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EVALUATION OF THE USU RETIREMENT AND SAVINGS SEMINAR

by

Diana Burk

A thesis submitted in partial fulfillment
of the requirements for the degree

of

MASTER OF SCIENCE

in

Family, Consumer, and Human Development

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UTAH STATE UNIVERSITY
Logan, Utah

2011

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ABSTRACT

Evaluation of the USU Retirement and Savings Seminar

by

Diana Burk, Master of Science

Utah State University, 2011

Major Professor: Dr. Jean M. Lown

Department: Family, Consumer, and Human Development

Consumers need to acquire financial knowledge and confidence in order to take effectual actions to accumulate adequate retirement wealth and improve their overall financial well-being. Thus, quality financial education programs are needed to empower consumers to achieve these goals. The purpose of this study was to evaluate the effectiveness of the Utah State University (USU) *Retirement and Savings Seminar* as measured by participant satisfaction and participants' financial knowledge, financial confidence, and financial behavior change compared to a similar group of non-participants. The program evaluation was guided by a logic model developed for the seminar.

Data for this study were collected with three online questionnaires emailed to USU employees who enrolled in the seminar as well as a comparison group matched by gender and employment category. A total of 188 individuals responded to the surveys, with subsamples of 54 treatment group participants and 134 comparison group

participants. Results from chi-square crosstabulations and an independent samples *t* test revealed that age, total household income, and current retirement assets were the only significant group differences between seminar participants and non-participants.

Based on the results of this study, it can be concluded that the *Retirement and Savings Seminar* is a beneficial program. Overall, seminar participants reported that they were very satisfied with the seminar and would recommend it to other university employees in the future. Results from the hierarchical regression models found a significant increase in seminar participants' financial knowledge and financial confidence from the pretest to the posttest. Additionally, seminar participants improved their financial knowledge and financial confidence scores more than non-participants above and beyond group differences in age, total household income, and pretest scores. A one-way repeated measures ANOVA found that financial behavior also increased more for seminar participants than for non-participants two months after completing the seminar.

According to the Transtheoretical Model of Change (TTM), individuals progress through five stages of behavior change to modify a problem behavior or acquire a positive behavior. Consistent with this theory, a Wilcoxon signed-ranks test indicated that the seminar helped seminar participants to progress to a higher TTM stage of change more than non-participants.

PUBLIC ABSTRACT

Evaluation of the USU Retirement and Savings Seminar

by

Diana Burk, Master of Science

Utah State University, 2011

Major Professor: Dr. Jean M. Lown
Department: Family, Consumer, and Human Development

Many employees at Utah State University (USU) are responsible for their own retirement preparation. The USU *Retirement and Savings Seminar* has been offered to teach employees and their spouses/partners regarding retirement options and to motivate them to plan, save, and invest for their retirement. This research study evaluated the seminar to ensure that the financial education is worthwhile and contributes to employees' financial knowledge, confidence, and behaviors. A logic model, which is an outline of program objectives and expected outcomes, was used to help determine the research questions.

Employees that registered for the seminar were asked to complete three surveys for this study: at the beginning of the seminar, at the end of the seminar, and two months after the seminar. A separate group of employees that did not register for the seminar was recruited to take the same three surveys. This group of non-participants was chosen to match the gender and employment category of the seminar participants as closely as

possible. In this study there were 188 respondents total, 54 seminar participants and 134 non-participants. The two groups were basically the same except that seminar participants were generally older and reported higher total household income and current retirement assets than non-participants.

Overall, the results from this program evaluation were very positive and it was concluded that the *Retirement and Savings Seminar* is a beneficial program. Seminar participants reported that they were very satisfied overall with the seminar and claimed they would recommend it to others in the future. It was found that the seminar did help to increase seminar participants' knowledge and confidence despite the fact that they were older and had more total household income and current retirement assets.

The Transtheoretical Model of Change (TTM) is a theory that describes how individuals make positive behavior changes and includes five stages of change that individuals progress through. This study found that the seminar not only contributed to an increase in seminar participants' financial behaviors two months after the seminar but also helped seminar participants to progress to a higher TTM stage of change compared to non-participants.

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Diana Burk

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CHAPTER I

INTRODUCTION

With the first wave of the 78 million baby boomers (the large cohort born between the years 1946 to 1964) turning 65 in 2011, concern is growing over their financial preparation for retirement. Although the economic well-being of older Americans has greatly improved over the past few decades (Clark, Burkhauser, Moon, Quinn, & Smeeding, 2004; Finke, Huston, & Sharpe, 2006), approximately 78% of senior households are financially vulnerable (Wheary, Shapiro, & Meschede, 2009). Also, 54% of senior households do not have the assets needed to cover projected expenses for the rest of their lives (Wheary et al., 2009). For this reason, financial educators, financial planners, and policymakers are increasingly concerned about individuals' ability to accumulate retirement savings (Helman, Copeland, & VanDerhei, 2010; VanDerhei, 2011).

The financial crisis which began in 2008 has been particularly severe for many older individuals who are ill prepared for retirement (Pynoos & Liebig, 2009; Rosnick & Baker, 2009). In 2008, one-fourth of Americans 65 years and older had retirement income of less than roughly \$11,000 (Purcell, 2009). The National Retirement Risk Index, which measures the percentage of households who are "at risk" of being unable to maintain their pre-retirement standard of living in retirement, increased from 44% in 2007 to 51% by 2009 (Munnell, Webb, & Golub-Sass, 2009). Helman et al. (2010) projected that low-income households were not the only ones at risk of running out of funds in retirement. Nearly 29% of individuals in the third income quartile and 13% of the highest-income quartile were expected to run short of money after 20 years in

retirement (Helman et al., 2010).

With an unemployment rate of 8.9% at the beginning of 2011, roughly 13.7 million Americans were looking for work (U.S. Bureau of Labor Statistics, 2011). The massive loss of jobs during the recession has led to increased competition for existing positions (Shierholz, 2011). Approximately 39% of unemployed workers have been jobless for over six months and there are nearly six job seekers for every job opening (Turner, 2010). Among job seekers, older individuals were more likely to be unemployed long-term compared to their younger counterparts (Rix, 2001). During the fourth-quarter of 2009, individuals aged 55 and over were unemployed for 36 weeks on average, whereas the average duration of unemployment for persons under age 55 was 28.3 weeks (Rix, 2009).

Joblessness can dramatically impact individuals' finances (Economic Policy Institute, 2011). Unemployment not only affects individuals' short-term financial situation, in terms of increased consumer debt and possible mortgage default, but can also strain individuals' finances long-term. Unemployed workers forgo employer-sponsored benefits, such as health insurance and retirement plan contributions, and often tap into their retirement accounts to pay current expenses.

Traditionally, employees have depended on a three-legged stool in retirement: (1) Social Security benefits, (2) employer-sponsored pension plans, and (3) personal savings, assets, and investments (Munnell & Sunden, 2006). More recently, employment earnings during "retirement" have become an essential fourth income source (Munnell & Sass, 2008). However, this "stool" does not accurately depict the economic situation of many

retirees or pre-retirees, as many individuals have only one or two of these income sources.

Social Security has evolved to be the primary source of retirement income for a large portion of older Americans (Federal Interagency Forum on Aging-Related Statistics, 2008). Social Security constitutes 90% of the income for 35% of all Social Security beneficiaries (Administration on Aging, 2009). However, the increasing number of baby boomers approaching retirement will place a burden on Social Security and may reduce the benefits received by future retirees. Under the current program, it is projected that the Social Security trust fund will be depleted by 2037 and then will only be able to pay 78 cents on the dollar (Sass, Munnell, & Eschtruth, 2009). As employers shift from defined benefit pension plans to defined contribution plans, the investment risk and responsibility also shifts from the employer to the employee (Sundali, Westerman, & Stedham, 2008).

Many Americans are financially illiterate or poorly informed regarding their personal savings and assets, which can stunt the growth of retirement wealth (Lusardi, Mitchell, & Curto, 2009b). Individuals who face retirement with inadequate wealth may not be able to retire when planned (Lown, 2008; Montalto, 2001; VanDerhei, 2011). Many workers are depending on being able to remain in the labor force even after traditional retirement age because of inadequate savings and income (Helman et al., 2010; Munnell & Sass, 2008). However, the recent financial crisis has resulted in pay cuts, fewer hours, or involuntary termination for countless employees. The most vulnerable age group affected by the high unemployment rate has been workers aged 45

years and older (Goodman, 2010; Pynoos & Liebig, 2009). Older, displaced workers are unlikely to get rehired at their former pay rate and many have foregone employee benefits once they do find a job, which causes serious concern because of the large number of older Americans.

The aging population in the United States is expected to dramatically increase as the baby boomers reach traditional retirement age. The percentage of the U.S. population aged 65 years and older is projected to increase from 12.4% in 2006 to 20.4% by 2040 (Federal Interagency Forum on Aging-Related Statistics, 2008). This increase can be attributed to declining fertility and mortality rates and increased life expectancy (Reznik, Shoffner, & Weaver, 2005). General improvements in medical procedures, preventive health care and health education over the past century have increased the likelihood of survival among infants and the elderly (Dobriansky, Suzman, & Hodes, 2007). The life expectancy at birth in 2005 was a record high of 77.9 years (Martin et al., 2008). Furthermore, older individuals who reach age 65 have an average life expectancy of an additional 18.6 years (Administration on Aging, 2009).

Need for Study

Recent retirement security projections for Americans reveal that more than half of the population is at risk of running short of funds in retirement (Helman et al., 2010; Munnell et al., 2009). Individuals and households need to be educated regarding how to improve their retirement security. In general, financial literacy among Americans is very low, especially among older persons (Lusardi et al., 2009b). As described by the

Organization for Economic Co-operation and Development (OECD), financial education is a process that empowers consumers to cultivate their understanding of financial fundamentals and to become more aware of financial opportunities and risks (Lusardi, 2006). In essence, individual consumers must acquire financial skills and confidence in order to take effectual actions to improve their financial well-being. In order to help individuals improve their retirement outlook and make informed retirement decisions, financial educators and planners have implemented numerous financial programs and workshops. Financial education is provided to enhance understanding of financial concepts and products as households prepare to make critical financial decisions.

Financial education has received additional attention as a result of the recent economic recession. In the wake of the housing crisis and decline in the world financial markets, more than \$10 trillion in household wealth was lost between the years 2007 and 2009; economic projections suggest that the economy may not fully regain those losses until 2014 (Rosnick & Baker, 2009). At a national level, the *President's Advisory Council on Financial Literacy* (the Council) was created on January 22, 2008 and expired on January 22, 2010. The Council was established by President George W. Bush in response to the troubling economic situation and provided recommendations to the President and the Treasury Secretary on how to improve the financial literacy of Americans (U.S. Department of the Treasury, 2008a). More recently, the *President's Advisory Council on Financial Capability* was established January 29, 2010 by President Barack Obama to "assist the American people in understanding financial matters and making informed financial decisions, and thereby contribute to financial stability" (U.S.

Department of the Treasury, 2011, p. 1).

Financial literacy can help promote the financial well-being of households and individuals. Thus, it is necessary to provide financial education and resources to help consumers develop their financial skills and knowledge as well as to boost their confidence to accumulate wealth for retirement. However, it is important to understand and evaluate all of the steps involved with successful program development.

Program evaluation is an important component of successful financial education (Collins & O'Rourke, 2010; Fox & Bartholomae, 2008; National Endowment for Financial Education, n.d.) although it is often conducted in a cursory manner after a financial literacy program has been initiated. One of the ten research priorities recommended by the Financial Literacy and Education Commission states that financial practitioners and policymakers need reliable and valid measures to evaluate the success of financial education programs (U.S. Department of the Treasury, 2008b). Through program evaluation, financial instructors and institutions can identify ways to improve the effectiveness of existing financial programs. Similar to physicians who prescribe remedial treatment, financial educators need to evaluate whether or not their instruction and counseling results in the behavior change of consumers. There are many opportunities to apply program evaluation in financial education. Program evaluation can be useful in judging the merit of the program, suggesting program improvements, and analyzing positive or negative outcomes for program participants (Bamberger, Rugh, & Mabry, 2006).

Theoretical Framework

In order to improve their retirement outlook, individuals need to learn how to plan and save for retirement by acquiring financial literacy and investment skills. As financial practitioners seek to help consumers embrace positive financial behaviors, it is important to understand how consumers perceive change. The Transtheoretical Model of Change demonstrates how individuals progress through the stages of behavior change.

The Transtheoretical Model of Change (TTM) was developed as a health psychology model to analyze positive behavior change processes (Prochaska, 1979). TTM is a step-by-step process that guides and motivates people to change undesirable behaviors (Xiao, 2008). The term “transtheoretical” implies that the model incorporates a variety of theories on how people change and may be applied to various counseling disciplines, including financial counseling and education (Xiao et al., 2004).

There are five distinct stages of change in the TTM: (1) precontemplation, (2) contemplation, (3) preparation, (4) action, and (5) maintenance (Prochaska, 1979). During the *precontemplation* stage, individuals have no intention of changing their behavior in the next six months. Individuals in the *contemplation* stage are aware of problematic behavior and are considering taking corrective action in the coming six months. These individuals may not have a plan for how to change their behavior. If people are willing to change within the next month, they are in the *preparation* stage. Individuals in the preparation stage are more likely to have a plan about how to change their behavior. The *action* stage includes individuals who have successfully changed their behavior, within the past six months. During the *maintenance* stage, people work to

prevent relapse to their previous behavior. Later, *termination* was added as the sixth stage of change (Prochaska & Velicer, 1997). Individuals in the *termination* stage have nearly zero temptation to revert back to their previous behavior. However, perhaps because it is seldom documented, the sixth stage is rarely discussed in the financial literature.

It is important for educators to understand both the financial situation of the participants and how people are motivated to progress through the stages of change. The purpose of financial education is not only to inform and present various financial options, but to motivate individuals to act upon this knowledge to improve their financial behaviors and habits.

Purpose of the Study

The purpose of this study was to evaluate the effectiveness of the Utah State University (USU) *Retirement and Savings Seminar* as measured by the overall satisfaction, financial knowledge, and financial confidence gained by participants after attending the seminar. Additionally, this study examined changes in participants' financial behavior two months after participating in the seminar. The USU *Retirement and Savings Seminar* was offered to employees to further increase their knowledge, confidence, and ability to plan, save, and invest for their retirement. Participants' financial behavior change was measured by the actions they took as a result of attending the seminar. This study also identified improvements that could be made to the seminar and other program evaluations in the future.

Retirement and Savings Seminar

The free *Retirement and Savings Seminar*, sponsored by the USU Office of Human Resources, was offered to all USU employees and their spouses/partners. The USU seminar was intended to increase individuals' financial knowledge and improve their retirement security by teaching them firsthand how to manage their retirement accounts. In this seminar, individuals were also taught strategies for achieving their short-term and long-term retirement goals as well as basic principles of saving and investing. A logic model was developed to illustrate the expected inputs, outputs, and impacts of the seminar as well as the assumptions and other external factors that may have influenced program decisions or achievement of outcomes (see Appendix A). The program has been taught each year since 2004 by a retired USU professor of Finance. Main retirement planning topics include investment time horizon, time value of money, types of investments, asset classes, risk tolerance, Social Security benefits, annuitization, pension plans, TIAA-CREF funds, asset allocation, diversification, and estate planning.

Research Questions

To accomplish the purpose and objectives, the following research questions were considered in this study. Responses of seminar participants were compared to a similar comparison group of employees who did not participate in the USU seminar.

1. How satisfied were participants with the *Retirement and Savings Seminar*?
2. Did financial knowledge about saving and investing for retirement increase

more for participants who attended the *Retirement and Savings Seminar* than those in the comparison group?

3. Did confidence in planning and preparing for retirement increase more for participants who attended the *Retirement and Savings Seminar* than those in the comparison group?

4. Two months after completing the *Retirement and Savings Seminar*, did financial behavior change more for participants who attended the seminar than those in the comparison group?

5. Did the *Retirement and Savings Seminar* help initiate financial behavior change to a higher stage of change in the Transtheoretical Model for some participants more than others? If so, for which participants?

