FINANCIAL COACHING: BRIDGING THE GAP BETWEEN FINANCIAL KNOWLEDGE AND FINANCIAL BEHAVIOR

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ABSTRACT

DISSERTATION PROJECT: Financial Coaching: Bridging the Gap Between Financial Knowledge and Financial Behavior.

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The purpose of this study was to evaluate an emerging financial education program, financial coaching. This study investigated whether participants improved their credit scores after participating in a financial coaching program. Four hypotheses were examined: (1) Financial coaching improves the credit scores of its participants. (2) Financial coaching has a greater impact on improving credit scores for women compared to men. (3) Financial coaching has a greater impact on improving credit scores for younger participants compared to the older ones. (4) Financial coaching has a greater impact on improving credit scores for minorities compared to non-minorities. For hypothesis 1, a paired-samples *t*-test was conducted to compare the last credit score and the first credit score at each site, both separately and collectively. For hypotheses 2 – 4, a hierarchical regression analysis was conducted on the total of all six sites collectively and evaluated on each site separately. First score, gender (hypothesis 2), age (hypothesis 3), and race (hypothesis 4) were entered into the regression to predict the last score.

For hypotheses 1, for five of the six sites, there was no significant difference between the first and last credit scores for participants. When all six sites were combined, there was a significant difference between the first and last credit scores. For hypotheses 2, there was no gender difference in average credit scores. However, when comparing the average increase in

credit scores, the females had a slightly higher increase than males. For hypothesis 3, older participants' average credit scores increased more than that of the younger ones' scores. For hypotheses 4, there was no race difference in average credit scores. However, when comparing the ranges in average credit scores between African-Americans and Caucasians, African-Americans' range did improve slightly more than the range of Caucasians.

Chapter One

Introduction

The year 2008 was the beginning of an economic crisis for many Americans. Despite aggressive efforts by the Federal Reserve and Treasury Department to prevent the U.S. banking system from collapsing, this was considered to be the worst recession since the Great Depression of 1929 (Willis, 2009). As a result of this great recession, housing prices fell 31.8%, and the unemployment rates exceeded 10% (Amadeo, 2011).

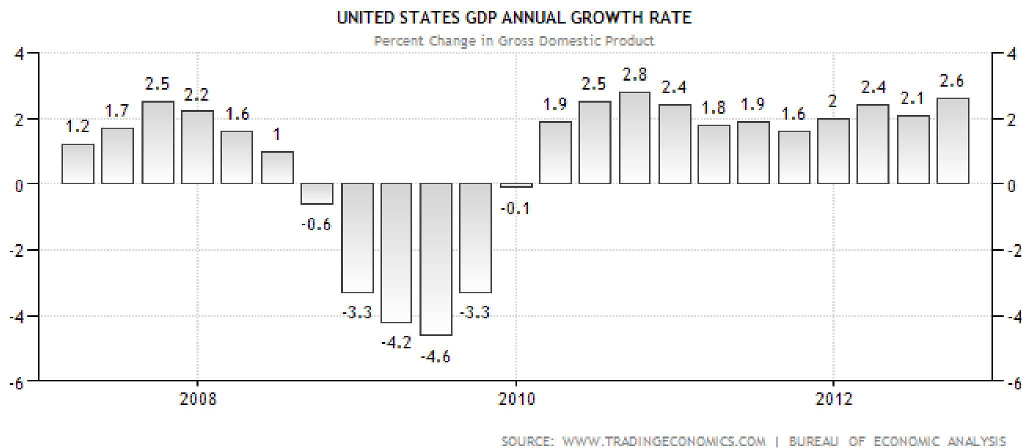
The Gross Domestic Product (GDP) data shown in Table 1 illustrate this crisis. The GDP is an economic indicator used to gauge the health of a country's economy. It represents the market value of all goods and services produced by the economy, expressed as a comparison to the previous quarter or year. There are three methods to calculate the GDP: (1) the value-added or production approach estimates each industry's gross output and subtracts intermediate inputs from other industries, (2) the income approach adds the total amount earned by households and firms in a year, or (3) the final demand or expenditures approach adds what everyone spent (consumption, investments, and exports) less imports. The methods of measuring GDP should arrive at roughly the same total, with some possible difference caused by statistical and rounding procedures (Landefeld, Seskin, & Fraumeni, 2008).

The economy is growing if the change in GDP is an increase. This indicates growth in personal income, business, and jobs (Economic Watch, 2010). The ideal GDP growth rate is 2-3%. At this ideal rate, the economy does not increase to the point it will create inflation nor decrease to create a recession. A recession occurs when the GDP growth is negative for two consecutive quarters or more (Amadeo, 2011). As indicated in Table 1, the GDP began to

decrease in the first quarter of 2008. It did not reach positive numbers again until the second quarter of 2010.

Table 1

Gross Domestic Product Growth Rates, 2008 - 2012



While there are many internal and external causes for these economic problems, one contributing factor is that individuals lack the necessary financial knowledge to effectively manage their personal finances (Hira, 2009) or to answer basic personal financial questions (Fox, Bartholomae, & Lee, 2005). This "Great Recession brought the lack of basic financial know-how among many U.S. households into sharp focus, especially in low-wealth communities" (Financial Capability Demonstration Project, 2013, p. 1). The lack of financial knowledge has caused many individuals to make poor decisions, resulting in devastating effects on their families' well-being and entire communities (Federal Deposit Insurance Corporation, 2004).

Parents teach their children values that include knowing the difference between right and wrong. Schools teach children reading, writing, and arithmetic. Who is teaching our children the importance of personal finances? By default, parents have had to teach their children personal finances, if they did not learn it in school. According to the National Foundation for Credit Counseling (2013), this situation can be seen as a problem, considering 40% of U.S.

adults gave themselves a grade of C, D, or F on their knowledge of personal finances. Consequently, many adults leave high school or even college not having the knowledge needed to effectively manage their personal finances. They purchase cars and houses by signing a promissory note, but do not have the knowledge of financing. They have credit cards, but do not understand the high interest rates they are forced to pay (Ramsey, 1995).

In an effort to help children become financially literate as adults, some states have mandated a personal finance course to be taught in the classroom. Bernheim, Garrett, and Maki (1997) completed a research study on the long-term effects of high school financial curriculum mandates. It was determined that the "mandates significantly increase exposure to financial education, and ultimately elevate the rates at which individuals save and accumulate wealth during their adult lives" (p. 29). In 2009, the Indiana Department of Education established a policy (Indiana Code 20-30-5-19) to become one of the few states that requires personal finance be taught in the classroom. This decision indicates personal finance topics are to be taught at least once by the end of the 8th grade and again by the end of the 12th grade. This change may have an impact in the future on the ability of adults to manage their finances, however there are many adults still lacking the knowledge needed to effectively manage their personal finances today.

