund	.55***	.03	.01
15.	Pay Bills on Time	.31***	.09***	-.04*
16.	Pay off credit card balances	–	.02	-.02
17.	Check credit report		–	.12***
18.	Run basic retirement calculation			–

Table A.3

Correlations Among all Variables- Chapter 4 (N = 3,542)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Perceived Retirement Preparedness	–																
2. Age	.02	–															
3. Gender	.15***	-.03	–														
4. Marital Status	.03	.12***	.09***	–													
5. Child(ren) in Household	-.04*	-.20***	.04*	.31***	–												
6. Homeowner	.06***	.34***	.02	.35***	.12***	–											
7. Non-Caucasian	-.06**	-.18***	-.03	-.08***	.09***	-.19***	–										
8. Income	.16***	.25***	.21***	.49***	.15***	.44***	-.21***	–									
9. Financial Satisfaction	.23***	.13***	.16***	.08***	-.12***	.19***	-.15***	.32***	–								
10. Perceived Financial Knowledge	.21***	.07***	.19***	.05**	.02	.08***	-.08***	.15***	.18***	–							
11. Financial Stress	.19***	.12***	.14***	.04*	-.14***	.15***	-.11***	.27***	.77***	.15***	–						
12. Debt Attitude	.15***	.13***	.16***	.05**	-.08***	.13***	-.13***	.27***	.52***	.11***	.50***	–					
13. Investment Confidence	.31***	.13***	.15***	.05**	-.04*	.11***	-.10***	.16***	.21***	.34***	.20***	.11***	–				
14. Handle on Cash Flow	.13***	.08***	.14***	.07***	-.13***	.12***	-.15***	.23***	.47***	.11***	.47***	.43***	.09***	–			
15. Pay Bills on Time	.09***	.10***	.11***	.05**	-.09***	.16***	-.17***	.22***	.37***	.07***	.39***	.29***	.09***	.37***	–		
16. Emergency Fund	.18***	.17***	.14***	.10***	-.10***	.20***	-.16***	.34***	.52***	.12***	.49***	.53***	.14***	.43***	.32***	–	
17. Pay Off Credit Card Balances	.14***	.09***	.18***	.07***	-.08***	.15***	-.13***	.28***	.47***	.09***	.45***	.61***	.10***	.41***	.31***	.54***	–

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
18. Check Credit Report	.11***	-.05***	.04**	-.03	.02	-.03	.03	.04*	.06**	.12***	.05**	.02	.09***	.05***	.09***	.03	.02
19. Contribute to Retirement Plan	.08***	.11***	.03*	.04**	-.03*	.10***	-.06***	.15***	.13***	.08***	.12***	.10***	.12***	.07***	.10***	.13***	.09***
20. Adjust Tax Withholding	.14***	.04*	.08***	.03*	-.02	.04**	.00	.08***	.14***	.24***	.13***	.10***	.16***	.13***	.06***	.10***	.11***
21. Max tax credits and deductions	.15***	.08***	.06***	.05**	.05**	.10***	-.07***	.08**	.11***	.31***	.11***	.03	.22***	.08***	.05**	.05**	.01
22. Review total insurance coverage	.11***	.03	.04*	.01	.02	.03	-.09***	.06***	.12***	.19***	.12***	.09***	.14***	.10***	.08***	.07***	.07***
23. Carry enough life insurance	.16***	.14***	.07***	.14***	.06***	.14***	-.11***	.20***	.11***	.20***	.09***	.05***	.19***	.04*	.06***	.08***	.02
24. Have long term disability coverage	.11***	-.01	.04*	-.02	-.02	.00	-.01	.09***	.04*	.14***	.03	.01	.10***	.00	-.01	.02	.01
25. Update Beneficiary Information	.07***	.14***	.02	.16***	.08***	.12***	-.07***	.14***	.07***	.15***	.05**	.01	.13***	.02	.05**	.03	-.00
26. Have written legal documents	.13***	.33***	.06**	.09***	-.01	.20***	-.16***	.23***	.17***	.14***	.13***	.14***	.15***	.10***	.12***	.17***	.16***

Note. ***p <.001; **p < .01; *p < .05

Variables	18	19	20	21	22	23	24	25	26
18. Check credit report	–								
19. Contribute to Retirement Plan	.00	–							
20. Adjust Tax Withholding	.12***	.01	–						
21. Max tax credits and deductions	.12***	.03	.21***	–					
22. Review total insurance coverage	.13***	.05**	.14***	.17***	–				
23. Carry enough life insurance	.08***	.04*	.13***	.18***	.21***	–			
24. Have long term disability insurance	.07***	.05**	.08***	.08***	.11***	.16***	–		
25. Update beneficiary information	.08***	.07***	.08***	.11***	.20***	.20***	.11***	–	
26. Have written legal documents	.05**	.05**	.10***	.11***	.10***	.21***	.10***	.19***	–

Note. *** p < .001; ** p < .01; * p < .05