Potential Benefits of the Study

This research is beneficial for financial educators as they assist individuals in making appropriate investment choices for retirement. This study also helps financial practitioners to target individuals and groups who have a greater need for financial assistance and to offer additional encouragement to prepare for retirement. The results from this study provide insight into strategies to improve the effectiveness of existing financial education programs as well as guide the possible creation of new financial education programs.

Program evaluation is a critical part of program design and implementation. It is performed to measure the effects of financial education on participants and improve

future programs. The logic model and the program evaluation design and measures detailed in this study may be replicated for evaluating the seminar in the future as well as for other similar financial education programs.

CHAPTER II

REVIEW OF LITERATURE

Overview

Effective program evaluation is a critical element of successful financial education programs. This review of literature is comprised of three sections. The first section explains the importance of program evaluation in financial education and reviews program evaluation resources used by financial educators and researchers, including the National Endowment for Financial Education (NEFE) evaluation toolkit and logic models. The second section explores the overall impact of financial education, such as increased financial knowledge and improved financial behaviors, by examining studies related to financial program evaluation. The third section investigates the Transtheoretical Model of Change as related to financial behavior change.

Program Evaluation

Financial education programs have the potential to empower individuals with knowledge and skills to make responsible consumer decisions. As consumers act upon their financial knowledge, they are more likely to reach financial goals and improve their economic well-being. For this reason, positive financial behavior changes are often a desired outcome of financial education programs. Program evaluation is necessary in order for financial practitioners to determine if a program is successful in helping participants improve their financial behaviors (National Endowment for Financial

Education, n.d.). Evaluation is the process of determining the impact of a program. Through program evaluation, researchers and educators are able to determine if a program is meeting the needs of the participants and to document the outcomes. Program evaluations may also provide insight as program coordinators seek to enhance efficiency of management and delivery.

Program evaluation is most successful when it is incorporated at every phase of the program design and implementation (Bamberger et al., 2006; Collins & O'Rourke, 2010; Fox & Bartholomae, 2008). However, oftentimes evaluation is an after-thought for program developers. This may be a result of the lack of time, money, data, and other factors that often accompany new educational programs (Bamberger et al., 2006). It is more difficult to accurately determine the effectiveness of a program when the evaluation process is not planned from the initial design phase. Also, if the program objectives or desired outcomes are determined after the program has occurred, then program coordinators may bias the results (Hathaway & Khatiwada, 2008). Therefore, program goals and outcomes are an important part of program evaluation and should be considered at the onset of program development.

NEFE Evaluation Toolkit

One useful resource for financial educators is the *Financial Education Evaluation Toolkit* sponsored by the National Endowment for Financial Education (n.d.). NEFE is a nonprofit organization that seeks to help Americans gain the knowledge and skills necessary to be financially stable. The evaluation toolkit was created to assist financial educators in assessing the outcomes and success of financial education programs and

provides information about the program evaluation process and how to collect, analyze, and summarize evaluation data. The toolkit includes an evaluation manual, which is a simple guide designed specifically for financial practitioners to measure the extent to which people change their attitudes or behaviors as a result of participation in educational programs.

The five key elements of the NEFE manual include: (1) needs assessment, (2) define objectives, (3) program development, (4) program delivery, and (5) evaluation (National Endowment for Financial Education, n.d.). Evaluation is integrated into every step to help maximize the impact of financial programs. The evaluation manual also provides step-by-step instructions about how to identify appropriate impact indicators for different types of programs and explains some of the advantages and disadvantages of various evaluation methods. The NEFE manual focuses specifically on methods for evaluating one-time programs, long programs (e.g., 2 hours or more), multi-session programs, and train-the-trainer programs. The manual also includes an evaluation database to allow educators to design their financial program evaluation measures.

Logic Model

As financial practitioners proceed through each phase of program development, a logic model can serve as a type of roadmap to better achieve program goals and objectives. A logic model, also known as a program theory, is a conceptual framework of how a program or intervention is expected to cause the observed or intended outcomes (Bamberger et al., 2006). Logic models help to identify program goals, resources, activities, and expected outcomes or changes (University of Wisconsin Extension, 2002).

The use of logic models also contributes to the strength of the research design by describing the program implementation process, analyzing factors that affect implementation and outcomes, and helping to interpret the evaluation findings and to assess whether a program should continue or be replicated (Bamberger et al., 2006).

Logic models can be applied to a wide range of educational programs or interventions such as focus groups, conferences, organizations, initiatives, and so forth. Logic models are versatile because they can be designed for any given program. A logic model was developed for the Utah State University (USU) *Retirement and Savings Seminar* that clearly defined and explained the basic concepts of the program (see Appendix A). Logic models generally consist of three main components: (1) inputs, (2) outputs, and (3) impacts (National Endowment for Financial Education, n.d.). The *inputs* represent all of the resources used to develop the program, which included the meeting time and place, instructor as well as any materials, equipment, and technology needed to conduct the seminar.

Learning opportunities, which are called the *outputs*, are created by the inputs of a financial education program in the form of participation and activities. In the logic model for the USU seminar, the outputs included both the number of USU employees and their spouses who attended the seminar and the number of sessions provided. In addition, activities such as curriculum development, scheduling meeting time and place, and conducting sessions were also included as outputs in the logic model. Each of the sessions provided retirement education and facilitated retirement preparation for attendees.

The *impacts*, both short-term and long-term, can be described as the benefits gained by participants as a result of the generated outputs. Aside from overall participant satisfaction, the short-term outcomes of the seminar are to increase participants' financial knowledge and confidence, and to help them to set financial goals. The long-term outcome is for participants to improve (or to maintain) their retirement planning financial behaviors. Ultimately, the impacts of the seminar should assist participants in achieving their retirement goals and a financially secure retirement. Other potential, far-reaching impacts also include promoting greater economic stability for participants and their community.

The logic model can also depict the problem and goal statement for the program as well as existing assumptions and other external factors (University of Wisconsin Extension, 2002). For the USU seminar, the problem statement is that individuals have insufficient financial knowledge and retirement preparation, and the goal statement is to increase the financial knowledge of participants' to improve their retirement security.

As the seminar was implemented, there were several assumptions and external factors that may have influenced program decisions or achievement of outcomes. It was assumed that resources were adequate and available to hold the seminar and employees (along with their spouses/partners) were willing and able to attend each of the sessions. Another assumption was that financial literacy is beneficial because it can positively influence participants' financial behaviors. Possible external factors that may have influenced the effectiveness of the seminar were USU employee benefits and retirement options currently available and participants' personal preferences and experiences.

Evaluation of Financial Education Programs:

Does Financial Education Work?

Considering that the number of financial education programs has increased over the years, there has been relatively few program evaluations published that assess the impacts of this education (Collins & O'Rourke, 2010). According to several financial program evaluations, financial education appears to be beneficial and has a positive impact on the lives of consumers; however, it is difficult to measure and determine what kind of impact and to what degree (Hogarth, 2006). At present, there is no clearly defined method for evaluating financial education programs (McCormick, 2009). In 2003, the Office of Financial Education of the U.S. Department of the Treasury (2004, 2006) suggested eight key elements regarding the content, delivery, impact, and sustainability of successful financial education programs to guide financial education developers. The eight elements state that a successful program:

1. Focuses on basic savings, credit management, home ownership and/or retirement planning.
2. Is tailored to its target audience, taking into account its language, culture, age and experience.
3. Is offered through a local distribution channel that makes effective use of community resources and contacts.
4. Follows up with participants to reinforce the message and ensure that participants are able to apply the skills taught.
5. Establishes specific program goals and uses performance measures to track

progress toward meeting those goals.

6. Demonstrates a positive impact on participants' attitudes, knowledge or behavior through testing, surveys, or other objective evaluation.

7. Can be easily replicated on a local, regional or national basis so as to have broad impact and sustainability.

8. Is built to last as evidenced by factors such as continuing financial support, legislative backing or integration into an established course of instruction.

Despite these broad guidelines, the task of evaluating the content, delivery, impact, or sustainability of financial programs can be difficult for researchers and educators. For instance, individuals who take advantage of voluntary financial education are assumed to be more motivated than those who choose not to participate. Also, future-oriented individuals are more likely to attend financial education programs because they are more likely to manage their personal finances better than their counterparts (Meier & Sprenger, 2007). These factors can confound the effectiveness of education programs because participants are already likely to change their financial behaviors regardless of the financial education delivery method.

Another important reason why it is difficult to evaluate financial programs is because there is no widely accepted standard (McCormick, 2009). After reviewing 41 program evaluation articles on financial education and counseling, Collins and O'Rourke (2010) found that existing evaluation research is not conclusive because it is prone to several methodological problems. The problems they cited included selection bias, longitudinal designs, measurement issues, and a general lack of theory. However,

financial education and counseling still holds promise as a strategy for consumers to enhance their financial abilities and decisions (Collins & O'Rourke, 2010).

A number of studies have evaluated various financial education and counseling programs. Although there is a distinction between financial education and counseling, they often overlap as counselors provide educational resources and educators address personal questions for participants (Collins & O'Rourke, 2010). Because of this crossover, both financial education and counseling evaluations will be reviewed. Financial program evaluation topics that will be reviewed in the following section include: workplace financial education, school-based financial education, general financial management education, bankruptcy counseling and education, and housing counseling and education.

Workplace Financial Education

Nearly one in four American workers is seriously dissatisfied and distressed with their personal finances (Garman et al., 2005). This can have negative ramifications for workers and their employers, co-workers, and families. Therefore, employers are increasingly offering workplace financial education for employees. Garman, Kim, Kratzer, Brunson, and Joo (1999) evaluated the effectiveness of a workplace financial education program by comparing the financial wellness and personal financial behaviors of participants to non-participants. A posttest questionnaire was mailed to employees to determine their financial attitudes, behaviors, and well-being. The researchers found that the workplace education resulted in better financial well-being of participants. Three-fourths of the participants responded that they made better financial decisions after

attending the financial program at work. Because a baseline measure was not taken, the researchers acknowledged that these results may be due to other factors external to the education program. Garman et al. (1999) suggested a pretest and posttest design for future researchers to more directly measure the effects of workplace financial education.

The impacts of another workplace financial literacy program, developed to introduce employees to key financial concepts, were evaluated by Holland, Goodman, and Stich (2008). A non-experimental, single group research design was used with a pretest and posttest comparison to examine the financial behaviors and attitudes of employees. The Personal Financial Wellness (PFW) scale was used, which is an eight-item scale developed by the Personal Finance Employee Education Foundation, Inc (2006) to measure the financial distress/well-being of individuals. Overall, the researchers concluded that workplace financial literacy programs can have a positive effect on the employees who participate. This study also found that individuals who participated in the financial program were less stressed and worried about their financial situations and more confident about facing unanticipated financial events than they were when they began the program.

Kim (2007) analyzed the effectiveness of a Cooperative Extension workplace financial education program taught to university employees. A pretest and posttest were administered to employees before and three months after the four-week program to measure their financial knowledge, behaviors, and well-being. Based on these assessments, Kim (2007) concluded that the workplace program was effective in increasing participants' financial knowledge and improving their financial behaviors.

School-based Financial Education

Danes and Haberman (2007) evaluated the High School Financial Planning Program (HSFPP) taught to high school students throughout the U.S. The curriculum and materials were developed by the National Endowment for Financial Education (NEFE). The HSFPP course taught students the basics of personal finance with the goal of increasing teen financial literacy. A retrospective pretest was used to assess the teenagers' level of financial knowledge, confidence, and behaviors. On average, males were more knowledgeable than females. Therefore, it appeared that the females gained more knowledge than the males in regards to financial topics such as auto insurance, credit, and investments because their baseline knowledge was lower. In other words, the researchers found that males' financial knowledge remained the same as a result of the course whereas females gained more because they started with less knowledge.

Another study evaluated the impact of personal finance education on the investment knowledge and household savings rates of high school and college students (Peng, Bartholomae, Fox, & Cravener, 2007). A posttest only design was used to determine participants' investment knowledge and household savings rates after attending the school-based financial education. Results from the hierarchical regression analysis showed that participation in a college level personal finance course was associated with higher levels of investment knowledge and financial experiences. Also, attending a personal finance course in college appeared to be more successful in improving investment knowledge than a high school personal finance course. The authors provided two explanations for this finding. First, college personal finance

courses are more likely to discuss investment topics than high school personal finance courses. Second, college students may be more primed for investment related information than high school students based on their financial experiences, creating a teachable moment.

Mandell and Klein (2007) evaluated a personal finance course for high school seniors to examine their level of motivation to learn or retain skills. Data from five successive national finance literacy surveys, sponsored by the Jump\$tart Coalition for Personal Financial Literacy, were used in this study. Specifically, the researchers analyzed three questions from the survey related to individuals' motivation to become financially literate. Mandell and Klein (2007) found that high school seniors' level of motivation was a key factor to becoming financially literate. They also concluded that successful financial programs for young adults should focus on why financial literacy is important and help make their goals achievable.

Financial Management Education

One study evaluated a two-day financial education course taught to U.S. Army soldiers stationed at Ft. Bliss in El Paso, Texas (Bell, Gorin, & Hogarth, 2009). A pretest and two consecutive midterm observations with comparison groups were administered to assess the changes in participants' financial behaviors. The type of evaluation design used, known as a comprehensive longitudinal design, is one of the strongest quantitative evaluation designs (Bamberger et al., 2006). Bell et al. (2009) found that the financial education did affect the financial management behaviors of the soldiers. Among the observed behavior changes, the self-selected treatment group was more likely to save on

a regular basis, to have a longer planning time horizon, and to have retirement saving plans than the comparison group. One challenge the researchers faced was attrition. Out of the 3,324 participants who completed the pretest survey, only 3.7% were matched with the posttest survey.

Haynes-Bordas, Kiss, and Yilmazer (2008) analyzed the success of the Get Checking™ financial education program in affecting the financial management behavior of the participants. The Get Checking™ program is a “second chance” program that offers financial education for individuals who committed checking account abuse or mismanagement. After attending the education session, a follow-up survey was administered to participants to evaluate their financial behavior change. The survey showed that 91% of respondents opened and maintained checking accounts and 68% reported changing their budgeting behavior since attending the class. Findings also showed that the program was more successful in eliciting positive behavior changes in non-white participants than their white counterparts. However, because the program evaluation design lacked a pretest and comparison group, it is difficult to confidently estimate the overall impacts of the financial program.

Servon and Kaestner (2008) sought to evaluate the effects of a financial program and internet training on low- and moderate-income individuals. The researchers used a pretest and posttest with comparison group research design. Baseline and follow-up telephone surveys were conducted as well as interviews and focus groups, which provided both quantitative and qualitative data. The results from the quantitative analysis indicated that the financial program had few significant impacts on participants’ ability to

acquire assets. Implementation problems were also discovered as a result of the qualitative analysis.

Bankruptcy Counseling and Education

The 2005 Bankruptcy Abuse Prevention and Consumer Protection Act (BAPCPA) federal legislation requires that debtors receive credit counseling and financial education in order to complete their bankruptcy. The U.S. Trustee Program (USTP) sought to develop an approach for assessing the effectiveness of agencies that offer prebankruptcy counseling required by BAPCPA. Clancy and Carroll (2007) made suggestions to improve the program evaluation method related to prebankruptcy counseling. The main recommendations were for the USTP to explicitly define goals and to implement common standards and modes of delivery among all of the approved credit counseling agencies to allow for easier comparisons between agencies.

In collaboration with Money Management Inc. (MMI), Lyons, White, and Howard (2008) evaluated the effectiveness of bankruptcy counseling and educational services required by BAPCPA. Pretests and posttests were administered as part of the study to assess debtors' financial knowledge, behavior, and overall satisfaction as a result of the counseling sessions and financial education course. On average, participants scored higher on the posttest than the pretest, indicating an overall increase in financial knowledge. But, the pretest and posttest scores showed little difference in financial behaviors. Based on the Transtheoretical Model stages of change, debtors on average remained in between the *preparation* and *action* stages of financial behavior change after completing the education and counseling. The authors noted that significant behavior

changes should not be expected immediately following a short intervention.