Research shows that the more knowledge people have to manage their personal finances, the better their financial decisions and overall financial well-being when compared to others who lack such knowledge (Gray, Sebstad, Cohen, & Stack, 2009; Hathaway & Khatiwada, 2008; Hogarth, Hilgert, & Schuchardt, 2002; Martin, 2007; and Mason & Wilson, 2000). Given the complexity of today's global financial markets (more financial products to choose among with a wider array of features) and consumers being more responsible for their financial futures (the

shift of employers to employees retirement planning), financial literacy is more critical than ever before (Hogarth, 2006).

Problem Statement

In 2006, before the financial crisis, Congress established the Financial Literacy Education Committee (FLEC). FLEC developed a national strategy titled *Taking Ownership of the Future* as part of its charge to improve financial literacy for Americans (FLEC, 2006). The purpose of this strategy was to create a framework to give guidance for organizations involved with creating and promoting financial education programs.

In 2010, President Barack Obama signed Executive Order 13530, establishing the President's Advisory Council on Financial Capability. This Council was charged with finding ways to increase the financial knowledge of the American people. In January of 2013, it released its final report noting "the financial crisis of 2008 shone a spotlight on the need for improved financial capability in the United States" (President's Advisory Council on Financial Literacy, 2013, n.p.). The Council acknowledged that financial capability is not a "stand alone" topic to be isolated from the rest of our lives. It stressed financial capability must be woven into the fabric of our lives which includes our (1) homes, (2) schools, (3) workplaces, and (4) communities" (President's Advisory Council on Financial Literacy, 2013 pp. iii-iv).

(1) THE HOME: Financial education is a lifelong pursuit that needs to begin in the home with parents educating their children, continue in a child's pre-school years, throughout high school in preparation for post-secondary education and training, and then persist beyond.

(2) THE SCHOOLS: Financial capability can be viewed as a function of education, enlightened regulation and choice architecture.

(3) THE WORKPLACE: Encourage the federal government and all employers to embrace an enhanced responsibility for financial well-being of employees and share best practices in employee education and benefits.

(4) THE COMMUNITIES: Financial capability can best be advanced in the community through coordinated efforts of local government, schools, post-secondary institutions, financial service providers, local business leaders and non-profits all working together.

There has been growth in the number of financial education programs as a result of this increased interest. The lack of guidelines and coherence among programs, along with the lack of a clear definition of financial literacy and how it can be consistently measured, has made implementing the national strategy problematic (Remund, 2010).

Purpose Statement

The purpose of this study was to evaluate an emerging financial education program, financial coaching. This study investigated whether participants improved their credit scores after participating in a financial coaching program. Although, there have been an increasing number of financial education programs, the review of literature will reveal there has been little evidence to support which programs are more successful at educating adults in the area of personal finance. There are no "one size fits all" programs currently available since adults learn in different ways. "Understanding what actually works will require research" (President's Advisory Council on Financial Literacy, 2013, p. iv). Huston (2010) added there is a need for more comparison research studies and/or meta-analysis on the effectiveness of financial education programs. This research study is intended to do just that. It will add to the empirical

studies on how effective financial coaching programs are increasing credit scores for its participants.

Studies have determined that individuals most in need of financial education are more likely to be single females, Black or Hispanic, live in larger households, have less formal education, and have lower incomes (Hogarth, Beverly, & Hilgert, 2003). Elliehausen, Lundquist and Staten (2007) added that individuals with the least financial knowledge might benefit more from credit counseling than those with more knowledge. Based on this statement, they have found women, minorities, and younger individuals had the biggest increase in credit scores.

Therefore, financial educators should be more aware of the demographics and cultural characteristics of their audience when designing and implementing financial education programs. This study determines if financial coaching has an effect on the changes in credit scores based on different demographic variables, such as gender, race, and age.

The following hypotheses emerged from a review of literature. A number of studies show that financial coaching can improve financial behavior leading to better outcomes (Hilgert & Hogarth 2003) or "increase assets, decrease debt, and build wealth" (Bajtelsmit & Rastelli, 2009). By virtue of the coaching process and changed behavior, it has been argued that credit scores can be improved (Financial Capability Demonstration Project, 2013; Collins, Murrell & O'Rourke, 2012; Collins, Baker, & Gorey, 2007). In addition, studies have indicated that women tend to improve credit scores more through financial coaching than men (Financial Capability Demonstration Project, 2013; Elliehausen, Lundquist, and Staten, 2007), that younger participants are more likely to improve credit scores through financial coaching than older ones (Financial Capability Demonstration Project, 2013; Collins, Baker, & Gorey, 2007; Elliehausen, Lundquist, and Staten, 2007), and that minorities are more likely to improve credit scores

through financial coaching than non-minorities (Financial Capability Demonstration Project, 2013; Collins & O'Rourke, 2012). A more in-depth examination of these results from the literature is provided in Chapter Two.

Hypotheses

The following hypotheses emerged from a review of literature. A number of studies show that financial coaching can improve financial behavior leading to better outcomes (Hilgert & Hogarth 2003) or "increase assets, decrease debt, and build wealth" (Bajtelsmit & Rastelli, 2009). By virtue of the coaching process and changed behavior, it has been argued that credit scores can be improved (Financial Capability Demonstration Project, 2013; Collins, Murrell & O'Rourke, 2012; Collins, Baker, & Gorey, 2007). In addition, studies have indicated that women tend to improve credit scores more through financial coaching than men (Finanicial Capability Demonstration Project, 2013; Elliehausen, Lundquist, and Staten, 2007), that younger participants are more likely to improve credit scores through financial coaching than older ones (Financial Capability Demonstration Project, 2013; Collins, Baker, & Gorey, 2007; Elliehausen, Lundquist, and Staten, 2007), and that minorities are more likely to improve credit scores through financial coaching than non-minorities (Financial Capability Demonstration Project, 2013; Collins & O'Rourke, 2012). A more in-depth examination of these results from the literature is provided in Chapter Two.

Hypothesis 1: Financial coaching improves the credit scores of its participants. An analysis was completed on the six sites combined and each site separately.

Hypothesis 2: Financial coaching has a greater impact on improving credit scores for women compared to men. An analysis was completed on the six sites combined and each site separately.

Hypothesis 3: Financial coaching has a greater impact on improving credit scores for younger participants compared to the older ones. An analysis was completed on the six sites combined and each site separately.

Hypothesis 4: Financial coaching has a greater impact on improving credit scores for minorities compared to non-minorities. An analysis was completed on the six sites combined and each site separately.

Significance of the Study

The financial education research currently being completed is not specific to the financial coaching field (O'Rouke, 2012). It is a relatively new service. There is a need for more research and evaluation on the effectiveness in comparison to other approaches. In an effort to develop a valid measure, the Center for Financial Security (2013) is working with a group of organizations to collect data from participants on 8 self-reported measures, as well as, data from credit reports (credit scores). The 8 self-reported measures are based on the following questions:

(1) Over the last 3 months, have you followed a personal budget, spending plan, or financial plan?