Wiener, Baron-Donovan, Gross, and Block-Lieb (2005) evaluated another debtor education program, called “Making Sense of Cents” to determine participants’ change in financial knowledge, attitudes, and behaviors. The seven unit financial management course was taught to chapter 7 and chapter 13 bankruptcy filers. A quasi-experimental research design was used with one experimental group and two comparison groups. Pretests and posttests were given to the three groups: trained debtors, untrained debtors, and non-debtors. The average financial knowledge test scores for all three groups increased. However, the trained debtors group was the only one that improved significantly from the pretest to the posttest (approximately 5.5%). The proportion of debtors who reported creating a budget and paying all of their bills in the past month also increased.

Housing Counseling and Education

As a result of the housing crisis, homeownership counseling has become more prevalent as individuals seek to avoid the risk of mortgage default and foreclosure. Carswell (2009) studied the effectiveness of pre-purchase housing counseling in terms of long-term positive financial behaviors. By administering a retrospective pretest, Carswell (2009) assessed the financial behaviors of counseled consumers 5 years after the purchase of their first home. Some aspects of financial behavior change were positive after the housing counseling, with a majority of respondents stating that they prioritize their mortgage payments above all other bills. Also, 72.5% of respondents reported no difficulty making their mortgage payments on time, which reduced the likelihood of

foreclosure. However, there was not a significant increase in all housing-related financial behaviors. One weakness of the study resulted from the lack of a control group, which reduced the explanatory power of the impacts of housing counseling.

Quercia and Spader (2008) studied the effectiveness of pre-purchase homeownership education and counseling delivered by a secondary market loan purchase program in 42 states. The researchers evaluated four modes of counseling: classroom, individual, home study, and telephone. A quasi-experimental selection model design was used to assess the impact of each delivery mode. The researchers found that there was no significant increase in prepayment or decrease in mortgage default among participants as a result of the housing counseling. Classroom-based instruction and individual counseling sessions improved participants' financial behaviors more than home study or telephone counseling.

Collins (2007) evaluated the delivery of mortgage default counseling to subprime borrowers. A posttest only design was used to analyze the effects of additional hours of counseling and other aspects of counseling delivery to mortgage default clients. Collins (2007) concluded that borrowers are more likely to continue meeting with a counselor after a face-to-face counseling session compared to a telephone counseling session. Also, the probability of a client moving toward foreclosure diminished approximately 3.5% with each additional hour of counseling. Therefore, the mortgage default counseling was found to be effective regardless of the type of delivery method.

Summary

In response to the question “does financial education work?” the answer remains ambiguous based on previous research. Key findings in the program evaluation literature suggest that, overall, financial education produced positive changes in participants’ financial knowledge, confidence, or behaviors (Bell et al., 2009; Carswell, 2009; Danes & Haberman, 2007; Garman et al., 1999; Haynes-Bordas et al., 2008; Holland et al., 2008; Kim, 2007; Lyons et al., 2008; Wiener et al., 2005). However, several limitations remain. For instance, it may be less likely that negative program evaluation results would be widely published and distributed. Also, methodological problems make it difficult to accurately estimate the magnitude of program impacts of many of the studies reviewed.

Similar to previous findings (Collins & O’Rourke, 2010), the majority of the studies used a retrospective pretest (Carswell, 2009; Danes & Haberman, 2007), posttest only (Collins, 2007; Garman et al., 1999; Haynes-Bordas et al., 2008; Peng et al., 2007), or pretest-then-posttest design (Holland et al., 2008; Kim, 2007; Lyons et al., 2008). According to Bamberger et al. (2006), these are considered the weakest quantitative research designs because of their inability to account for external factors. Attrition was another limitation experienced by evaluators as well as the primary use of self-report data. Attrition can dramatically affect the statistical outcomes of a study, and self-reports can result in response bias which can positively bias the results. Another explanation of why evidence in favor of financial education remains unclear is due to the lack of effective program evaluation, as discussed previously (Hathaway & Khatiwada, 2008). However, even though it may be premature to address the larger question of the

effectiveness of financial education programs due to these limitations, the literature did suggest that financial education is essential and that many existing approaches appear to be effective (Martin, 2007).

Transtheoretical Model and Stages of Financial Behavior Change

The Transtheoretical Model of Change (TTM) was originally developed to explain how individuals progress from one stage of behavior change to a higher stage when trying to prevent a negative health behavior or forming a new positive health behavior (Prochaska, DeClemente, & Norcross, 1992; Prochaska & Velicer, 1997; Prochaska et al., 1994). More recently, the TTM has been applied to other fields of study, including financial behavior studies, and has also been used to help determine the effectiveness of financial education programs. Lyons and Neelakantan (2008) argue that the TTM may not be an appropriate measure of financial behaviors because standards for financial behaviors have not been ascertained. Although it is easier to conclusively identify positive health-related behaviors than positive financial behaviors, the TTM can still be a valuable framework for financial educators regarding how to help consumers improve their financial behaviors.

Xiao et al. (2008) used the TTM to develop specific strategies to help motivate employees to make positive financial behavior changes based on their readiness to change. For individuals in the precontemplation stage, increasing awareness or raising consciousness about financial risks and the benefits of change are strategies that may help

to motivate them to progress to a higher stage. Similarly, one strategy for helping those in the contemplation stage is to convince them that the benefits of changing outweigh the costs. Strategies used in the preparation stage include empowering people to make an action plan and encouraging them to take small steps to build confidence. People in the action stage benefit from both behavioral and cognitive strategies, such as reinforcement management and positive thinking. Finally, supportive strategies, like having a plan to cope with setbacks, would be most beneficial for individuals who have reached the maintenance stage (Xiao et al., 2008).

Gutter, Hayhoe, and Wang (2007) utilized the TTM to examine the saving behavior of defined contribution retirement plan participants. Using data from the 2001 Survey of Consumer Finances, the researchers grouped households into four of the five stages of change (e.g., precontemplation, contemplation, preparation, and action) based on financial characteristics, life cycle characteristics, and personal preferences. The TTM categorization helped to expand beyond merely savers and non-savers and provided more insight about individuals' saving intentions as well as behaviors. Gutter et al. (2007) found that marital status, age, preference (e.g., time horizon and risk tolerance), and other financial sources (e.g., net worth, job tenure, cash reserve, and employer match) were all significantly related to participation in defined contribution plans as categorized by the TTM framework.

In another study, Lown (2007) compared the stages of change to the Retirement Personality Types (RPT) from the Retirement Confidence Survey sponsored by the Employee Benefit Research Institute. Similar to the TTM, the RPT classifies individuals

into five personality types: (1) deniers (precontemplation), (2) impulsives (contemplation), (3) strugglers (preparation), (4) savers (action), and (5) planners (maintenance). The RPT was further adapted to specifically represent a Financial Planning Personality Type (FPPT). The FPPT is a useful and simple measure that allows researchers to determine both individuals' financial planning type and stage of behavior change (Lown, 2007).

To examine financial behavior change of Individual Development Account (IDA) participants, Shockey and Seiling (2004) also used the TTM. Six money management behaviors were identified that could enable participants to begin or increase their savings, including: setting financial goals, using a spending plan, tracking spending, reducing debt, setting aside money, and saving money. A readiness assessment for these six behaviors was administered to participants to determine their stage of behavior change before and after completing the four-week financial education classes. On average, they found that all six of the money management behaviors improved. Participants were at the preparation stage for all of the money management behaviors except for reducing debt; participants were at the action stage on debt reduction. Shockey and Seiling (2004) concluded that the TTM is applicable for evaluation of financial education programs.

Xiao et al. (2004) assessed the readiness of consumers to get out of credit card debt when they were already having credit card problems. The TTM framework was used to compare individuals' readiness to change their debt habits. In addition to the stages of change, other key constructs of the TTM were used, including decisional balance, processes of change, and self-efficacy. Xiao et al. (2004) found that behavioral

changes could involve multiple stages. Consumers in the first three stages of change (e.g., precontemplation, contemplation, and preparation) were comparable to each other while individuals in the last two stages (e.g., action and maintenance) were also similar. This information can be beneficial for financial counselors and educators as they seek to tailor their programs and resources to more appropriately suit the needs of consumers.

Johnson (2001) also used the TTM as a conceptual framework to evaluate *The Financial Checkup* and to determine if it helped advance individuals along the stages of change. *The Financial Checkup*, a personal financial management tool, allows consumers to evaluate their financial situation on an annual basis. *The Financial Checkup* was presented to participants at a one-time workshop where individuals were asked to complete a pretest and posttest, and then a follow-up test three months later. A control group was selected from a list of individuals who desired to attend a financial management workshop. From the pretest to the follow-up test, Johnson (2001) found that 29% of respondents improved at least one stage compared to 21% of the control group. Participants improved the most along the stages of change in debt financing.

Summary

The Transtheoretical Model of Change (TTM) has been used in a number of studies related to participants' change in financial behavior. The TTM was implemented to better target individuals for financial education based on their readiness for change (Xiao et al., 2008). The literature demonstrated how the TTM has been used to classify individuals according to their stage of behavior change (Gutter et al., 2007; Lown, 2007;

Xiao et al., 2004). Also, the TTM has been utilized as a means for evaluating participants' financial behavior change as a result of a financial intervention (Johnson, 2001; Shockey & Seiling, 2004).

CHAPTER III

METHODOLOGY

The purpose of this study was to evaluate the effectiveness of the Utah State University (USU) *Retirement and Savings Seminar* as measured by the overall satisfaction, financial knowledge, and financial confidence gained by participants after attending the seminar. Additionally, this study examined changes in participants' financial behavior two months after participating in the seminar. This chapter describes the sample, design, variables, instrumentation, data analysis, and data collection procedures.

Sample

The convenience sample consisted of USU employees who self-selected to attend the *Retirement and Savings Seminar*. Similar to other financial education programs, it is important to acknowledge that individuals who chose to attend the seminar were likely to already be motivated to make positive financial behavior changes. It may be assumed that participants desired to learn more about or to evaluate their plan for retirement more than employees who chose not to participate; therefore, participants were likely to be at the preparation, action, or maintenance stages of behavior change in the Transtheoretical Model (TTM).

Although employees were encouraged to bring their spouses/partners to the seminar, only data from the USU employees were used except when both spouses/partners were also employed at USU. Couple data were not gathered to avoid

conflicting responses or inaccurate averages when analyzed per household. However, it is important to recognize that spouses can influence their partner's retirement investment decisions (Yilmazer & Lyons, 2010).

Design

The research design was a pretest, posttest, comparison group design and included the following: pretest, intervention, posttest, and 2-month follow-up (e.g., $O_1 X_1 O_2 O_3$). A quasi-experimental design was used for this study rather than an experimental design because there was no random assignment to the treatment or comparison groups. The comparison group was matched on key variables (i.e., gender and employment category) to make it as representative as possible of the accessible population (Gall, Gall, & Borg, 2007).

This study sought to control for several threats to internal validity to increase the confidence that any changes were due to the seminar rather than to extraneous factors. Pretest sensitization may have affected the internal validity of this study because pretests can influence the variables being measured (Gall et al., 2007). For instance, participants' level of financial knowledge and confidence measured at the pretest may have affected participant's posttest responses and resulted in response shift bias. Although pretest sensitization is not uncommon when evaluating educational and training programs, it is important to control for this threat by having a comparison group (Gall et al., 2007). The matched comparison group helped to determine if participants improved more than non-participants due to attending the seminar.

History was another potential threat to internal validity of this study because there may have been other events that occurred outside the seminar that influenced the dependent variables. For instance, the recent economic recession may have caused more individuals to seek financial security, early retirement, or continued employment. The comparison group shared the same economic and institutional history which helped to strengthen the internal validity of the study.

A potential threat to construct validity of using a pretest, posttest comparison group design was having an inadequate program theory model (Bamberger et al., 2006). To control for this threat, a logic model was developed for the seminar to identify how outputs and impacts were achieved. Additionally, the logic model clearly defined and explained the basic objectives of the program (see Appendix A).

Among other evaluation designs, the unreliability of treatment implementation is a threat to statistical conclusion validity (Bamberger et al., 2006). When treatments are not uniformly presented to all of the subjects, this can weaken the accuracy of the research results. To control for this threat, the intervention (e.g., seminar) was delivered consistently to all participants.

Variables

Dependent Variables

To evaluate the effectiveness of the seminar, the level of satisfaction, financial knowledge, financial confidence, and financial behavior change were measured as dependent variables. As much as possible, established measures tested in previous

research studies were used to ensure reliability and minimize the threat to statistical conclusion validity. When available, psychometric properties from previously used measures have been reported below.

Satisfaction was measured in five categories with 1 = not at all satisfied, 2 = not too satisfied, 3 = somewhat satisfied, 4 = satisfied, and 5 = very satisfied. The question stated “How would you rate your overall level of satisfaction with the *Retirement and Savings Seminar?*” Three additional open-ended questions helped to assess the implementation and quality of the seminar.

Financial knowledge was assessed using two measures. The first measure was a self-rated measure of individuals’ perceived financial knowledge divided into five categories from 1 = very poor, 2 = poor, 3 = fair, 4 = good, and 5 = excellent (National Endowment for Financial Education, n.d.). The second measure was a 12-item financial knowledge scale. Each of the financial knowledge questions was multiple-choice with only one correct answer. Three of the financial knowledge questions assessed participants’ basic financial literacy. These questions were derived from the 2004, 2006, and 2008 Health and Retirement Survey (HRS) and have been used in other national surveys, including wave 11 of the National Longitudinal Study of Youth (Lusardi, 2010; Lusardi, Mitchell, & Curto, 2009a). Two questions were from the Rand American Life Panel (ALP), an online survey used to measure adults’ ability to comprehend basic financial literacy concepts (Lusardi & Mitchell, 2009). One question was from the 2008 Metlife Retirement Income IQ Test, a survey of pre-retiree knowledge of financial retirement issues (Metlife Mature Market Institute, 2008). Six investment knowledge

questions came from “Test Your Money Smarts,” a quiz to assess individuals’ basic investing knowledge (U.S. Securities and Exchange Commission, 2001). Scores were computed by adding the number of correct responses (1 = correct answer, 0 = any other answer, including “do not know”) which ranged from 0 – 12, with higher scores indicating a higher level of financial knowledge. Individuals who did not answer at least 11 of the 12 knowledge questions were not included in the analysis to avoid distorting the results with low scores due to failure to respond.

Financial confidence was measured using an 11-item scale that combined three separate measures. The first measure was a single, self-rated question from the ALP survey (Lusardi & Mitchell, 2009) to assess employees’ retirement planning confidence with a 7-point Likert scale ranging from 1 = very low and 7 = very high. The second financial confidence measure assessed respondents’ capability to perform retirement planning basics with four 5-point Likert scale questions from 1 = not at all confident to 5 = very confident. These items came from previous retirement research (AARP/ACLI, 2007; Robb, 2010; Yakoboski, 2010) and stated, “How confident are you that you: (a) will be able to manage your savings and investments so that they last for the rest of your life/and your spouses’ life?; (b) will have enough money to take care of basic expenses during retirement?; (c) are doing a good job of preparing financially for retirement?; and (d) will have enough money to take care of medical expenses during retirement?” The third measure assessed individuals’ financial self-efficacy with six 4-point Likert scale questions with 1 = exactly true, 2 = moderately true, 3 = hardly true, and 4 = not at all true. The financial self-efficacy measure was adapted from health behavior measures of

self-efficacy (Schwarzer & Renner, 2009) and was also used in previous research (Robb, 2010). For example, the first question stated, “It is hard to stick to my spending plan when unexpected expenses arise.” Because each of the three measures used a different scale, the raw scores of each measure were normalized using z-scores (ranging from -1 to 1) and then summed to generate respondents’ overall financial confidence score.

Financial behavior change was measured using two different measures: (1) the Financial Preparedness for Retirement (FPR) scale, and (2) the Retirement Personality Type (RPT). The FPR scale was used to measure the actions that participants took to prepare for retirement and consisted of ten 4-point questions with a Cronbach’s alpha of .92 (Ross & Willis, 2009). The rating scale was reversed for six questions so that the lowest level of retirement preparation scored one point and the highest level of retirement preparation scored four points. Three questions directed respondents to skip the following question if they answered no preparation. Thus, a default score of one point was applied to the skipped question as this indicated that no action was taken. FPR scores were totaled and ranged from 10 – 40.