(2) Do you currently have a least one financial goal?

(3) How confident are you in your ability to achieve a financial goal you set for yourself today?

(4) In the last 3 months, did you use an automatic deposit or transfer to put money away for a future use such as saving for retirement or education?

(5) Have you set aside emergency or rainy day funds that would cover your expenses for 3 months, in case of sickness, job loss, economic downturn, or other emergencies?

(6) Over the past 3 months, would you say your household's spending was less than, more than, or about equal to your income?

(7) In the last 3 months, have you paid a late fee on a loan or bill?

(8) How would you rate your current credit record?

This study will also add to the needed research on evaluating the effectiveness of financial coaching at improving adult financial behaviors.

Definitions

Coaching is "a process that helps individuals define financial goals, develop plans of action, and implement steps toward their goals" (Collins & O'Rourke, 2012, p. 39).

Financial behavior is the respondent's self assessed propensity to manage his/her personal finances (Perry & Morris, 2005).

Financial capability is "the capacity, based on knowledge, skills and access, to manage financial resources effectively" (President's Advisory Council on Financial Capability, 2012, n.p.).

Financial illiteracy is being oblivious to the knowledge needed to manage one's personal finances effectively (Whelehan, 2004).

Financial literacy is "the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being" (President's Advisory Council on Financial Literacy, 2008, p. 4).

Intermediary is the organization that oversees, organizes, and delivers financial coaching.

Limitations

The researcher was unable to determine the level of financial knowledge the participants have prior to receiving financial coaching services or to identify the participants who may have received any other advice (from friends and families) during the time they were receiving financial coaching services from one of the six sites. Only participants who sought coaching advice from one of the sites and have a baseline credit score and subsequent credit score were included in this study.

Chapter Two

Review of Literature

Current Research on Financial Education Programs

"Financial education can include any program or process, be it formal or informal that addresses the knowledge, attitude, and/or behavior of an individual toward financial topics and concepts" (Lusardi, Clark, Fox, Grable, & Taylor, 2010, p. 3). These programs can provide general topics, such as budgeting, financial planning, cash/money management, credit/debt management, and savings/investing. As discussed in Chapter One, many adults lack the necessary knowledge to effectively manage their personal finances (Hira, 2009). It was also noted that financial education is the key to adults making better financial choices.

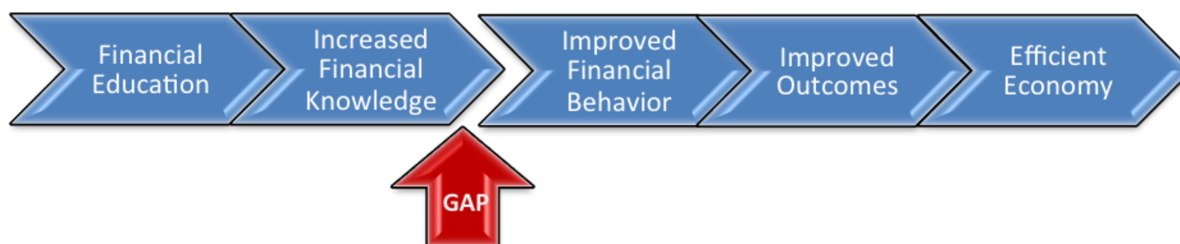
Collins and O'Rourke (2010) indicated some consumers face more than educational barriers when they make financial decisions. They may lack self-control or exhibit other behavioral issues that education and counseling may not enable them to overcome. However, they also added, "financial education and counseling hold the promise of improving financial knowledge and facilitating behavior change" (p. 483). If a storm hits a house that is not on a firm foundation, this house will fall. The same logic applies when it comes to managing finances. It requires having the right tools, which includes acquiring the financial knowledge that is needed for the process of improving financial behavior.

Gray, Stebtad, Cohen and Stack (2009) supported the theoretical framework that financial education will eventually lead to an efficient economy. Figure 1 illustrates this theoretical framework. Financial education is the starting point. The more financial education individuals acquire, the more knowledgeable they become at managing their personal finances. With this increased financial knowledge, individuals should thereby improve their financial behavior.

However, increased financial knowledge does not always mean improved financial behavior (Tisdell, Taylor, & Sprow, 2011). Some individuals may find it difficult to turn increased financial knowledge into improved financial behavior. This will therefore leave a gap between these two links. If individuals are successful at using this knowledge in a positive way, this knowledge will improve their financial behavior. Improved financial behavior will provide better outcomes not only for individuals, but also for their families and the community in which they live (Hilgert & Hogarth, 2003). Thriving communities will lead to an efficient economy (President's Advisory Council on Financial Literacy, 2013).

Figure 1

Linking Financial Education to an Efficient Economy



Linking financial education to increased financial knowledge. The Institute of Financial Literacy (2007) has established five national standards that are needed to properly educate adults in the area of financial literacy. These standards can also be used as guidelines to help organizations design financial education programs. The standards include: (1) money management, (2) debt management, (3) risk management, (4) investing and retirement planning, and (5) credit.

Money management. Adults' ability to manage their money properly is a central component of financial literacy (Financial Capability, 2012). Preparing a written budget is one of the most effective ways of managing one's personal finances (Garman & Forgue, 2006). When budgeting expenses properly, individuals can better control their spending. Comparing

amounts budgeted to actual spending will aid individuals with proper planning and enable them to track their cash inflows and outflows. As a result, individuals will be more capable of paying bills on time and building an emergency fund. In turn, individuals can increase assets, decrease debt, and build wealth (Bajtelsmit & Rastelli, 2009).

Debt management. "The two common indicators that families are overburdened by debt are having a debt payment to income ratio greater than 40% and being substantially late with their loan payments" (Hogarth, Beverly, & Hilgert, 2003, p. 2). The burden of repaying loan balances and interest can delay building an emergency fund, saving for retirement, and home ownership (Ratcliffe & McKernan, 2013). One of the areas that has brought national attention to financial literacy is predatory lending. Predatory lending practices have become a problem in the United States. Certain lenders take advantage of unknowledgeable borrowers by persuading them to agree to loan contracts that are not in their best interest (Todd, 2002). Financially literate adults should be familiar with such practices and be equipped with the knowledge necessary to avoid being taken by these and similar unethical practices.