A short version of the RPT, which is part of the Retirement Confidence Survey (Employee Benefit Research Institute, 1999), consisted of two questions: one with eight responses, and one with five responses (Lown, 2007). Based on these two questions, 40 response combinations were used to categorize respondents into one of the five distinct personality types: (1) deniers, (2) impulsives, (3) strugglers, (4) savers, and (5) planners (Lown, 2007). According to the Retirement Confidence Survey, *deniers* feel that retirement planning is futile and/or that it takes too much time and effort. *Impulsives*

believe that anyone can have a comfortable retirement; however, they often experience financial setbacks and do not consider themselves to be disciplined savers. *Strugglers* are more cautious than both deniers and impulsives and carefully research and plan for their financial goals. They consider themselves savers rather than investors and experience occasional financial setbacks from unexpected events. *Savers* are disciplined and mostly enjoy financial planning. They tend to be more cautious than planners, which leads them to take risk-averse investment behavior and less willing to take financial risks. *Planners* have estimated how much they need to invest for retirement and are, therefore, willing to take risks (Employee Benefit Research Institute, 1999). The RPT types were used as a proxy for the TTM stages of change where: deniers = precontemplation, impulsives = contemplation, strugglers = preparation, savers = action, and planners = maintenance (Lown, 2007).

Independent Variables

Socioeconomic variables were used as the independent variables to identify the characteristics of participants. The independent variables included: (1) gender, (2) marital status, (3) employment category, (4) education, (5) race, (6) age, (7) total household income, (8) current retirement assets, and (9) projected retirement assets. The wording and response categories of the demographic variables were based upon previous research (FINRA Investor Education Foundation, 2011; Robb, 2010). Gender, marital status, employment category, education, and race were categorical variables. Age was a continuous variable. Total household income was measured with five categories ranging from less than \$50,000 to \$150,000 or more and included all sources of income, before

taxes. Current retirement assets were measured by six categories ranging from less than \$100,000 to \$1 million or more. Individuals' current retirement assets were defined as bank accounts, stocks, bonds, mutual funds, and retirement accounts but did not include the value of their primary home. Projected retirement assets were also measured in six categories ranging from less than \$250,000 to \$1.5 million or more. Group, a dummy-coded grouping variable, was used for data analyses with 1 = treatment group and 2 = comparison group

Instrumentation

Three separate self-report surveys – pretest, posttest, and two-month follow-up – were used to measure the variables described previously. The pretest survey (see Appendix B) was administered at the beginning of the seminar to establish a baseline and included questions regarding financial knowledge (questions 2 and 20 – 31), financial confidence (questions 13 – 15), financial behaviors (questions 1, 3 – 12, and 16 – 19), and demographics (questions 32 – 40). Similarly, the posttest questionnaire (see Appendix C) used most of the same questions as the pretest for financial knowledge (questions 5 and 20 – 31), financial confidence (questions 16 – 18), financial behavior (questions 6 – 15 and 19), and demographics (questions 32 – 40). In addition, participant satisfaction with the seminar (questions 1 – 4) was asked of the treatment group only. The follow-up survey (Appendix D) included the same financial behavior questions (1 – 14 and 16) as the pretest and posttest. A qualitative measure (question 15) was used to identify if any retirement planning goals were achieved since the seminar ended as well

as reasons why or why not. The final question (17) was open-ended and allowed participants to qualify any of their responses or provide additional feedback.

Four researchers and professionals helped to determine face and content validity. These professionals offered expertise in the subject matter, research procedures, and aspects of financial educational programs. A pilot study with four other university employees who did not participate in the final study was used to determine the appropriateness of the survey questions and to identify any potential problems. Critical feedback and analysis was obtained from both groups to refine the measures, such as rewording questions, adjusting response categories, and so forth, and changes were made accordingly.

Data Analysis

The purpose of the study was to evaluate the seminar and measure participant outcomes. Data analyses began with descriptive statistics to portray the characteristics of the participants. The frequencies and distributions of demographic characteristics were summarized, as well as the percentages, means, and medians of the independent and dependent variables. The next section presents each of the five research questions and the data analyses that were used to help answer these questions. The data were analyzed using the Statistical Package for the Social Sciences (SPSS).

Research Question One

Research question one was, “How satisfied were participants with the Retirement and Savings Seminar?” The posttest survey had a combination of one categorical and

three open-ended questions to assess overall participant satisfaction with the seminar.

Descriptive statistics were used to analyze participants' level of satisfaction.

Research Question Two

A financial knowledge scale, consisting of 12 financial literacy questions, was used to answer the second research question, "Does financial knowledge about saving and investing for retirement increase more for participants who attend the *Retirement and Savings Seminar* than those in the comparison group?" A regression analysis was performed to determine if financial knowledge of individuals in the treatment group differed significantly from those in the comparison group. This analysis was conducted to ascertain if the previously outlined threats to validity were problematic as well as to answer this research question.

Research Question Three

To address the third research question, "Does confidence in planning and preparing for retirement increase more for participants who attend the *Retirement and Savings Seminar* than those in the comparison group," three measures were combined to measure participants' level of financial confidence. Similar to research question two, a regression analysis examined the degree of change between the treatment and comparison groups' financial confidence scores.

Research Question Four

The fourth research question, "Two months after completing the *Retirement and Savings Seminar*, does financial behavior change more for participants who attended the

seminar than those in the comparison group,” was answered by the 10-question FPR scale, which measured participants’ change in financial preparations for retirement. A one-way repeated measures analysis of variance (ANOVA) was performed to determine if financial preparation for retirement changed significantly across time for both the treatment and comparison groups.

Research Question Five

The final research question asked, “Does the *Retirement and Savings Seminar* help initiate financial behavior change to a higher stage of change in the Transtheoretical Model for some participants more than others? If so, for which participants?” This question was answered using a Wilcoxon signed-ranks test to compare each participants’ RPT type from the pretest and the follow-up. The RPT was then used as a proxy to determine individuals’ TTM stage of change. Descriptive statistics were performed to portray the profile of participants who were more or less likely to exhibit financial behavior change as a result of the seminar.

It is important to acknowledge that some participants may have demonstrated positive financial behaviors prior to the seminar and were already in the preparation, action, or maintenance stages of the TTM. These participants were expected to continue their financial behavior, and therefore, minimal change was expected in their behaviors.

Data Collection Procedures

The *Retirement and Savings Seminar*, which was held from February 2, 2011 to March 15, 2011, was taught once a week for approximately one hour per session.

Although the seminar was free, participants were required to pre-register through the USU Human Resources website. Enrollment was open for approximately one month prior to the seminar. During that time, the seminar was advertised to USU employees. Fliers were mailed to USU deans, department heads, directors, and so forth, requesting that they promote the seminar to their employees. Registration information was distributed to USU employees through the Human Resources newsletter and a press release in *Utah State Today*, an online news bulletin. Previous seminar participants were requested to provide a brief statement of how the seminar helped them or why the seminar was valuable. Three testimonials were received and used in an email to promote the seminar to a women's financial planning group, many of whom were USU employees. The Office of Human Resources at the USU Research Foundation emailed an announcement to all employees regarding the seminar. The seminar was also advertised during the annual Campus Wellness Expo.

Approval for the study from the USU Institutional Review Board (IRB) for the protection of human subjects was obtained. After the seminar registration closed, USU employees who matched registrants' gender and employment category were recruited to participate in the comparison group using a current listing of USU employee email addresses provided by the Office of Human Resources. However, a few registrants could not be matched who were: (1) non-USU employees (e.g., a spouse/partner of a USU employee or recently retired), (2) were USU Research Foundation (USURF) employees (i.e., employed at Space Dynamics Laboratory or Energy Dynamics Laboratory), or (3) employees who used a non-university email address.

The pretest survey was emailed a week before the first seminar session, the posttest was emailed directly after the last session, and the follow-up was emailed 2 months later to both the treatment and comparison groups. For the treatment group, the option of completing a paper version of the pretest and posttest surveys was also made available at the first and last session of the seminar. Reminder emails were sent one week after the original survey invitation to individuals who had not yet responded. Survey Monkey, a web-based survey company, was used to administer the surveys and to collect responses.

Participants received written notification via email each time a survey was administered that provided an explanation of the study and how the results would be used. Participants were asked to provide their email addresses for the purposes of comparing individual responses across the three surveys. A unique and random six character, alphanumeric ID was assigned to each participant. No personal identifiable information was ever associated with the responses and all participant responses were kept anonymous and confidential. Participation incentives included a drawing for a \$50 gift card to a local restaurant as well as other gift cards or gift certificates from local restaurants, the USU Bookstore, and recent copies of personal financial magazines. Individuals were also offered the opportunity to receive a summary of the study findings.

CHAPTER IV

RESULTS

This study evaluated the Utah State University (USU) *Retirement and Savings Seminar* by measuring participants' financial knowledge, financial confidence, and financial behavior change compared to a similar group of employees who did not attend the seminar. Overall participant satisfaction with the seminar was also examined. Five research questions guided the study; the findings are reported in the following sections.

Description of the Sample

Prior to running analyses, frequency distributions, box plots, and crosstabs were used to identify possible data entry errors, outliers, and other potential anomalies. For instance, non-numeric responses were dropped for questions regarding age (i.e., desired retirement age and current age). Also, an average age was calculated for respondents who provided an age range rather than a specific age. No other outliers were found.

Seventy-four university employees who registered for the *Retirement and Savings Seminar* were administered the pretest and 75 were administered the posttest and follow-up. For the treatment group, one more person was contacted for the posttest and follow-up than for the pretest because two additional participants were identified after completing paper surveys and one individual dropped the seminar before it began. Forty-seven responses were received for the treatment group pretest for a response rate of 63.5% (see Table 1). On the posttest, 37 treatment group responses were received for a response rate of 49.3%, and 31 responses were received on the follow-up for a response

rate of 41.3%. Additionally, nine individuals stated that they did not complete the posttest or the follow-up because they attended fewer than half of the seminar sessions. Other than scheduling conflicts, individuals did not specify their reasons for not completing the seminar.

Of the 74 initial registrants, 58 university employees were matched based on gender and employment category to recruit the comparison group. Approximately 10 subjects were recruited for the comparison group for every registrant in the treatment group. Thus, 550 university employees were invited to participate in the comparison group. The number of responses received for the comparison group pretest was 134, a response rate of 24.4%. Only respondents who completed the pretest were administered the posttest and the follow-up, with a total of 90 responses received on the posttest for a response rate of 16.4% and 91 responses received on the follow-up for a response rate of 16.5% (see Table 1).

In summary, the total sample size was 188 with a treatment group subsample of 54 and a comparison group subsample of 134. However, not all respondents provided demographic information. There were 176 respondents who answered at least one or

Table 1

Number of Respondents and Response Rates

	Initial	Pretest	Posttest	Follow-up
Group	<i>N</i>	<i>N</i> (Response rate)	<i>N</i> (Response rate)	<i>N</i> (Response rate)
Treatment	74	47 (63.5%)	37 (49.3%)	31 (41.3%)
Comparison	550	134 (24.4%)	90 (16.4%)	91 (16.5%)

more of the nine demographic questions on the pretest or posttest, but no more than 168 responded to any single question. Crosstabulations and *t* tests were conducted to discern whether treatment group respondents who completed both the pretest and posttest were different from those who did not. Based on demographic characteristics and the dependent variables, no significant differences were found.

The average age of the treatment and comparison groups was compared using an independent samples *t* test. As shown in Table 2, the *t* test revealed that the treatment group ($M = 49.2, SD = 11.18$) was significantly older than the comparison group ($M = 44.2, SD = 11.06$), $t(79) = 2.522, p < .05$. Given the retirement focus of the seminar, participants were expected to be older than the average USU employee.

Demographic characteristics for both the treatment and comparison groups are provided in Table 3. Women represented 62.2% of the treatment group and 57.4% of the comparison group with men comprising 37.8% of the treatment group and 42.6% of the comparison group. Most respondents were married (75.6% in the treatment group and 70.2% in the comparison group) and Caucasian (95.6% in the treatment group and 95.9% in the comparison group). There were more professional employees (55.6% of treatment

Table 2

Current Age of Sample

Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>df</i>	<i>t</i>
Treatment group	45	49.2	11.18	79	2.522*
Comparison group	119	44.2	11.06	79	

* $p < .05$

Table 3

Demographic Characteristics

Variables	<u>Treatment group</u>		<u>Comparison group</u>		χ^2
	<i>n</i>	%	<i>n</i>	%	
Gender					
Male	17	37.8	52	42.6	.32
Female	28	62.2	70	57.4	
Marital status					
Married	34	75.6	85	70.2	
Living together/partnered	-	-	1	0.8	
Widowed	-	-	2	1.7	5.08
Divorced	5	11.1	11	9.1	
Separated	1	2.2	-	-	
Never married	5	11.1	22	18.2	
Employment category					
Faculty	7	15.6	26	21.1	1.08
Professional staff	25	55.6	58	47.2	
Classified employee	13	28.9	39	31.7	
Education level					
High school or GED	2	4.4	6	4.9	
Some college/technical training	10	22.2	22	17.9	1.40
Bachelor's degree	14	31.1	43	35.0	
Master's degree	13	28.9	29	23.6	
Ph.D./professional degree	6	13.3	23	18.7	
Ethnic group					
American Indian/Alaskan Native	1	2.2	-	-	
Asian/Pacific Islander	1	2.2	3	2.5	
Black/African-American	-	-	-	-	3.46
Hispanic/Latino	-	-	-	-	
White/Caucasian	43	95.6	117	95.9	
Other	-	-	2	1.6	
Total household income					
Less than \$50,000	12	26.7	55	45.5	
\$50,000 to less than \$75,000	7	15.6	31	25.6	12.20*
\$75,000 to less than \$100,000	11	24.4	14	11.6	
\$100,000 to less than \$150,000	10	22.2	12	9.9	
\$150,000 or more	5	11.1	9	7.4	
Current retirement assets					
Less than \$100,000	20	44.4	74	61.2	
\$100,000 to less than \$250,000	4	8.9	20	16.5	
\$250,000 to less than \$500,000	14	31.1	9	7.4	16.92*
\$500,000 to less than \$750,000	2	4.4	7	77.8	
\$750,000 to less than \$1 million	1	2.2	4	3.3	
\$1 million or more	4	8.9	7	5.8	
Projected retirement assets					
Less than \$250,000	3	7.1	7	5.7	
\$250,000 to less than \$500,000	6	14.3	25	20.5	
\$500,000 to less than \$750,000	9	21.4	21	17.2	2.83
\$750,000 to less than \$1 million	12	28.6	24	19.7	
\$1 million to less than \$1.5 million	6	14.3	24	19.7	
\$1.5 million or more	6	14.3	21	17.2	

* $p < .05$

group and 47.2% of comparison group) than faculty and classified employees. Typical of university employees, the majority of respondents (73.3% of the treatment group and 77.3% of the comparison group) had earned at least a bachelor's degree.

Crosstabulations were conducted for each of the categorical demographic variables and differences between treatment and comparison group participants' were identified. According to Table 3 the crosstabs found that the treatment group reported significantly higher total household incomes ($\chi^2 = 12.20$, $df = 4$, $p < .05$) and current retirement assets ($\chi^2 = 16.92$, $df = 5$, $p < .05$) than the comparison group, as was expected since the treatment group was older and closer to retirement. The two groups were comparable on all other demographic variables.

Of those employees who completed the pretest, 80.9% of the treatment group indicated that they did not use a financial advisor for retirement planning (see Table 4). Similarly, 73.9% of the comparison group also reported that they did not use a financial advisor.

Approximately three-fourths of treatment group respondents rated themselves as having fair or good financial knowledge on the pretest and no respondents rated their financial knowledge as excellent (see Table 5). In the treatment group posttest, no

Table 4

Do You Use a Financial Advisor for Retirement Planning? (N = 181)

Financial advisor	<u>Treatment group</u>		<u>Comparison group</u>		χ^2
	<i>n</i>	%	<i>n</i>	%	
No	38	80.9	99	73.9	.92
Yes	9	19.1	35	26.1	

* $p < .05$

Table 5

How Would You Rate Your Overall Level of Financial Knowledge?