Risk management. Garman and Forgue (2006) defined risk management as the process of identifying and evaluating situations that involve financial loss and determining and implementing the appropriate means for minimizing this loss. This process includes having the proper types and amounts of insurance. Individuals and their families can experience financial hardships by being uninsured or underinsured. Examples of these hardships would include the death of the breadwinner with no life insurance, becoming disabled with no disability insurance, and having damaged (or loss of) personal assets with no property and casualty insurance. Adults can avoid such hardships being financially educated in risk management,

Investment and retirement planning. Planning for retirement is critically important now more than ever. Employers are having employees be responsible for planning their own retirement. Financial education can help employees develop an investment strategy that ensures their retirement security (Braunstein & Welch, 2002). It is becoming more apparent that social security may not be available in the future (U.S. Social Security Administration, 2011). If individuals do not plan properly, they run the risk of living in poverty during their retirement years.

Credit. Knowledge about credit reports and credit scores are very important for making financial decisions, since credit scores are used to determine not only whether one gets a loan, but also the interest rate (Meier & Sprenger, 2007). If an individual has poor credit, the likelihood of being approved is decreased along with the chances of obtaining a low interest rate. We live in a credit-driven society. Credit scores may legally be used by employers, landlords, and insurance companies in their decision-making process. Knowledge about credit scoring supports sound financial decision-making. Cole, Paulson, and Shastry (2012) found that financial education improved credit scores and dramatically reduced the probability of declaring bankruptcy or suffering foreclosure during the financial crisis. “Credit reporting and credit scores can fuel economic growth, increase consumer access to essential resources and enable more efficient allocation of risk, cost, and financial resources” (TransUnion, 2007, n.p.).

The credit score most widely used is the FICO score created by Fair Isaac Corporation. Fair Isaac calculates the FICO score by using information gathered from the consumer’s credit report maintained at the credit reporting agencies. It is a 3-digit number, ranging from 300 to 850, that represents a snapshot of an individual’s risk level (TransUnion, 2007). The higher the number, the better the credit score. Table 2 shows a breakdown of the different levels of credit

scores (Credit.com, 2013). As of October 2012, the average credit score in the U.S. was 689 (MyFICO, 2013). The credit score does not determine solely whether or not credit is granted; it only provides an objective measurement that can be used in a decision making process (TransUnion, 2007).

Table 2

Credit Score Levels

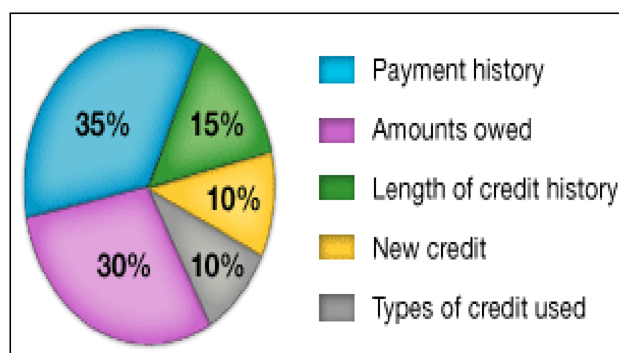
Credit Score	**Description**
Excellent	750 +
Good	700 – 749
Fair	650 – 699
Poor	600 – 649
Bad	Below 599

The three most common credit-reporting agencies are: TransUnion, Equifax, and Experian. These companies gather, organize, standardize, and disseminate consumer credit related information (Consumer Financial Protection Bureau, 2011). Considering these agencies are independent from one another, it is not uncommon for an individual to have a different credit score from each agency.

There are five different categories that are analyzed when calculating a credit score: (1) payment history, (2) amounts owed, (3) length of credit history, (4) new credit, and (5) types of credit used. Figure 2 shows the weighted percentage of these five categories when calculating the FICO credit score (MyFICO, 2013).

Figure 2

The Breakdown of a FICO Credit Score



The positive and negative information from these categories are considered. As previously mentioned, paying bills on time is the most heavily weighted category when calculating a credit score. Late payments can have a negative effect on a score. It is recommended to keep the amounts owed below 30% of the credit limit. This is known as credit utilization (Credit Karma, 2009). The length of time since accounts have been opened also is a factor in calculating a credit score. If an account has been opened for several years and has been paid on time, these two factors will have a greater positive effect on the score than an account that has been opened for two months and has also been paid on time. Opening and closing too many lines of credit all at once could also have a negative effect on a credit score. Excessive credit inquiries will have a negative effect on a credit score. This is known as a hard inquiry and these types of inquiries will stay on a credit report for two years (Credit Karma, 2011). Unlike a hard inquiry, a soft inquiry will not affect the credit score. These inquiries include potential employers or insurance companies checking an individual's credit or when an individual checks on their credit or credit score.

As a joint venture, TransUnion, Equifax, and Experian have established what is called a VantageScore. This score is created by VantageScore LLC using databases that combine data

from all three credit agencies (Consumer Financial Protection Bureau, 2011). VantageScore is currently in the process of including alternative credit into its score. Alternative credit encompasses rent and utility payment records and public records like bankruptcies. This approach will be helpful for people with very limited credit histories. This will enable as many as 30 million people who previously couldn't get a credit score and potentially help them qualify for more competitive credit rates (MyFICO, 2013).

Linking increased financial knowledge to improved financial behavior. Hilgert and Hogarth (2003) completed a study on the connection between knowledge and behavior. They focused on four financial management activities: cash-flow management, credit management, saving, and investment. They found “a well-informed financially educated consumer is better able to make good decisions for their families” (p. 309).

Behavioral economics is another area of study relating financial behavior. This area of study offers a framework for behaviors that seem inconsistent or irrational. It helps to explain why financial education alone is not enough for some individuals. Behavioral economics acknowledges psychological characteristics, which include procrastination, regret, risk aversion, compulsiveness, generosity, altruism, and peer pressure (Mullainathan & Thaler, 2000).

Linking improved financial behavior to improved outcomes. Changing one’s financial behavior in a positive way will yield improved outcomes where financial goals are obtainable. An individual’s financial behavior can have a major impact on their quality of life (Ramsey, 2011). Table 3 has a few examples of how changing one’s financial behavior can affect outcomes or financial goals (Hilgert & Hogarth, 2003).

Table 3

The Effects of Positive Financial Behavior

Financial Behavior	Outcome (or financial goals)
Money Management:	
Having a budget or a spending plan and sticking to it	• Live below or at one's means
Saving regularly	• Have enough money for a down-payment on a home or a car • Have an emergency fund - prepared for life's unexpected events such as major home and automobile repairs • Have the ability to travel and not worry about how to pay for it
Debt Management:	
Paying credit card balances and other bills on time	• Avoid paying minimum balance • Avoid late fees • Increase credit score
Risk Management:	
Being properly insured (life, medical, disability, property and casualty)	• Protected against life's unexpected hazards and thereby avoiding financial setbacks
Investing & Retirement Planning:	
Saving for retirement	• Have enough money to live on during retirement
Credit:	
Knowing and applying the rules regarding credit reports to increase one's credit score	• Avoid predatory lending scams • Able to purchase big ticket items with a loan at a reasonable interest rate

Linking improved outcomes to an efficient economy. "Secure families are better able to contribute to vital, thriving communities, further fostering community economic development. Thus, being financially literate is not only important to the individual household and family, it is also important to communities and societies" (Hogarth, 2006, p. 1). The National Financial Capability "suggests that Americans' ability to make ends meet is at least partly influenced by general economic conditions" (Financial Capability, 2012, p. 7).

Financial coaching is a financial education program that can be used to help Individuals bridge the gap between financial knowledge and improved financial behavior. “The financial coaching field is still in development and faces several challenges, including a lack of evidence-based practice standards” (Collins & O’Rourke, 2012, p. 39). Before discussing the research that has been completed on financial coaching, it is important to first explain the coaching process. Once it is explained, a discussion will show how this process relates to adult education.

The Coaching Process

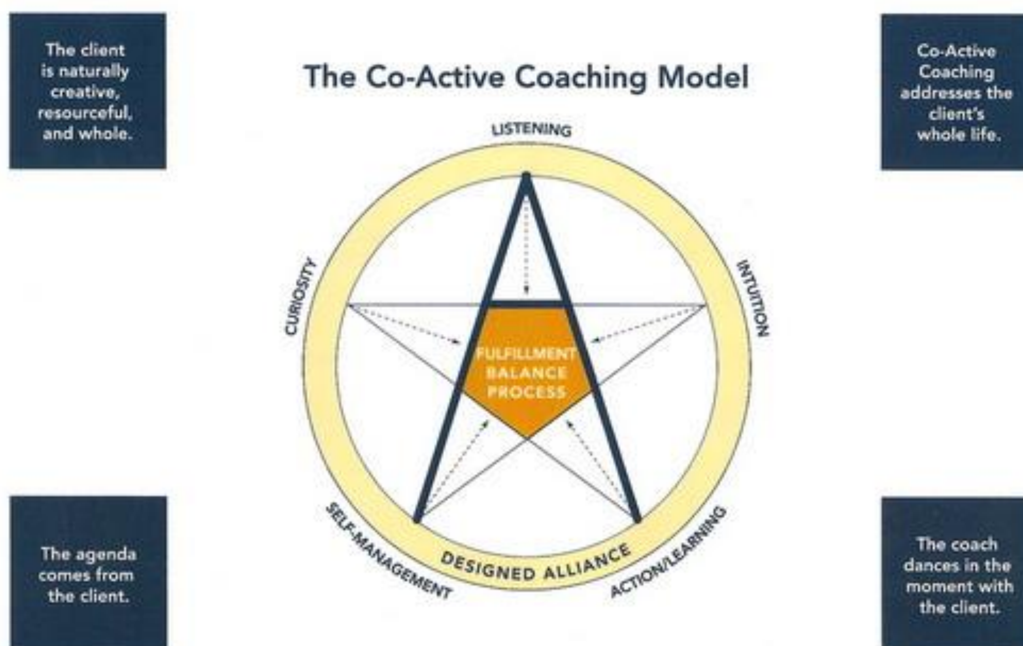
The co-active coaching model. Figure 3 displays a diagram of the Co-Active Coaching model. This diagram aids in understanding the coaching process. It is referred to as "co-active” because it involves the actions of both the coach and clients, but exists only to address the clients’ agenda or goals. This model focuses on the coach asking questions that encourage the participants to find their own answers, rather than the coach imposing a particular direction or giving answers. Individuals are more accepting and willing to work harder at something that comes from them (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011). Through this process, the coach aids their clients in critically examining their attitudes about money so they can become lifelong learners in their financial lives.

There is very little hope that adults will change their behavior if they do not analyze the source of the behavior (Tisdell, Taylor, & Sprow, 2011). According to adult educators and theorists Mezirow (2009) and Brookfield (1998), behavior change could be accomplished through critical reflection. “Critical reflection is used in education to encourage the integration of theory and practice while enhancing student learning and self-confidence” (Lucas, 2012,). Mezirow (2009) included critical self-reflection as one of the steps in transformative learning

among adult learners. He defined critical self-reflection as "questioning the integrity of deeply held assumptions and beliefs based on prior experiences" (p. 7).

Figure 3

The Co-Active Coaching Model



Source: http://www.crowe-associates.co.uk/coaching-and-mentoring-skills/the-co-active-coaching-model/

Brookfield (1998) defined critical reflection "as the process of inquiry involving practitioners in trying to discover research, the assumptions that frame how they work" (p. 197). This is accomplished by viewing these assumptions through four complementary lenses-the lenses of students' eyes, colleagues' perceptions, literature, and our own autobiography (Brookfield, 2009). As a college professor, Brookfield (1995) introduced the Critical Incident Questionnaire (CIQ) to help his students as a critical reflection activity. There are five areas that are questioned during the learning process. These areas involve moments in class were the

learner is (1) most engaged, (2) most distanced, (3) most helpful, (4) most puzzling or confusing, and (5) most surprising.

Shaw (2012) used CIQs during her dissertation and found a connection between life coaching and adult education. Five life coaches were asked to complete CIQs after each coaching session and submit a journal every two weeks summarizing their results of their CIQs. During her phenomenological research study, she found five themes emerged: (1) more structured coaching sessions, (2) increased self-awareness, (3) passionate purpose, (4) professional development, and (5) enhanced relationship with self and others. "Critical reflection helped the life coaches validate the decisions they had made as they reflected on their next step and direction" (Shaw, 2012, p. 81).

The center of the model. In the heart of the model is the client's agenda. This agenda addresses three central aspects or principles of the client's life: fulfillment, balance, and process. They are the liveliness of an individual's life. When they are combined, they create the heat and light of a life that is fully alive (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011).

Fulfillment. Fulfillment is what fills the client's heart and soul. A fulfilling life is a valued life. Considering individuals value different things, clients will have their own definition of what they truly value. The deepest level of fulfillment is about finding and experiencing a life of purpose. It is about reaching one's full potential (Whitworth, Kimsey-House, & Sandahl, 1998).

One approach to thinking about progressing toward fulfillment or reaching potential has been described by Maslow. Figure 4 illustrates Maslow's (1943) hierarchy of needs. There are five needs: (1) Physiological, (2) Safety, (3) Belongingness, (4) Esteem, and (5) Self-actualization, which describe the pattern through which human motivation generally moves. It is

at the self-actualization level when individuals will experience the fulfillment of life. This potential cannot occur until the individual's physiological, safety, belongingness, and esteem needs have been met.

The first four are the basic levels of this hierarchy. At the lowest level, physiological needs, humans need physical requirements in order to survive. Without air, water, and food, it is impossible for humans to exist. When their physical needs are met, individuals will need to experience safety. Once they have a safe place to live and work, they are able to move to the next level of the hierarchy. This level is belongingness. It is important that individuals feel a sense of belonging and acceptance among their social groups. Once individuals have accomplished the belongingness level, they are able to elevate to the next level, esteem. At this level, individuals desire to be accepted, respected, and valued by others. It is only after this level is satisfied, that individuals are able to accomplish the self-actualization level.