Self-assessed financial knowledge	<u>Treatment group</u>		<u>Comparison group</u>		χ^2
	<i>n</i>	%	<i>n</i>	%	
Pretest					
Very poor	1	2.1	5	3.7	8.91
Poor	11	23.4	30	22.4	
Fair	28	59.6	52	38.8	
Good	7	14.9	42	31.3	
Excellent	-	-	5	3.7	
Total	47	100.0	134	100.0	
Posttest					
Very poor	-	-	-	-	.80
Poor	2	5.4	8	9.1	
Fair	18	48.6	37	42.0	
Good	15	40.5	37	42.0	
Excellent	2	5.4	6	6.8	
Total	37	100.0	88	100.0	

* $p < .05$

participants reported a very poor level of financial knowledge, 89.1% reported a fair or good level of financial knowledge, and 5.4% reported an excellent level of financial knowledge. For the comparison group pretest, approximately 70% of employees indicated their financial knowledge was fair or good and 3.7% indicated that their financial knowledge was excellent. In comparison, 84% of respondents on the posttest rated their financial knowledge as fair or good with 6.8% rated as excellent.

Using a 12-item financial knowledge scale, treatment group scores ranged from 0 to 12 on the pretest and from 8 to 12 on the posttest (see Table 6). The average treatment group financial knowledge score increased from 9.5 ($SD = 2.40$) on the pretest to 10.5 ($SD = .94$) on the posttest. One individual scored zero on the financial knowledge

Table 6

Financial Knowledge Scores

Financial knowledge score	<i>n</i>	Min	Max	<i>M</i>	Median	<i>SD</i>
Treatment group						
Pretest	45	0	12	9.5	10	2.40
Posttest	36	8	12	10.5	11	.94
Comparison group						
Pretest	121	0	12	9.2	10	2.41
Posttest	86	1	12	9.6	10.5	2.22

treatment group pretest; the next lowest score was 5. On the comparison group pretest and posttest, the average score increased from 9.2 ($SD = 2.41$) to 9.6 ($SD = 2.22$). On the comparison group pretest, one individual scored zero; on the posttest, one individual scored 1 with 4 being the next lowest score.

As described in the previous chapter, three basic financial literacy questions (Lusardi & Mitchell, 2009) were included as part of the financial knowledge scale. Compared to their results, respondents in this study were more knowledgeable. Approximately 89% of respondents in the treatment group and 87.7% of respondents in the comparison group answered the first question correctly compared to approximately 75% reported by Lusardi and Mitchell (2009). Also, a higher percentage of the current sample answered the first two questions correctly (82.2% and 97.2% on the treatment group pretest and posttest; 84.9% on the comparison group pretest and posttest) than Lusardi and Mitchell's (2009) sample (56%). However, this difference may be related to the fact that the university employees are better educated than Lusardi and Mitchell's (2009) sample.

Another financial knowledge question asked about the recommended percentage that individuals could safely withdraw from their retirement savings each year (Metlife Mature Market Institute, 2008). Of those who responded to this question, 20% of the treatment group and 22% of the comparison group answered correctly on the pretest and 36.1% of the treatment group and 23.3% of the comparison group answered correctly on the posttest. These pretest and posttest results are similar to the Metlife Retirement Income IQ Test (Metlife Mature Market Institute, 2008), where only three out of ten respondents correctly estimated how much they could safely withdraw each year from their retirement savings.

The remaining eight questions on the financial knowledge scale came from two sources: (1) the Rand American Life Panel (Lusardi & Mitchell, 2009), and (2) the “Test Your Money Smarts” quiz (U.S. Securities and Exchange Commission, 2001). However, no comparisons were made for these financial knowledge questions because neither of these sources provided norming data.

Using standardized *z*-scores, results from the 11-item financial confidence scale shown in Table 7 indicate that treatment group participants improved their financial

Table 7

Financial Confidence Scores

Financial confidence score	<i>n</i>	Min	Max	<i>M</i>	Median	<i>SD</i>
Treatment group						
Pretest	46	-15.4	18.5	-.4	-.7	7.84
Posttest	36	-11.2	13.7	1.8	.8	6.91
Comparison group						
Pretest	130	-19.4	17.1	.2	-.0	8.38
Posttest	89	-20.6	15.5	-.7	-.6	8.64

confidence scores on average from the pretest ($M = -.4$, $SD = 7.84$) to the posttest ($M = 1.8$, $SD = 6.91$). Conversely, the comparison groups' financial confidence scores decreased on average from the pretest ($M = .2$, $SD = 8.38$) to the posttest ($M = -.7$, $SD = 8.64$).

The Financial Preparedness for Retirement (FPR) scale measured respondents' change in retirement behavior. As shown in Table 8, the average FPR score increased for the treatment group from the pretest ($M = 25.6$, $SD = 7.16$) to the posttest ($M = 28.7$, $SD = 6.64$), and from the posttest to the follow-up ($M = 31.1$, $SD = 5.42$). For the comparison group, the average FPR score increased from the pretest ($M = 25.7$, $SD = 8.27$) to the posttest ($M = 30.2$, $SD = 6.94$) then decreased from the posttest to the follow-up ($M = 26.6$, $SD = 7.45$).

According to Table 9, the most common Retirement Personality Type (RPT) for the treatment group pretest was planners (39.5%), followed by savers and strugglers (25.6%), then deniers (7%), and impulsives (2.3%). Similarly, the most common RPT for the comparison group pretest was planners (36.2%), followed by savers (29.1%),

Table 8

Financial Preparedness for Retirement (FPR) Scores

FPR score	<i>n</i>	Min	Max	<i>M</i>	Median	<i>SD</i>
Treatment group						
Pretest	40	13	39	25.6	24.5	7.16
Posttest	34	15	40	28.7	29.0	6.64
Follow-up	31	17	40	31.1	32.0	5.42
Comparison group						
Pretest	127	10	40	25.7	25.0	8.27
Posttest	56	14	40	30.2	31.0	6.94
Follow-up	89	13	40	26.6	26.0	7.45

Table 9

Retirement Personality Types

RPT	<u>Treatment group</u>		<u>Comparison group</u>		χ^2
	<i>n</i>	%	<i>n</i>	%	
Pretest					
Deniers	3	7.0	6	4.7	4.00
Impulsives	1	2.3	14	11.0	
Strugglers	11	25.6	24	18.9	
Savers	11	25.6	37	29.1	
Planners	17	39.5	46	36.2	
Total	43	100.0	127	100.0	
Follow-up					
Deniers	-	-	7	7.8	9.83*
Impulsives	-	-	5	5.6	
Strugglers	2	6.7	18	20.0	
Savers	8	26.7	24	26.7	
Planners	20	66.7	36	40.0	
Total	30	100.0	90	100.0	

* $p < .05$

strugglers (18.9%), impulsives (11%), and deniers (4.7%). On the posttest, the treatment group reported significantly more planners (66.7%), savers (26.7%), and strugglers (6.7%) than the comparison group ($\chi^2 = 9.83$, $df = 4$, $p < .05$). On the treatment group posttest, there were zero impulsives and deniers, whereas the comparison group posttest indicated 5.6% impulsives and 7.8% deniers.

Correlations between the primary dependent variables (i.e., financial knowledge, financial confidence, and financial behavior) and the previously identified between group differences (i.e., age, total household income, and current retirement assets) were examined and are presented in Table 10. Age and total household income were positively related to the dependent variables and were subsequently included as covariates in each regression and analysis of variance (ANOVA) analyses reported later

Table 10

Correlations Between Variables

Variable	1	2	3	4	5	6	7	8
1. Financial knowledge scale								
2. Self-assessed financial knowledge	.273**							
3. Financial confidence scale	.368**	.658**						
4. FPR	.371**	.361**	.373**					
5. RPT	.222*	.337**	.470**	.356**				
6. Age	.184*	-.019	.011	.307**	-.020			
7. Total household income	.311**	.174	.304**	.283**	.173	.447**		
8. Current retirement assets	.335**	.341**	.467**	.418**	.242*	.469**	.701**	
9. Group	-.211*	.004	-.141	-.274**	-.280**	-.195*	-.225*	-.139

* $p < .05$, ** $p < .01$

in the chapter. Current retirement assets was excluded from these analyses to avoid multicollinearity because this variable was highly intercorrelated with total household income.

Research Questions

Research Question One

How satisfied were participants with the *Retirement and Savings Seminar*? As shown in Table 11, the majority of respondents were either satisfied (43.2%) or very satisfied (48.6%) with the seminar. None of the respondents reported a satisfaction level below somewhat satisfied.

Participants were also asked if they would recommend the *Retirement and Savings Seminar*. Of the 37 participants who responded to the posttest, 100% recorded

Table 11

How Would You Rate Your Overall Level of Satisfaction with the Retirement and Savings Seminar? (N = 37)

Level of satisfaction	<i>n</i>	%
Not at all satisfied	-	-
Not too satisfied	-	-
Somewhat satisfied	3	8.1
Satisfied	16	43.2
Very satisfied	18	48.6

that they would recommend the seminar to others in the future (see Table 12). An open-ended question asked why individuals would not recommend the class if they had selected no. Although all respondents reported yes, they would recommend the seminar, two individuals provided additional feedback. One respondent wrote, “It [the *Retirement and Savings Seminar*] is the only method for getting any information at all. The websites recommended at hiring address only general themes, not the pros and cons of specific outlook.”

Two additional qualitative questions were asked regarding what participants liked most and least about the seminar. Thirty-six employees provided feedback on what they liked the most about the *Retirement and Savings Seminar*. The laddering strategy—a

Table 12

Would You Recommend the Retirement and Savings Seminar to Others? (N = 37)

Recommend	<i>n</i>	%
Yes	37	100
No	-	-

method of managing diverse investments that will liquidate at different time frames during retirement—was the most popular topic among respondents. Several participants also noted the quality of retirement information provided throughout the seminar, including applicable examples and illustrations specific for university employees. Further employee comments regarding the benefits of the seminar were: (1) it gave a better understanding of saving for retirement; (2) helped focus on important points to consider when preparing for retirement; (3) made an intimidating topic very interesting and accessible; (4) it was not a “do this, do that” seminar, rather, it taught timeless principles that can be used forever; (5) felt better prepared to plan for retirement savings and have somewhat of an idea of how to get started; (6) finally understood what to do to get prepared for retirement; (7) a lot of new information that will help with future investment decisions; (8) better understanding of investment strategies that will lead to a financially secure position in retirement; and (9) realization that money needs to keep ‘working’ even after retirement.

Twenty-six individuals provided feedback regarding what they liked the least about the *Retirement and Savings Seminar*. Respondents’ complaints were all related to one of the inputs and/or activities of the seminar outlined in the logic model (see Appendix A). Suggestions for modifying the curriculum included: (1) provide more examples geared for younger employees and classified employees¹, (2) explain available retirement options for individuals who do not expect a 30-year working career (e.g.,

¹ At USU, classified employees participate in a defined benefit (DB) plan whereas all other employees (e.g., professional, faculty) participate in a TIAA-CREF defined contribution (DC) plan. In the *Retirement and Savings Seminar*, more DC plan examples were provided than DB plan examples.

individuals reentering the labor force), and (3) discuss IRAs in addition to university-provided retirement benefits. Requests were made to have all presented material available before each session (e.g., workbook or handouts) rather than all together at the end of the seminar. Participants also provided recommendations regarding the seminar schedule and the technology equipment.

Research Question Two

Did financial knowledge about saving and investing for retirement increase more for participants who attended the *Retirement and Savings Seminar* than those in the comparison group? Twelve financial literacy questions were combined to create the financial knowledge scale, which had a Cronbach's alpha of .69.

To determine if the improvement in the treatment group financial knowledge scores was a result of the *Retirement and Savings Seminar*, in addition to the contributions of pretest financial knowledge, age, and total household income, a hierarchical multiple regression model was performed. As noted previously, age and total household income were positively related to financial knowledge scores (see Table 10). Therefore, these two covariates were included in the regression analysis. The dependent variable was posttest financial knowledge. The first step of the regression included pretest financial knowledge, age, and total household income. The second step included the group variable (treatment versus comparison) as well to adjust for the between group differences.

One significant predictor variable from this regression is pretest financial knowledge ($\beta = .65$) with a probability of $< .001$ showing that as pretest financial

knowledge scores increase, the respondents posttest financial knowledge scores also increase. Group is also a significant predictor variable ($\beta = -.19$) with a probability of $< .01$, indicating that posttest financial knowledge scores increased more for the treatment group than for the comparison group due in part to the seminar. As noted in Table 13, the regression had an R Square change value of .04 indicating that this model accounts for an additional 4% of the variance from the independent variables.

Research Question Three

Did confidence in planning and preparing for retirement increase more for participants who attended the *Retirement and Savings Seminar* than those in the comparison group? Three financial confidence measures were normalized using z-scores and summed to generate respondents' overall financial confidence score. The Cronbach's alpha for this financial confidence scale was .92, indicating high internal consistency of the three measures.

A hierarchical multiple regression model was examined to determine if

Table 13

Regression Predicting Financial Knowledge

Step predictors	t entry	t final	B	SEB	β	R^2 step	ΔR^2	F change	df
Step 1:						.49***			109
Pretest financial knowledge score	9.17***	9.49***	.59	.06	.65				
Age	1.30	.99	.02	.11	.10				
Total household income	1.31	1.29	.15	.01	.10				
Step 2:						.53**	.04	8.20**	108
Group		-2.86**	-.88	.31	-.19				

** $p < .01$, *** $p < .001$

participating in the *Retirement and Savings Seminar* predicted an increase in financial confidence above and beyond the contributions of pretest financial confidence, age, and total household income. As described previously, total household income was correlated with financial confidence and was higher in the treatment group than the comparison group (see Table 10) and, thus, was included in the model as a covariate. For consistency, age was also included as a covariate in this model. Posttest financial confidence was entered as the dependent variable. The first step of the regression included pretest financial confidence, age, and total household income; then group was included on the second step. Thus, the impact of the educational seminar was assessed after age, total household income, and pretest financial confidence were taken into account.

The regression results reveal group as a significant predictor variable ($\beta = -.17$) with a probability of $< .001$, indicating that the seminar contributed to financial confidence of the treatment group above and beyond age, total household income, and pretest financial confidence, accounting for an additional 3% of the variance (see Table 14). In addition, as pretest financial confidence increased one unit, posttest financial confidence increased by .86 units.

Research Question Four

Two months after completing the *Retirement and Savings Seminar*, did financial behavior change more for participants who attended the seminar than those in the comparison group? The FPR scale was used to measure the actions that participants have taken to prepare for retirement. Comparable to Ross and Willis (2009), the FPR

Table 14

Regression Predicting Financial Confidence

Step predictors	<i>t</i> entry	<i>t</i> final	<i>B</i>	SEB	β	R^2 step	ΔR^2	F change	<i>df</i>
Step 1:						.78***			112
Pretest financial confidence score	18.53***	20.08***	.86	.05	.86				
Age	.07	-.40	.00	.04	.00				
Total household income	1.66	1.61	.52	.32	.08				
Step 2:						.80***	.03	17.02***	111
Group		-4.13***	-3.31	.80	-.17				

*** $p < .001$

Cronbach's alpha for this study was .90.

A one-way repeated measures analysis of variance (ANOVA) was used to determine if participants' financial behavior improved across time and for group. The dependent variable for the ANOVA was participants' FPR scores (pretest, posttest, and follow-up) and the independent variable was group (treatment and comparison). Age and total household income were included as covariates (see Table 10) in the analysis to minimize the effects of systematic variance related to non-random assignment.

The ANOVA indicates a significant interaction effect between time and group, $F(2, 119) = 10.19, p < .001, \eta = .137$, indicating that the treatment groups' financial behavior changed substantially from the pretest to the follow-up (see Table 16). As presented in Table 15, the treatment group FPR pretest scores ($M = 25.8, SD = 6.73$) were lower than the comparison group pretest scores ($M = 28.8, SD = 7.67$). However, over time, the treatment groups' financial behaviors increased at the posttest ($M = 28.1, SD = 6.87$) and the follow-up ($M = 30.9, SD = 5.01$); whereas the comparison groups' financial

Table 15

FPR Mean Scores and Standard Deviations

FPR scores	Treatment group ($N = 21$)		Comparison group ($N = 47$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Pretest	25.8	6.73	28.8	7.67
Posttest	28.1	6.87	30.2	6.97
Follow-up	30.9	5.01	28.7	6.82

behaviors remained relatively unchanged from the pretest to the follow-up ($M = 28.7$, $SD = 6.82$). The time by group interaction is also depicted in Figure 1. Additionally, the ANOVA did not find a between subjects main effect for group, age, or total household income (see Table 16).