Figure 4

Maslow's Hierarchy of Needs

Source: www.simplypsychology.org/maslow.html

The coach is there to assist participants in sorting out their values. When choices individuals make are in line with their values, life will be more satisfying and seem effortless (Whitworth, Kimsey-House, & Sandahl, 1998).

Balance. With so many responsibilities (self, family, job, school, and friends), balance can be a difficult task in today's world. When an individual's life becomes "out of balance," many problems can occur: health issues, financial issues, family issues, and others. The coaching process approaches all areas of a individual's life. It will be ineffective to help clients excel in one area of their life without addressing the rest.

Process. The process is what individuals are experiencing in their lives. Process is often compared to a river. As life flows, there are times individuals will experience onrushing, white-water progress. Then there will be times they are stagnant, and other times backsliding into treacherous pools (Whitworth, Kimsey-House, & Sandahl, 1998). The coach is there to encourage and support during these times.

The five points on the star. Each point of the star, shown in Figure 3, represents what the coach brings to the coaching relationship with the client: listening, intuition, action/learning, self-management, and intuition. It is at these points that the coaches utilize their talents and skills as a coach. They help to create the ground in which the coaching unfolds. The coach consistently draws from these skills during the practice of coaching. Depending on the responses of the participant, the coach will determine which skill is necessary to continue.

Listening. Being an effective listener can be challenging. Not only is it important for the coach to listen to what the client is saying, but should also listen for what the client is not saying. This would include listening to the client's tone, watching body language and paying attention to other non-verbal communication movements.

Intuition. Some may refer to intuition as a sixth sense. It is a "gut reaction" that may not come from the other five senses: sight, sound, smell, taste, and touch. Some may not trust their intuition because of its instinctive nature. The coach is taught that it is not so much about "being right" with intuition, but the key is to have senses tuned in to pick up signals that can aid the client.

Action/Learning. Co-active coaching has two purposes: to forward the action and to deepen the learning. These two forces combine to create change. The client takes action and learn, which leads to more action based on what was learned, which leads to more learning.

Self-management. The coach must not be quick to give clients the answer. This approach requires self-control and self-management from the coach. Clients must also have self-control and self-management to use their own experiences, opinions, and approaches to accomplishing their goals. The coach's job is to simply find the questions that reveal these skills.

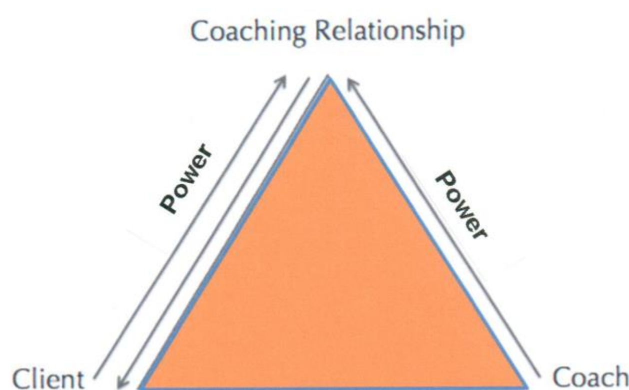
Curiosity. The coach must be curious and ask open-ended, non-leading, and inviting questions. Exploring together from the context of curiosity allows for non-threatening exploration from a playful and innocent state, full of wonder and lacking in judgment.

Designed alliance: The process that surrounds the star. It is through the designed alliance that forms the coaching relationship. Figure 5 illustrates how this process works. It is the container that the coach and client create together. It is at this point that the coach and client set ground rules to establish the physical and relational environments. In this model all the power is in the coaching relationship. The coaching relationship is mutually created and entirely focused on the client. It is the coaching relationship, not the coach that gives power to this entire process. Both the coach and the client grant the power to the coaching relationship. The client,

in turn, is empowered by the coaching relationship. The client is empowered to take charge of life and the choices made. It is the coach's responsibility to make sure this process continues to flow. The coaching relationship allows the coach to equip the client to build trust in oneself and the relationship, have conversation, learn new information, improve performances, keep the process moving, make choices, experience self-fulfillment, and be aware of the progress (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011).

Figure 5

The Coaching Relationship



Source: http://www.viewsfromtheroof.com/2014/02/872/

Studies have shown the longer the coaching relationship the participants have with the financial coach the higher credit score will be (Financial Capability Demonstration Project, 2013). The participants in this study working with the financial coaches for one year or less had an average credit score increase of 3.93, whereas, those working with financial coaches for more than one year had an average credit score increase of 6.46.

The four cornerstones of the co-active model. The four cornerstones of the co-active coaching model are: (1) The client is naturally creative, resourceful, and whole. (2) The agenda comes from the client. (3) The coach dances in the moment. (4) Co-active coaching addresses the client's whole life. They form the foundation of the co-active model. In order for life-giving

action on the part of the participant to manifest, these four components must form the necessary structure. People are naturally creative, resourceful, and whole. No matter what the circumstances are, they are capable of finding answers, making the right choices, taking action, and recovering when things do not go as planned. Dance in the moment means altering the coaching relationship to address whatever the client is dealing with at that moment (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011).

Relating the Coaching Process with Adult Education

"The ultimate goal of education is helping students gain the skills to live, learn, and work successfully within society" (Black, 2010, p. 100). This same goal holds true with financial coaching. The financial coaches' main responsibility is to "help individuals define financial goals, develop plans of action, and implement steps toward their goals" (Collins & O'Rourke, 2012, p. 39). The coaching process and adult education have other similar principles. Both recognize adult learners are autonomous and self-directed learners that draw on the reservoir of their experiences in order to understand the new information they are learning. Cross (1981) stated, approximately 70% of adult learning is self-directed. Tough (1971) added, 90% of all adults conduct at least one self-directed learning project a year. Their learning experience is ineffective if they are unable to see the relevancy of the new information as it relates to what is happening in their current lives.

Another similarity between the coaching process and adult education involves the transformative learning theory. As discussed in the Review of Literature, adults have to be actively engaged in the learning process for learning to truly take place (Tisdell, Taylor & Sprow, 2011). This same principle can be seen in the coaching model. In order for the coaching relationship to work effectively, the participant must be involved from the very beginning and

throughout the entire process. Transformative learning is evoked when the coach aids the participant in reaching that "aha" moment. They acquire new strengths and renewed capacity that is similar to finding muscles they had forgotten or did not know they even had (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011).

Although adults are goal oriented, sometimes they need assistance achieving these goals. The financial coach aids the adult in reaching goals through using the coaching process. The participant sets goals that they desire to achieve. The coach, aids in this process by making sure the participants set SMART goals. This is an acronym that stands for **S**-Specific, **M**-Measurable, **A**-Attainable, **R**-Relevant, **T**-Time bound (Lee, 2010).

Specific. The participant should define precisely what they want to achieve. If they do not state where they want to be, how will they know when they get there? When this goal is achieved, it allows the coach and the participant to celebrate.

Measurable. The goal must be something that is tangible and can easily be measured. This would include setting precise amounts and dates.

Attainable. The goal should be possible to achieve. By setting realistic yet challenging goals, it helps increase the chances of succeeding with future goals.

Relevant. The goal should be in alignment with one's mission.

Time bound. The goal should have a reasonable deadline. Without a deadline, trying to achieve a goal could go on forever.

Being an effective listener, asking the right questions while drawing on intuition and curiosity skills, a coach aids the participant in becoming a self-directed learner which will help them improve their financial behavior. They are motivated by the accountability of doing what has to be done. When a person is accountable to someone else for accomplishing a goal, they are

more likely to accomplish it. This involves more than just telling someone about the goal, they must ask others to hold them accountable, request for specific assistance, celebrate actual accomplishments, and emphasize what remains to be done. By holding the participant accountable, the coach aids them in using the financial knowledge acquired to improve their financial behavior (Johnson, 2011).

Financial Coaching Research Studies

Collins and O'Rourke (2012) explained financial coaching as "a process that helps individuals define financial goals, develop plans of action, and implement steps toward their goals" (p. 39). Collins, Olive, and O'Rourke (2013) added, "financial coaching is designed to help participants bridge the all-too-common gap between knowledge and intentions on the one hand and lasting behavior change on the other" (n.p.). "Financial coaching is not for everyone; some individuals are not and may never be ready for coaching" (Collins, Murrell, & O'Rourke, 2012, p. 5). These authors claimed that financial coaching is a distinct intervention drawing upon coaching psychology and adult learning. Financial coaching recognizes the challenges inherent in behavior change, helps participants form concrete action plans, holds participants accountable to their stated intentions, and offers support along the way.

Kauffman (2006) said coaching might be particularly useful for people with self-control, procrastination problems, or struggling with taking the financial knowledge they have acquired and making positive financial behavior changes. The financial coach's role is to help participants use the financial knowledge they have acquired in order to change their financial behaviors. Coaches also search for ways to help clients develop the skills necessary to handle future issues independently and become lifelong learners (MyCoachMatch, 2013).

The gymnast, Gabby Douglas, is an example to illustrate this point. Gabby began taking gymnastic lessons at the age of seven. She competed and won various gymnastic competitions. It was not until she began training with one of the greatest gymnastic coaches by the name of Liang Chow that she became an even better gymnast. After training with Liang Chow, at the age of 16 years, Gabby had gained the expertise needed to become the first African-American to win the all-around gymnastic 2012 Olympic gold medal (Whiteside, 2012). The financial coaching process works very similar to this coaching process. Financial coaches are helping the individuals take the financial knowledge they have already acquired and use it to become better at managing their personal finances. Short-term financial training programs are not sufficient education for clients to build substantial assets. Many individuals need support over time to make informed decisions about spending, borrowing, saving, and investing. That support will have a positive change on their financial behavior. The support the clients need comes from a financial coach (Collins, Baker, & Gorey, 2007).

Financial coaching has been adopted in the asset-building field for use with low-income clients (Collins, Baker, & Gorey, 2007). It involves providing "regular one-on-one sessions with clients, in order to 'coach' performance improvements to meet goals set mutually by the coach and the client" (Collins & Murrell, 2010, p. 2). It is different from counseling in that a financial coach will provide encouragement and direction in a process largely driven by the client. The coach's role is to facilitate realistic goals, enhance accountability, and find creative ways to help individuals achieve their own stated goals and build assets. Financial coaching is not designed to be therapeutic or to aid clients in an acute crisis resolution like that of financial advising or financial counseling. It is focused on achieving goals not triggered by a specific event or problem (Collins & Murrell, 2010).

Qualifications. There are no universal standards and some training programs appear to be little more than credentialing mills (Grant & Cavanagh, 2011). However, "a trained financial coach has knowledge of personal financial topics as well as experience in how to support a client to make decisions and change behaviors" (Collins, Baker, & Gorey, 2007, p. 6). Typically, financial coaches should have a Bachelor of Science degree in business, finance, or a related field of study but may be substituted with highly relevant work experience ([Intermediary Director], personal communication, August 6, 2013). Financial coaches can earn certifications in the financial education field, such as certified personal finance counselor and certified educator in personal finance. Financial coaches must have experience understanding coaching fundamentals, knowledge of personal finance, communication and facilitation skills, and general knowledge and understanding of the needs of a low-income working population (Collins, Baker, & Gorey, 2007). It is through "understanding the needs of low-income working population" that financial coaches may take on another role. This role is what Dubofsky and Sussman (2009) referred to as non-financial coaching responsibilities. In sum, financial coaches must understand both the financial and non-financial needs of their clients to promote success in meeting goals.

Programs. Some of the most important research being conducted on financial coaching in the nation has emerged from the University of Wisconsin-Madison Center for Financial Security. This is an applied, multidisciplinary research center that has 43 affiliated researchers who "seek to inform practitioners, policymakers, and the general public on strategies that build financial capability over the life course" (Center for Financial Security, 2013, n.p.). Their work is broad in scope, focusing on descriptive studies establishing a frame of reference for financial coaching, qualifications of financial coaches, and financial coaching programs.

Measuring the effectiveness of financial education programs can be difficult (Lyons, Hogarth, Schuchardt, Smith, & Toussaint, n.d.). Considering there is no standardized way of testing the effectiveness of financial education programs, outcome measures currently being used vary program by program. These measures can be subjective or objective. Subjective measures are based on individuals' analysis of what they know, while objective measures are based on another person's evaluation of this knowledge (Selnes & GrNhaug, 1986). Subjective measures gathered from participants include satisfaction levels, self-confidence, attitudes, and change in behavior. Objective measures include savings rates, debt levels, wealth accumulation, delinquency and bankruptcy rates, credit scores, investment strategies, account enrollment, homeownership, and rates of participation in retirement savings plans.

Collins and O'Rourke (2012) explained how effective financial coaching could be, by summarizing the findings of three different financial coaching programs. Although each one of the studies evaluated different outcomes, each used subjective measures of evaluating its programs. The researchers noted that the secondary data collected from these programs did not represent a controlled trial of financial coaches, but, nonetheless, illustrated the types of behaviors financial coaching might be predicted to influence and is suggestive of the outcomes financial coaches are likely to encounter.