Research Question Five

Did the *Retirement and Savings Seminar* help initiate financial behavior change to a higher stage of change in the Transtheoretical Model for some participants more than others? If so, for which participants? In order to address this research question, the RPT was used to represent the Transtheoretical Model (TTM) stages of change (Lown, 2007).

As discussed previously, the percentage of planners (maintenance), savers (action), and strugglers (preparation) in the treatment group increased from the pretest to the follow-up while impulsives (contemplation) and deniers (precontemplation) decreased from 9.3% combined on the pretest to 0.0% on the follow-up (see Table 9). In comparison, the RPT distribution in the comparison group remained relatively unchanged from the pretest to the follow-up.

Table 16

Summary of One-Way Repeated Measures Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>P</i>
Between subjects					
Age	1	392.87	392.87	3.58	.063
Total household income	1	235.45	235.45	2.14	.148
Group	1	97.95	97.95	.89	.349
Error 1	64	7029.51	109.84		
Within subjects					
Time	2	70.25	37.72	3.02	.056
Age x time	2	11.55	6.20	.50	.596
Total household income x time	2	11.17	6.00	.48	.606
Group x time	2	236.71	127.09	10.19	.000
Error 2	119	1486.64	12.47		

To further investigate whether the *Retirement and Savings Seminar* promoted a significant change to a higher TTM stage, a nonparametric Wilcoxon signed-ranks test was performed using the RPT pretest and follow-up scores. The results show a significant movement for the treatment group RPT from pretest to follow-up ($z = -3.025$, $p < .01$) while no significant change was found for the comparison group ($z = -1.254$, $p = .210$), indicating that the seminar significantly contributed to participants' increase in RPT, and thus, progression to a higher TTM stage of change.

Furthermore, the Wilcoxon results showed that 40.7% of treatment group respondents reported a higher RPT type at the follow-up compared to the pretest and the

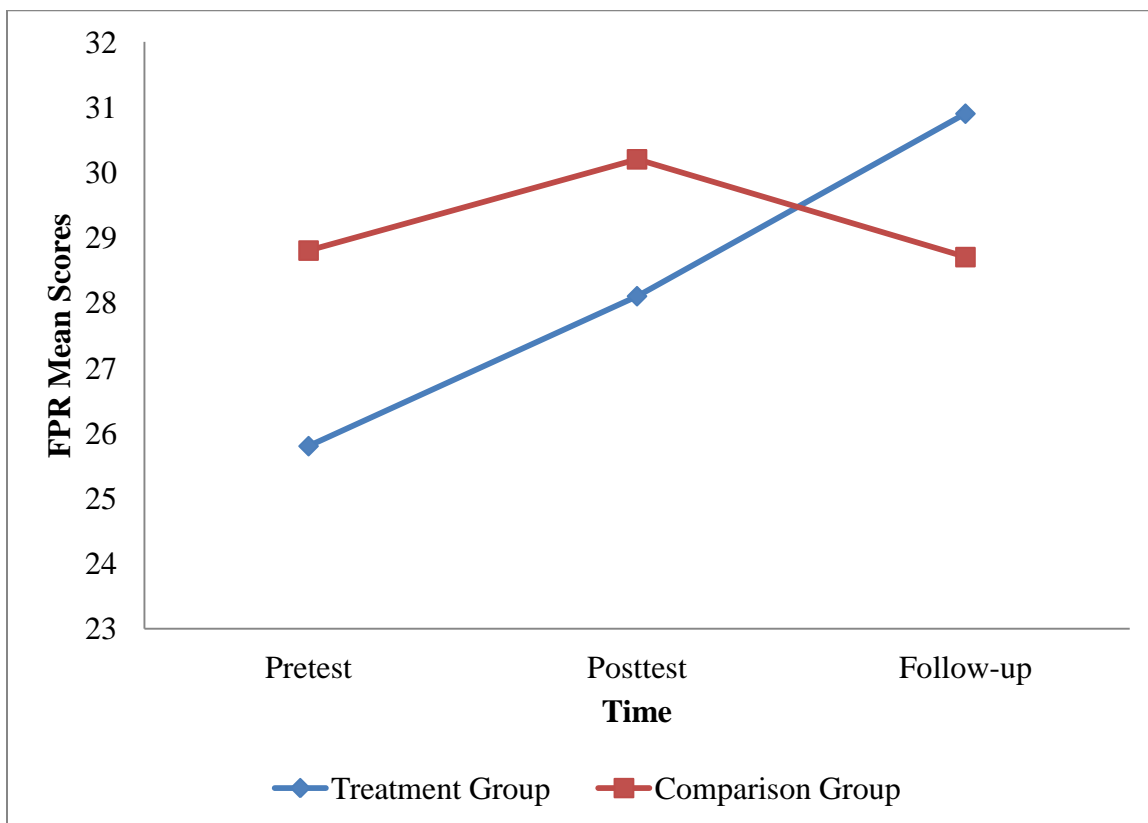


Figure 1. FPR mean scores across time for both the treatment and comparison groups.

remaining 59.3% reported no change in their RPT type from the pretest to the follow-up.

Thus, overall, treatment group participants either maintained the same TTM stage of change two months after the seminar or increased to a higher stage of change.

Individuals in the treatment group who maintained their RPT type (or TTM stage of change) were all strugglers (preparation; 6.2%), savers (action; 37.5%), and planners (maintenance; 56.3%; see Table 17). For treatment group participants who experienced improvement to a higher RPT type (or TTM stage of change), the RPT distribution shifted from 27.3% savers (action), 54.5% strugglers (preparation), and 18.2% deniers (precontemplation) on the pretest to only 9.1% strugglers (preparation) and 90.9%

Table 17

Treatment Group Retirement Personality Types That Changed (N = 11)

RPT	Pretest <i>n</i> (%)	Follow-up <i>n</i> (%)
Deniers	2 (18.2)	0 (00.0)
Impulsives	0 (00.0)	0 (00.0)
Strugglers	6 (54.5)	1 (09.1)
Savers	3 (27.3)	0 (00.0)
Planners	0 (00.0)	10 (90.9)

planners (maintenance) on the follow-up. For the comparison group, although some respondents (23%) had a higher follow-up RPT type than on the pretest, over half (65.5%) showed no change in their RPT type from the pretest to the follow-up while the remaining respondents (11.5%) had a lower follow-up RPT type than on the pretest.

After determining that the seminar helped to initiate financial behavior change for the treatment group to a higher TTM stage of change, the profile of these participants was examined to ascertain which individuals were more or less likely to change their financial behavior. As shown in Table 18, individuals who indicated a behavior change two months after the seminar were compared to those who showed no change. For both groups the majority of respondents were female, married, and Caucasian. For those who indicated behavior change from the pretest to the follow-up 63.6% were classified employees, 45.5% had attained a bachelor's degree, and 63.6% held less than \$100,000 in current retirement assets. In comparison, individuals who indicated no behavior change from the pretest to the follow-up were mostly professional staff (56.2%), had attained a master's degree or higher (56.2%), and held between \$250,000 and \$500,000 in current retirement assets (43.7%).

Table 18

Demographics of Treatment Group Retirement Personality Types (N = 27)

Variables	<u>RPT change (N = 11)</u>		<u>No RPT change (N = 16)</u>	
	<i>n</i>	%	<i>n</i>	%
Gender				
Male	2	18.2	7	43.7
Female	9	81.8	9	56.3
Marital status				
Married	7	63.6	11	68.8
Living together/partnered	-	-	-	-
Widowed	-	-	-	-
Divorced	-	-	4	25.0
Separated	1	9.1	-	-
Never married	3	27.3	1	6.2
Employment category				
Faculty	-	-	3	18.8
Professional staff	4	36.4	9	56.2
Classified employee	7	63.6	4	25.0
Education level				
High school or GED	0	-	-	-
Some college/technical training	4	36.4	3	18.8
Bachelor's degree	5	45.5	4	25.0
Master's degree	1	9.1	6	37.5
Ph.D./professional degree	1	9.0	3	18.7
Ethnic group				
American Indian/Alaskan Native	-	-	-	-
Asian/Pacific Islander	-	-	1	6.2
Black/African-American	-	-	-	-
Hispanic/Latino	-	-	-	-
White/Caucasian	11	100.0	15	93.8
Other	-	-	-	-
Total household income				
Less than \$50,000	2	18.2	6	37.5
\$50,000 to less than \$75,000	3	27.3	-	-
\$75,000 to less than \$100,000	5	45.5	4	25.0
\$100,000 to less than \$150,000	1	9	4	25.0
\$150,000 or more	-	-	2	12.5
Current retirement assets				
Less than \$100,000	7	63.6	4	25.0
\$100,000 to less than \$250,000	2	18.2	1	6.2
\$250,000 to less than \$500,000	1	9.1	7	43.7
\$500,000 to less than \$750,000	1	9.1	1	6.3
\$750,000 to less than \$1 million	-	-	1	6.3
\$1 million or more	-	-	2	12.5
Projected retirement assets				
Less than \$250,000	1	9.1	1	6.3
\$250,000 to less than \$500,000	2	18.2	2	12.5
\$500,000 to less than \$750,000	2	18.2	3	18.8
\$750,000 to less than \$1 million	6	54.5	4	25.0
\$1 million to less than \$1.5 million	-	-	3	18.7
\$1.5 million or more	-	-	3	18.7

Summary of Findings

This chapter presented the results of the statistical analysis of the data gathered from the treatment and comparison groups of the *Retirement and Savings Seminar*. Overall, participants were very satisfied with the seminar and would recommend it to other university employees in the future. Results from two separate hierarchical regression analyses found that both financial knowledge and financial confidence improved more for treatment group participants than for comparison group participants, even when accounting for group differences in age, total household income, and pretest scores. Similarly, a one-way repeated measures ANOVA showed that financial behavior increased more for the treatment group than for the comparison group two months after the seminar even after controlling for significant between group differences (age and total household income). Lastly, a Wilcoxon signed-ranks test indicated that the seminar assisted individuals in the treatment group to advance to a higher TTM stage of change, as measured by RPT, more than individuals in the comparison group.

CHAPTER V

DISCUSSION

The need for quality financial education continues to increase as consumers face an ever turbulent and more complicated economy, offering a myriad of sophisticated financial products. Financial management education can empower individuals with the confidence and ability to withstand temporary financial lapses, make informed decisions, and gain greater financial stability. Despite the importance of implementing efficient financial education programs, a limited number of sound evaluations have been conducted (Collins & O'Rourke, 2010). Because there is no industry standard for financial education performance and outcomes, continued evaluation is a requisite to cultivate high caliber financial programs. This study was conducted to assess the Utah State University (USU) *Retirement and Savings Seminar* by measuring changes in participants' financial knowledge, financial confidence, and financial behavior compared to a similar group of non-participants. Participants' overall satisfaction with the seminar was also investigated.

The findings of this study contribute to the discussion on the effectiveness of financial education programs and the impact of financial education on consumer knowledge, confidence, and behaviors. The results discussed in this chapter provide evidence that the *Retirement and Savings Seminar* was effective in increasing participants' financial knowledge, financial confidence, and financial behaviors as well as receiving high overall satisfaction scores. Chi-square crosstabulations, frequencies, a *t* test, hierarchical regressions, a one-way repeated measures analysis of variance

(ANOVA), and a Wilcoxon-signed ranks test were utilized to test these outcome variables with a .05 level of statistical significance.

The effectiveness of the seminar was supported by the results of this study in regards to financial knowledge about saving and investing for retirement. The first hierarchical regression found that financial knowledge increased significantly for the treatment group from the pretest to the posttest while the comparison group showed no significant improvement. Furthermore, seminar participants showed significant increases in their knowledge scores despite being older, having more household income, and having higher pretest knowledge scores than the comparison group. In other words, the seminar influenced the knowledge level of employees who were already fairly knowledgeable before participating in the seminar. Thus, the seminar contributed to an increase in participants' financial knowledge, similar to previous research (Danes & Haberman, 2007; Kim, 2007; Lyons et al., 2008; Peng et al., 2007; Weiner et al., 2005).

Findings from the second hierarchical regression support the hypothesis that participating in the *Retirement and Savings Seminar* also improved USU employees' financial confidence in planning and preparing for retirement. Consistent with other financial education program evaluations (Danes & Haberman, 2007; Garman et al., 1999), seminar participants performed significantly better on the posttest than the pretest in regards to financial confidence. Additionally, the treatment group increased their financial confidence scores above and beyond group differences in age, total household income, and pretest confidence scores. This finding implies that employees participating in the seminar gained confidence which could help them to build on the knowledge they

learned, thereby improving their future financial security.

The USU *Retirement and Savings Seminar* was also effective in helping participants improve their financial behaviors in preparation for retirement. Results of the ANOVA for financial behavior change based on the Financial Preparedness for Retirement (FPR) scale revealed a significant time by group interaction effect. The treatment groups' FPR scores increased across the pretest, posttest, and follow-up regardless of group differences in age and total household income while the comparison groups' FPR scores remained unchanged. Based on this result, it appears that seminar participants' positively changed their financial behaviors due to the seminar, which is consistent with similar program evaluations in the financial education literature (Bell et al., 2009; Carswell, 2009; Danes & Haberman, 2007; Haynes-Bordas et al., 2008; Kim, 2007; Lyons et al., 2008; Mandell & Klein, 2007; Wiener et al., 2005). Additionally, no other main effects were found, indicating that individuals' financial behavior change was dependent on time rather than group, age, or total household income.

The results of this study were consistent with the Transtheoretical Model of Change (TTM), as described by Prochaska (1979). The TTM portrays how individuals progress through stages of change to modify a problem behavior or acquire a positive behavior (Prochaska et al., 1992, 1994; Prochaska & Velicer, 1997). The TTM includes five hierarchical stages of change: precontemplation, contemplation, preparation, action, and maintenance. With each stage of change, it is assumed that individuals gain greater self-control, awareness, and ability to act on new positive behaviors. Educational programs, such as the *Retirement and Savings Seminar*, have been used as a medium for

helping individuals progress through these stages (Johnson, 2001; Shockey & Seiling, 2004). The findings of this study generally supported this premise.

In this study, individuals' financial behaviors were examined before and after the seminar for both the treatment and comparison groups. In the treatment group, there was a significant shift in the TTM stages of change from the pretest to the follow-up and all of the individuals in the two lowest TTM stages of change (i.e., precontemplation and contemplation) progressed to a higher stage of change. On the other hand, there was generally no shift in the TTM stages of change for the comparison group. Furthermore, there was no downward shift among the stages of change within the treatment group; rather, seminar participants either maintained or increased their TTM stage of change from the pretest to the follow-up. Individuals who did not show progress to a higher stage of change were already in the top three stages (i.e., preparation, action, or maintenance). These results support the hypothesis that the *Retirement and Savings Seminar* helped to facilitate change to a higher TTM stage of change by educating and/or motivating individuals regarding their financial behaviors.

Despite these positive outcomes, it is also important to note that the majority of participants were already in the preparation, action, or maintenance stages prior to the educational seminar. In other words, most of the treatment group participants appeared to already be motivated to learn about retirement planning or make changes in their financial preparations for retirement prior to the seminar. This is consistent with previous program evaluation research (Meier & Sprenger, 2007). At the same time, it is not surprising that relatively few individuals were in the precontemplation and contemplation

stages of change for this study. By definition, individuals in the precontemplation stage are unaware of their need to make changes to their current behaviors and so naturally they are not as likely to seek out or to make the time for voluntary education programs. They do not recognize or are unwilling to consider the benefits of these types of programs. Similarly, although persons in the contemplation stage may be more aware of their situation or need to make changes, they are still not ready to take the first step (Prochaska, 1979). Stumbling blocks such as procrastination and lack of accountability or responsibility often impede their ability or desire to change. Thus, it was expected that both individuals who started in the higher TTM stages of change would show little progression as they maintained their already positive financial behaviors while fewer individuals would start in the lower TTM stages of change due to their preexisting resistance to change.

This study found strong evidence that, overall, participants were very satisfied with the *Retirement and Savings Seminar*. The seminar provided steps on how to set financial goals and start preparing and saving for retirement. Some minor suggestions were made, such as changes to the schedule and curriculum, to improve the seminar. However, the majority of respondents indicated that the information presented was both useful and interesting.

Financial education has the potential to assist individuals in preparing for their financial future by identifying specific options for their financial needs and providing encouragement and resources. Although many persons could benefit from financial education, it is often those who could benefit the most who are the hardest to solicit to

participate. For instance, individuals who lack financial knowledge and/or confidence are particularly vulnerable to financial struggles and have a greater need for financial assistance. However, these individuals may be less likely to seek out or participate in financial education. Although the seminar proved to significantly increase participants' financial knowledge and confidence, pretest knowledge and confidence mean scores were relatively high before the seminar began. Also, USU employees who participated in the seminar were primarily in the higher stages of change (i.e., preparation, action, and maintenance). These results imply that employees with moderate-to-high financial knowledge, confidence, and behaviors were reached by the *Retirement and Savings Seminar*; however, few employees with low-to-moderate financial knowledge, confidence, and behaviors enrolled. Thus, one area that financial educators and counselors could concentrate on is advertising and participation incentives to attract employees in the early stages of change.

Limitations and Strengths

There are several limitations to this study. One limitation for the treatment group was the inability to accurately assess dyadic data versus individual data. Although the *Retirement and Savings Seminar* was made available to both USU employees and their spouses/partners, data primarily from the USU employed spouse/partner were assessed to avoid reporting couple averages of total household income. Couples on the registration list with the same last name were easy to distinguish. In such cases, the non-USU employee was not emailed the surveys or included in the treatment group. However, a few anomalies still occurred. For instance, there was one couple in which both spouses

were USU employees and responded to at least one of the surveys, and another non-USU employed spouse responded to the paper surveys provided at the seminar. To circumvent this problem in the future, it would be advisable to include an option for “spouse/partner” or “non-USU employee” for the question “Which employment category at the university best describes your position (either currently or prior to retirement)?” This was not a limitation for the comparison group because only USU employee email addresses were used for recruiting.

Another limitation of this study was not being able to consistently track all individuals’ responses. Email addresses were the only form of personal identifiable information used for tracking purposes; however, there were a few discrepancies in matching cases across all three data collections among treatment group participants who completed paper versions of the survey. For instance, a few respondents used a different email address than their work email address, therefore, their responses could not be matched to the email address from the registration list. Conversely, one participant did not provide any email address on a paper survey, so his/her responses could not be matched to the other two surveys. Also, two seminar registrants provided invalid email addresses, thus they did not receive the survey invitations and were not included in the treatment group. For these reasons, it would be beneficial to use additional personal identifiable information for tracking employees’ responses in the future.

In order to obtain as much feedback as possible regarding the *Retirement and Savings Seminar*, all treatment group participants were invited to complete each survey. This resulted in a small percentage of individuals (approximately 8%) who completed the

posttest and/or follow-up but who did not complete the baseline pretest. Also, there were minor technical problems with data collection in Survey Monkey and embedding accurate survey hyperlinks in each email. These problems were identified during the administration of the pretest and fixed for the posttest and follow-up surveys. These limitations were due to Survey Monkey options and could be avoided by using a different web-based data collector. However, Survey Monkey was beneficial because it forced individuals to select survey answers solely from the category responses provided, thus reducing the number of inaccurate survey responses or outliers.

The use of a small sample was another limitation of this study. A large sample size is advantageous because the larger the sample size, the more likely participants' scores will be representative of population scores on the measured variables (Gall et al., 2007). Although the sample size for both the treatment and comparison groups was above the conventional 30 participant minimum (Gall et al., 2007), it would be best to perform a power analysis in the future to calculate the minimum sample required to achieve a significant effect size. Also, there was no bias detected due to sample attrition because seminar participants who did not respond to the pretest and posttest were not significantly different from those who did. In other words, individuals in the treatment group who withdrew from the sample were similar to those who remained in the sample.

There were also a number of strengths of the study. One of the primary strengths was the use of a comparison group. According to Collins and O'Rourke (2010), the lack of a comparison group has been the most serious methodological issue of previous financial education program evaluations. Because a non-randomly assigned sample was

used for this study, a comparison group was necessary to account for the threat of selection bias. The use of a comparison group in the data analyses helped to avoid overinflating the estimated positive effects of the *Retirement and Savings Seminar*. The comparison group also helped to minimize the potential internal threats to validity of pretest sensitization and history. To obtain additional precision in statistical analysis, the comparison group was matched to the treatment group based on gender and employment category. Matching was used based on the assumptions that the sample size would be small and that there would be relatively minor differences between the treatment and comparison groups (Gall et al., 2007). This minimized the likelihood of having large group differences.

Another strength was the use of a logic model. The USU *Retirement and Savings Seminar* logic model was developed after the seminar had been offered in previous years but before this year's seminar and it provided considerable guidance for the purpose, research questions, and design of the study. The use of a logic model helped to strengthen the construct validity of the study. Also, logic models help to define how a program is intended to achieve its objectives, test critical assumptions, and identify contextual factors that may affect program outcomes (Bamberger et al., 2006). For example, one of the key assumptions that was identified in the logic model was that educational programs, such as this seminar, can potentially influence participants to make behavior changes (see Appendix A). This assumption then served as a guide in determining the research questions and research design. Also, each of the short-term impacts of the seminar identified in the logic model were assessed as one of the primary

dependent variables of the study.

As suggested by previous financial education program evaluations (Collins & O'Rourke, 2010; Garman et al., 1999), the use of a longitudinal design also strengthened this study. The administration of pretest, posttest, and follow-up questionnaires was more powerful than the more commonly used cross-sectional, one-time program evaluation design because it allowed for a better measurement of program impacts. The pretest helped to establish a baseline while the follow-up captured short-term program impacts. The interaction between time and group discussed previously provides further evidence that it is particularly beneficial for researchers to utilize a longitudinal design when measuring behavior change.

Recommendations for Future Research

Although evidence was found that individuals changed their financial behaviors as a result of the seminar, it would be beneficial to further investigate the timing of the follow-up. The follow-up was administered to the treatment and comparison groups two months after the seminar was completed. This timeframe was used because it was assumed that seminar participants were most likely to make financial behavior changes soon after completing the seminar. Also, a longer follow-up period was avoided because it may have contributed to positive bias due to attrition (Collins & O'Rourke, 2010). However, it is possible that the follow-up itself prompted additional behavior change for some individuals as they were reminded about their retirement goals. Thus, it is recommended that future researchers include a second and possibly third brief follow-up to capture any additional behavior change prompted by the first follow-up. The use of

multiple follow-ups might also reveal a better timeline for follow-up observations in future program evaluations.

Another recommendation relates to the measures used to analyze financial confidence. On the pretest and posttest, three separate measures were used to examine individuals' financial confidence and self-efficacy. To maintain the power of the statistical analyses, these three measures were combined as one financial confidence scale given the high reliability coefficient. Each of the three measures was essentially gathering the same information; therefore, it would be more efficient to use only one of the financial confidence measures in future research rather than all three. Out of the three measures, it is recommended that the pretest question 14, which consisted of four items, be used to examine financial confidence in future research because of its high Cronbach's alpha of .93. This measure provides the researcher with a slightly broader perspective than the single, self-rated financial confidence measure (Lusardi & Mitchell, 2009; pretest question 13) and is more specific to financial confidence than the self-efficacy measure (Schwarzer & Renner, 2009; pretest question 15).

Another potential improvement for future program evaluations would be to use a mixed-methods approach by gathering qualitative data, such as interviews or focus groups, in addition to quantitative self-report survey data. When using a mixed-methods design, quantitative data can provide breadth of understanding while qualitative data can provide further depth. Methodological triangulation refers to incorporating a mixed-methods design by gathering data from different methods of inquiry (Bamberger et al., 2006). The use of triangulation could improve the validity of the program evaluation

findings, provide educators with further insight into what aspects of the program are the most useful, and help identify what motivates individuals to take the initiative and change as a result of the financial education.

For instance, at least 12% of the individuals who initially registered for the *Retirement and Savings Seminar* attended fewer than half of the seminar sessions. Most of these individuals did not provide specific feedback as to why they stopped attending the seminar; however, it is possible that some of these individuals became uninterested or unable to attend because of schedule conflicts. It may also be speculated that these individuals either do not value free education as highly as other priorities or are among the lower TTM stages of change (precontemplation or contemplation) and were unready to commit or change their financial behaviors. Based on the attrition analysis, there was no significant difference in financial knowledge scores between those who completed the pretest and posttest and those who did not. Therefore, to gain a clearer understanding of participants' motives and to better tailor the educational program to meet participants' needs and concerns, future evaluation research should incorporate a mixed-methods design by contacting drop-outs to find out why they stopped attending.

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APPENDICES

Appendix A

Logic Model: USU Retirement and Savings Seminar

Logic Model: USU Retirement and Savings Seminar

<i>Problem Statement</i>
<ul style="list-style-type: none"> ▪ Insufficient financial knowledge and preparation for retirement
<i>Goal Statement</i>
<ul style="list-style-type: none"> ▪ Increase financial knowledge to improve retirement security
<i>Assumptions</i>
<ul style="list-style-type: none"> ▪ Resources are adequate and available ▪ Participants (and spouses/partners) are willing and able to attend all sessions ▪ Knowledge leads to behavior change
<i>External Factors</i>
<ul style="list-style-type: none"> ▪ Participants' personal preferences and experiences ▪ USU employee benefits and retirement options
<i>Inputs</i>
<ul style="list-style-type: none"> ▪ Instructor ▪ Room ▪ Time ▪ Materials ▪ Equipment ▪ Technology
<i>Outputs</i>
<ul style="list-style-type: none"> ▪ Number of USU employees (and their spouses/partners) who attend ▪ Number of sessions provided
<i>Activities</i>
<ul style="list-style-type: none"> ▪ Develop curriculum ▪ Schedule meeting time and place ▪ Conduct sessions on retirement planning topics ▪ Facilitate retirement preparation ▪ Provide education and advising
<i>Short-term Impacts</i>
<ul style="list-style-type: none"> ▪ Increase in participants' financial knowledge ▪ Improvement in participants' financial confidence ▪ Overall participant satisfaction ▪ Employees are aided in setting financial goals
<i>Long-term Impacts</i>
<ul style="list-style-type: none"> ▪ Participants improve (or maintain) retirement planning financial behaviors
<i>Overall Impacts</i>
<ul style="list-style-type: none"> ▪ Financially secure retirement for participants ▪ Participants achieve retirement goals ▪ Greater economic stability

Appendix B
Pretest Survey

This survey is being conducted to determine the effectiveness of the Retirement and Savings Seminar taught on campus to Utah State University employees. You are receiving this survey because you are currently registered² for the seminar at USU. Survey questions will ask you to check a response or provide a short answer to gauge your level of understanding and confidence in regards to retirement planning and also your current retirement planning behaviors. This will help us better understand retirement knowledge, confidence, and behaviors of USU employees.

As an incentive to participate, the email addresses of individuals who return all three surveys (i.e. pretest, posttest, and follow-up) will be entered into a drawing for prizes, including a \$50 gift card to your choice of local restaurant as well as prizes from local restaurants, the USU Bookstore, and personal financial literature.

This study is being conducted by:

Dr. Jean Lown, Professor
Diana Burk, Master's degree student
Department of Family, Consumer, and Human Development
Utah State University

(1) Do you use a financial advisor for retirement planning?

No
Yes

(2) How would you rate your overall level of financial knowledge?

Very poor
Poor
Fair
Good
Excellent

(3) How much have you thought about retirement?

A lot
Some
A little
Not at all

² This wording was used for the treatment group survey. For the comparison group survey, the wording was changed from “you are currently registered” to “you are not currently registered.”

(4) Have you collected any information about preparing financially for retirement?

- A lot
- Some
- A little
- Not at all (go to question 6)

(5) If you have collected information about preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(6) Prior to the USU Retirement and Savings Seminar, have you attended any seminars or gone to any meetings on preparing financially for retirement?

- More than two
- Two
- One
- None (go to question 8)

(7) If you have been to any seminars or meetings on preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(8) Have you discussed preparing financially for retirement with anyone?

- Not at all (go to question 10)
- Only passing, not in detail
- Yes with my family and/or friends
- Yes with a Financial Planner or Accountant

(9) If you have discussed preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(10) Have you thought about a date or the age at which you wish to retire?

- A lot
- Some
- A little
- Not at all

If so, please provide the age you wish to retire at: _____

(11) Have you thought about how long you expect to be retired for?

- A lot
- Some
- A little
- Not at all

(12) Have you thought about how much you will need to have saved by the time you retire so you can live comfortably in retirement?

- A lot
- Some
- A little
- Hardly at all

The following questions ask about your financial confidence.

(13) On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your understanding of financial planning?

- 1 2 3 4 5 6 7

(14) Please select the response that best describes your confidence to do the following:

How confident are you that you:	Not At All Confident	Not Too Confident	Somewhat Confident	Confident	Very Confident
a. will be able to manage your savings and investments so that they last for the rest of your life/and your spouse's life?	1	2	3	4	5
b. will have enough money to take care of basic expenses during retirement?	1	2	3	4	5
c. are doing a good job of preparing financially for retirement?	1	2	3	4	5
d. will have enough money to take care of medical expenses during retirement?	1	2	3	4	5

(15) Please respond to the following statements by marking the number of your response using the following response categories:

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

- _____ It is hard to stick to my spending plan when unexpected expenses arise.
- _____ It is challenging to make progress toward my financial goals.
- _____ When unexpected expenses occur I usually have to use credit.
- _____ When faced with a financial challenge, I have a hard time figuring out a solution.
- _____ I lack confidence in my ability to manage my finances.
- _____ I worry about running out of money in retirement.

The following questions ask about your financial behaviors.

(16) Which of the following *Financial Attitudes* statements best describes you?**(Choose only one)**

- Just when I think I have a handle on my finances, something always happens that sets me back from my financial goals.
- I am disciplined at saving.
- I am willing to take substantial financial risk for substantial gain.
- I frequently spend money when I do not plan to buy anything.
- I pay off my credit cards at the end of every month.
- I always research and plan for a big purchase.
- I am not willing to take any financial risks, no matter what the gain.
- I enjoy financial planning.

(17) Which of the following *Retirement Planning* statements best describes you?**(Choose only one)**

- I think anyone can have a comfortable retirement, if they just plan and save.
- I feel it is pointless to plan for retirement because it is too far away to know what I will need.
- If I just save some money each month, I will be fine in my retirement.
- I think preparing for retirement takes too much time and effort.
- I am more of a saver than an investor.

(18) Please read the following questions and all the possible answers carefully.**Choose the best response for each question and mark your answer.**

1. YES, I have been for MORE than 6 months.
 2. YES, I have been, but for LESS than 6 months.
 3. NO, but I intend to in the next 30 days.
 4. NO, but I intend to in the next 6 months.
 5. NO, and I do NOT intend to in the next 6 months.
- Do you consistently balance or monitor your checking account to avoid bounced checks or overdrafts?
- Do you regularly monitor your spending?
- Do you save a portion of each paycheck (your income or spouse/partners')?
- Have you tried to determine how much you need to save for retirement?
- Do you invest for retirement in a personal account such as an IRA, SEP, SIMPLE, or supplemental retirement account that you have set up yourself?

(19) How often do you change or rebalance the investments in your retirement accounts?

- At least once a year
- Once every few years
- Rarely
- Never

The following questions ask about your financial knowledge.

(20) Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- More than \$102
- Exactly \$102
- Less than \$102
- Do not know

(21) Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- More than today
- Exactly the same
- Less than today
- Do not know

(22) Buying a single company stock usually provides a safer return than a stock mutual fund.

- True
- False
- Do not know

(23) Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have on this account in total?

- More than \$200
- Exactly \$200
- Less than \$200
- Do not know

(24) Suppose that next year, your income doubles and prices of all goods double too. How much will you be able to buy with your income?

- More than today
- The same
- Less than today
- Do not know

(25) To help ensure that an individual has enough money to make savings last his or her lifetime, experts are now recommending limiting the percent they withdraw from their savings each year to...?

- 4%
- 7%
- 10%
- 15%
- Do not know

(26) If you buy a company's stock:

- You own a part of the company
- You have lent money to the company
- You are liable for the company's debts
- The company will return your original investment to you with interest
- Do not know

(27) If you buy a company's bond:

- You own a part of the company
- You have lent money to the company
- You are liable for the company's debts
- You can help manage the company
- Do not know

(28) Monique owns a wide variety of stocks, bonds, and mutual funds to lessen her risk of losing money. This is called:

- Saving
- Compounding
- Diversifying
- Do not know

(29) Maria wants to have \$100,000 in 20 years. The sooner she starts to save, the less she'll need to save because:

- The stock market will go up
- Interest rates will go up
- Interest on her savings will start compounding
- Do not know

(30) Jennifer wants to take some of her savings and invest in a mutual fund because mutual funds are

- Guaranteed to earn more than savings accounts
- Risk free
- Managed by experts at picking investments
- Do not know

(31) Bob is 22 years old and wants to start saving now for his retirement in 43 years. Of these choices, where should Bob put most of his money now for this long-term goal?

- A savings account at the bank
- A checking account at the bank
- A mutual fund that invests in stocks
- Do not know

The following questions are about you and your family.

(32) What is your gender?

- Male
- Female

(33) What is your current age? _____ Years

(34) What is your marital status?

- Married
- Living together/partnered
- Widowed
- Divorced
- Separated
- Never married

(35) Which employment category at the university best describes your position (either currently or prior to retirement)?

- Faculty
- Professional staff
- Classified employee

(36) What is the highest level of education you have completed?

- High school or GED
- Some college or technical training beyond high school
- Bachelor's degree
- Master's degree
- Ph.D. or Professional degree (i.e., J.D., M.D., D.V.M. etc.)

(37) What is your primary race or ethnicity?

- American Indian or Alaska Native
- Asian or Pacific Islander
- Black or African-American
- Hispanic or Latino
- White or Caucasian
- Other

(38) What was your total household income for last year, before taxes? Please include income from all sources.

- Less than \$50,000
- \$50,000 to less than \$75,000
- \$75,000 to less than \$100,000
- \$100,000 to less than \$150,000
- \$150,000 or more

(39) In total, about how much money would you say you (and your spouse/partner) currently have in retirement assets? This includes bank accounts, stocks, bonds, mutual funds, and retirement accounts, but does not include the value of your primary home.

- Less than \$100,000
- \$100,000 to less than \$250,000
- \$250,000 to less than \$500,000
- \$500,000 to less than \$750,000
- \$750,000 to less than \$1 million
- \$1 million or more

(40) How much in total retirement assets do you think you need for retirement?

- Less than \$250,000
- \$250,000 to less than \$500,000
- \$500,000 to less than \$750,000
- \$750,000 to less than \$1 million
- \$1 million to less than \$1.5 million
- \$1.5 million or more

Appendix C
Posttest Survey

This survey is being conducted to determine the effectiveness of the Retirement and Savings Seminar taught on campus to Utah State University employees. You are receiving this survey because you are currently registered³ for the seminar at USU. Survey questions will ask you to check a response or provide a short answer to gauge your level of understanding and confidence in regards to retirement planning and also your current retirement planning behaviors. This will help us better understand retirement knowledge, confidence, and behaviors of USU employees.

As an incentive to participate, the email addresses of individuals who return all three surveys (i.e. pretest, posttest, and follow-up) will be entered into a drawing for prizes, including a \$50 gift card to your choice of local restaurant as well as prizes from local restaurants, the USU Bookstore, and personal financial literature.

This study is being conducted by:

Dr. Jean Lown, Professor
 Diana Burk, Master's degree student
 Department of Family, Consumer, and Human Development
 Utah State University

The following questions ask about your satisfaction.⁴

(1) How would you rate your overall level of satisfaction with the *Retirement and Savings Seminar*?

- Not at all satisfied
- Not too satisfied
- Somewhat satisfied
- Satisfied
- Very satisfied

(2) What did you like the most about the *Retirement and Savings Seminar*?

(3) What did you like the least about the *Retirement and Savings Seminar*?

(4) Would you recommend the *Retirement and Savings Seminar* to others?

- Yes
- No

If no, why not?

³ This wording was used for the treatment group survey. For the comparison group survey, the wording was changed from “you are currently registered” to “you are not currently registered.”

⁴ The satisfaction questions (1 – 4) were only included on the treatment group survey.

(5) How would you rate your overall level of financial knowledge?

- Very poor
- Poor
- Fair
- Good
- Excellent

(6) How much have you thought about retirement?

- A lot
- Some
- A little
- Not at all

(7) Have you collected any information about preparing financially for retirement?

- A lot
- Some
- A little
- Not at all (go to question 9)

(8) If you have collected information about preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(9) Prior to the USU *Retirement and Savings Seminar*, have you attended any seminars or gone to any meetings on preparing financially for retirement?

- More than two
- Two
- One
- None (go to question 11)

(10) If you have been to any seminars or meetings on preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(11) Other than the USU *Retirement and Savings Seminar*, have you discussed preparing financially for retirement with anyone?

- Not at all (go to question 13)
- Only passing, not in detail
- Yes with my family and/or friends
- Yes with a Financial Planner or Accountant

(12) If you have discussed preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(13) Have you thought about a date or the age at which you wish to retire?

- A lot
- Some
- A little
- Not at all

If so, please provide the age you wish to retire at: _____

(14) Have you thought about how long you expect to be retired for?

- A lot
- Some
- A little
- Not at all

(15) Have you thought about how much you will need to have saved by the time you retire so you can live comfortably in retirement?

- A lot
- Some
- A little
- Hardly at all

The following questions ask about your financial confidence.

(16) On a scale from 1 to 7, where 1 means very low and 7 means very high, how would you assess your understanding of financial planning?

- 1 2 3 4 5 6 7

(17) Please select the response that best describes your confidence to do the following:

How confident are you that you:	Not At All Confident	Not Too Confident	Somewhat Confident	Confident	Very Confident
a. will be able to manage your savings and investments so that they last for the rest of your life/and your spouse's life?	1	2	3	4	5
b. will have enough money to take care of basic expenses during retirement?	1	2	3	4	5
c. are doing a good job of preparing financially for retirement?	1	2	3	4	5
d. will have enough money to take care of medical expenses during retirement?	1	2	3	4	5

(18) Please respond to the following statements by marking the number of your response using the following response categories:

1 = Not at all true 2 = Hardly true 3 = Moderately true 4 = Exactly true

- _____ It is hard to stick to my spending plan when unexpected expenses arise.
 _____ It is challenging to make progress toward my financial goals.
 _____ When unexpected expenses occur I usually have to use credit.
 _____ When faced with a financial challenge, I have a hard time figuring out a solution.
 _____ I lack confidence in my ability to manage my finances.
 _____ I worry about running out of money in retirement.

(19) Please select the response that best describes your answer.

As a result of the USU Retirement and Savings Seminar, do you plan to:	No	Maybe	Yes	Already doing this	Does not apply
a. Set specific retirement goals?	1	2	3	4	5
b. Review and revise financial goals?	1	2	3	4	5
c. Calculate the amount of money needed to retire?	1	2	3	4	5
d. Increase the amount you invest for retirement?	1	2	3	4	5
e. Periodically review retirement investments and adjust as needed?	1	2	3	4	5
f. Diversify retirement investments or adjust your asset allocation?	1	2	3	4	5

Now that you have completed the USU Retirement and Savings Seminar, please respond to the following questions ask about your financial knowledge.

(20) Suppose you had \$100 in a savings account and the interest rate was 2% per year. After 5 years, how much do you think you would have in the account if you left the money to grow?

- More than \$102
- Exactly \$102
- Less than \$102
- Do not know

(21) Imagine that the interest rate on your savings account was 1% per year and inflation was 2% per year. After 1 year, how much would you be able to buy with the money in this account?

- More than today
- Exactly the same
- Less than today
- Do not know

(22) Buying a single company stock usually provides a safer return than a stock mutual fund.

- True
- False
- Do not know

(23) Suppose you had \$100 in a savings account and the interest rate is 20% per year and you never withdraw money or interest payments. After 5 years, how much would you have on this account in total?

- More than \$200
- Exactly \$200
- Less than \$200
- Do not know

(24) Suppose that next year, your income doubles and prices of all goods double too. How much will you be able to buy with your income?

- More than today
- The same
- Less than today
- Do not know

(25) To help ensure that an individual has enough money to make savings last his or her lifetime, experts are now recommending limiting the percent they withdraw from their savings each year to...?

- 4%
- 7%
- 10%
- 15%
- Do not know

(26) If you buy a company's stock:

- You own a part of the company
- You have lent money to the company
- You are liable for the company's debts
- The company will return your original investment to you with interest
- Do not know

(27) If you buy a company's bond:

- You own a part of the company
- You have lent money to the company
- You are liable for the company's debts
- You can help manage the company
- Do not know

(28) Monique owns a wide variety of stocks, bonds, and mutual funds to lessen her risk of losing money. This is called:

- Saving
- Compounding
- Diversifying
- Do not know

(29) Maria wants to have \$100,000 in 20 years. The sooner she starts to save, the less she'll need to save because:

- The stock market will go up
- Interest rates will go up
- Interest on her savings will start compounding
- Do not know

(30) Jennifer wants to take some of her savings and invest in a mutual fund because mutual funds are

- Guaranteed to earn more than savings accounts
- Risk free
- Managed by experts at picking investments
- Do not know

(31) Bob is 22 years old and wants to start saving now for his retirement in 43 years. Of these choices, where should Bob put most of his money now for this long-term goal?

- A savings account at the bank
- A checking account at the bank
- A mutual fund that invests in stocks
- Do not know

The following questions are about you and your family. If you previously answered these questions on the pretest survey, you do not need to continue.

(32) What is your gender?

- Male
- Female

(33) What is your current age? _____ Years

(34) What is your marital status?

- Married
- Living together/partnered
- Widowed
- Divorced
- Separated
- Never married

(35) Which employment category at the university best describes your position (either currently or prior to retirement)?

- Faculty
- Professional staff
- Classified employee

(36) What is the highest level of education you have completed?

- High school or GED
- Some college or technical training beyond high school
- Bachelor's degree
- Master's degree
- Ph.D. or Professional degree (i.e., J.D., M.D., D.V.M. etc.)

(37) What is your primary race or ethnicity?

- American Indian or Alaska Native
- Asian or Pacific Islander
- Black or African-American
- Hispanic or Latino
- White or Caucasian
- Other

(38) What was your total household income for last year, before taxes? Please include income from all sources.

- Less than \$50,000
- \$50,000 to less than \$75,000
- \$75,000 to less than \$100,000
- \$100,000 to less than \$150,000
- \$150,000 or more

(39) In total, about how much money would you say you (and your spouse/partner) currently have in retirement assets? This includes bank accounts, stocks, bonds, mutual funds, and retirement accounts, but does not include the value of your primary home.

- Less than \$100,000
- \$100,000 to less than \$250,000
- \$250,000 to less than \$500,000
- \$500,000 to less than \$750,000
- \$750,000 to less than \$1 million
- \$1 million or more

(40) How much in total retirement assets do you think you need for retirement?

- Less than \$250,000
- \$250,000 to less than \$500,000
- \$500,000 to less than \$750,000
- \$750,000 to less than \$1 million
- \$1 million to less than \$1.5 million
- \$1.5 million or more

Appendix D
Follow-up Survey

This survey is being conducted to determine the effectiveness of the Retirement and Savings Seminar taught on campus to Utah State University employees. You are receiving this survey because you are currently registered⁵ for the seminar at USU. Survey questions will ask you to check a response or provide a short answer to gauge your level of understanding and confidence in regards to retirement planning and also your current retirement planning behaviors. This will help us better understand retirement knowledge, confidence, and behaviors of USU employees.

As an incentive to participate, the email addresses of individuals who return all three surveys (i.e. pretest, posttest, and follow-up) will be entered into a drawing for prizes, including a \$50 gift card to your choice of local restaurant as well as prizes from local restaurants, the USU Bookstore, and personal financial literature.

This study is being conducted by:

Dr. Jean Lown, Professor
 Diana Burk, Master's degree student
 Department of Family, Consumer, and Human Development
 Utah State University

(1) How much have you thought about retirement?

- A lot
- Some
- A little
- Not at all

(2) Have you collected any information about preparing financially for retirement?

- A lot
- Some
- A little
- Not at all (go to question 4)

(3) If you have collected information about preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

⁵ This wording was used for the treatment group survey. For the comparison group survey, the wording was changed from “you are currently registered” to “you are not currently registered.”

(4) Prior to the USU *Retirement and Savings Seminar*, have you attended any seminars or gone to any meetings on preparing financially for retirement?

- More than two
- Two
- One
- None (go to question 6)

(5) If you have been to any seminars or meetings on preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(6) Since the end of the USU *Retirement and Savings Seminar*, have you discussed preparing financially for retirement with anyone?

- Not at all (go to question 8)
- Only passing, not in detail
- Yes with my family and/or friends
- Yes with a Financial Planner or Accountant

(7) If you have discussed preparing financially for retirement, have you taken any action as a result?

- No I have not taken any action
- I have thought about it
- I know what to do but I have not done it yet
- Yes I have taken action

(8) Have you thought about a date or the age at which you wish to retire?

- A lot
- Some
- A little
- Not at all

If so, please provide the age you wish to retire at: _____

(9) Have you thought about how long you expect to be retired for?

- A lot
- Some
- A little
- Not at all

(10) Have you thought about how much you will need to have saved by the time you retire so you can live comfortably in retirement?

- A lot
- Some
- A little
- Hardly at all

The following questions ask about your financial behaviors.

(11) Which of the following *Financial Attitudes* statements best describes you?

(Choose only one)

- Just when I think I have a handle on my finances, something always happens that sets me back from my financial goals.
- I am disciplined at saving.
- I am willing to take substantial financial risk for substantial gain.
- I frequently spend money when I do not plan to buy anything.
- I pay off my credit cards at the end of every month.
- I always research and plan for a big purchase.
- I am not willing to take any financial risks, no matter what the gain.
- I enjoy financial planning.

(12) Which of the following *Retirement Planning* statements best describes you?

(Choose only one)

- I think anyone can have a comfortable retirement, if they just plan and save.
- I feel it is pointless to plan for retirement because it is too far away to know what I will need.
- If I just save some money each month, I will be fine in my retirement.
- I think preparing for retirement takes too much time and effort.
- I am more of a saver than an investor.

(13) Please read the following questions and all the possible answers carefully. Choose the best response for each question and mark your answer.

1. YES, I have been for MORE than 6 months.
2. YES, I have been, but for LESS than 6 months.
3. NO, but I intend to in the next 30 days.
4. NO, but I intend to in the next 6 months.
5. NO, and I do NOT intend to in the next 6 months.

- _____ Do you consistently balance or monitor your checking account to avoid bounced checks or overdrafts?
- _____ Do you regularly monitor your spending?
- _____ Do you save a portion of each paycheck (your income or spouse/partners')?
- _____ Have you tried to determine how much needs to be saved for a comfortable retirement?
- _____ Do you invest for retirement in a personal account such as an IRA or supplemental retirement account?

(14) How often do you change or rebalance the investments in your retirement accounts?

- At least once a year
- Once every few years
- Rarely
- Never

(15) As a result of the USU *Retirement and Savings Seminar*, have you achieved or started working on any personal retirement goal(s) (i.e. talked with spouse, reviewed asset allocation, opened IRA, etc.)?

- Yes
- No

If yes, what was the single most important goal you achieved?

If no, what things have prevented you from achieving your goals?

(16) Please select the response that best describes your answer.

As a result of the USU Retirement and Savings Seminar, have you:	No	Yes	Does not apply
a. Set specific retirement goals?	1	2	3
b. Reviewed and revised your financial goals?	1	2	3
c. Calculated the amount of money needed to retire?	1	2	3
d. Increased the amount you invest for retirement?	1	2	3
e. Reviewed your retirement investments and adjusted if needed?	1	2	3

(17) Thank you for participating in this evaluation. Is there anything else you would like to tell us about the USU Retirement and Savings Seminar or your concerns about retirement planning? Please use this space for any additional comments or suggestions.