The first financial coaching program discussed was on the campus of Central New Mexico Community College (CNM) in Albuquerque, New Mexico. In April 2010, CNM sent two different student groups a 34-question, online survey. One group of 400 students received at least one coaching session. The other group of 800 students had not been offered coaching. A total of 178 students responded to the survey (20% of the coached students and about 12% of the students who had not been offered coaching). The purpose of the study was to measure the

students' self-reported ability to manage finances. Data were collected through the method of a Likert-type scale ranging from 1 = "Poor" to 5 = "Excellent". An Ordinary Least Square (OLS) regression was used to test the results of the survey. The results showed that students who received coaching had a positive perception of self-control and self-efficacy related to budgeting.

The second financial coaching program discussed was the Financial Clinic of New York City. This is a nonprofit organization that serves lower-income clients on financial issues. In January 2010, the University of Wisconsin-Madison Survey Center mailed a survey to 1,501 Financial Clinic clients who worked with the agency on filing income taxes in 2008 or 2009. Some of these clients were also enrolled in the Clinic's financial coaching program. Of the 436 that completed the survey, 60 reported having worked with a financial coach. The purpose of this study was to determine how many individuals had financial goals. An OLS regression analysis was also used in this study to test the results of the survey. The results showed coaching clients were 17.8% points more likely to have a financial goal than the ones who did not have a coach. The coaching clients also reported having higher confidence in achieving their financial goals.

The third financial coaching program that was discussed came from The Annie E. Casey Foundation. This organization supports Centers for Working Families (CWF). CWF focuses on long-term coaching offered by trained counselors and caseworkers. Data were collected through interviews from sites that offer financial coaching and survey questions from the years 2008 and 2009. Both the interviews and survey questions were based on the participants' self-reported financial behaviors including paying at least the minimum balance on bills, setting aside savings, and paying bills on time. The Annie E Casey Foundation hired the research company, Abt Associates, to conduct this research study. The final sample included a total of 168 participants.

Of this number, 83 reported working with a financial coach at least once, and 85 reported that they had never worked with a coach. The purpose of the study was to compare the coached participant's self-reported financial behaviors (specifically savings and paying bills) with the ones who had not been coached. A two-tail test with equal variances was used to test the results. The "results suggest that coaching clients are more likely to exhibit positive financial behaviors requiring attention and focus on budgeting choices" (Collins & O'Rourke, 2012, p. 49).

Lusardi (2012) completed a study on older adults and found inconsistencies with self-assessed (a subjective measurement) financial knowledge and actual levels of financial knowledge (objective measurement). This finding was consistent with what Finke, Howe, and Huston (2011) also found. The older respondents self-assessed their knowledge as higher than their actual results. Selnes and GrNhaug (1986) indicated that objective measures seem preferable when focusing on ability differences among individuals, while subjective measures should be preferred when focusing on motivational aspects of knowledge. Whether subjective or objective measures are selected will depend on the purpose of the research (Mitchell, 1982).

An altogether different study was launched by two powerful organizations in the financial capability world. NeighborWorks American and Citi Foundation used the credit scores (an objective measurement) of participants as a way to measure the effectiveness of financial coaching. This 2011-12 Financial Capability Demonstration Project (2013) on financial coaching, *Scaling the Training Infrastructure to Build Financial Coaching Capacity*, focused on the following goals: (1) to deepen the understanding of how financial capability and coaching programs impact low- and moderate-income consumers, (2) to ensure that financial capability programs effectively turn consumers' knowledge into sustainable action for the long-term, (3) to showcase promising financial coaching delivery and program models, and (4) to provide

nonprofit organizations with tools and resources to effectively monitor and report the outcomes of these coaches.

Thirty organizations representing 17 states and 24 communities across the country were selected for this study. Two courses developed by NeighborWorks America, Delivering Effective Financial Education for Today's Consumer and Financial Coaching and Helping Clients Reach Their Goals, were used to train 1,500 practitioners. Of these 1,500 practitioners, 400 were studied during this two-year period. Equipped with this new knowledge from the two courses and the aid of additional training, grant support, and technical assistance, these 400 practitioners served approximately 65,000 low- and moderate-income individuals. Using the Success Measures Data System, these 400 practitioners tracked, analyzed, and reported the changes in the progress of a sample of their financial coaching clients at two points over the course of these relationships. "The evaluation provided data about how consumers' financial knowledge, attitudes, and behaviors were changing over time" (Financial Capability Demonstration Project, 2013, p. 5). The changes in behaviors focused primarily on financial status, savings, debt, and credit.

The studies found encouraging evidence that financial coaching helped participants save money, pay down debt, and improve credit scores. They reported 54% of the clients with no savings at the start of the project had some savings. Fifty-five percent, who had unsecured debt when they began receiving coaching, decreased their debt by $3,005. Forty-seven percent of the clients raised their credit scores over the course of the project by 59 points. "Rather than solely transferring knowledge through financial education classes or resolving problems through counseling sessions, a financial coach acts as a facilitator to support the client's personal behavior change overtime" (Financial Capability Demonstration Project, 2013, p. 9).

Demographical Differences

"For anyone in business, be it coaching or any other job, we need to interact with others who are different to us" (Passmore, 2013, p. 1). A successful coaching model should take diversity into consideration when designing and implementing the model. Rosinki (2003) highlighted this point: "By integrating the culture dimension, coaching will unleash more human potential to achieve meaningful objectives" (pg. xviii).

As previously noted in Chapter One, Elliehausen, Lundquist, and Staten (2007) found women, minorities, and young adults increased their credit scores more after receiving financial counseling. The Financial Capability Demonstration Project (2013) found that women and young adults' credit scores also increased more from financial coaching. This report did not provide any results relating to the race of the participants.

Gender. Statistics show women outlive men by five to six years (Kirkwood, 2010), earn an average of 23% less than men (DeNavas-Walt, Proctor, & Smith, 2013), and have lower levels of pension or survivors' benefits than men (American Association of University Women, 2011). According to Weir and Willis (2000), these factors put women at higher risk than men for having financial problems. Yet, according to a study completed by Hilgert and Hogarth (2003), women have less financial knowledge than men. Given these circumstances, it is important to underscore the results of the Financial Capability Demonstration Project (2013), which showed financial coaching helped 51% of female clients increase their credit score compared to only 39% of the men in the study.

Age. There are over 3.1 billion people in the world today (Worldmeters, 2013). The U.S. is the third largest country with a population of over 300 million. The four generations from 1946 to the present are characterized as follows (Tapscott, 2009): (1) The Baby boomers

generation: January 1946 to December 1964 – 19 years, producing 77.2 million children; (2) Generation X: January 1965 to December 1976 – 12 years, producing 44.9 million children; (3) Generation Y (Millennial or Net): January 1977 to December 1997 – 21 years, producing 81.1 million children; and (4) Generation Next (Generation Z): January 1998 to present - producing 40.1 million children as of 2008. Approximately 50 million Americans were born between 1925 and 1945 (Census, 2012). These individuals were known as the silent generation.

The two largest of the five generations are the baby boomers (the older adults) and generation Y or the millennials (the younger adults), who are the children of the baby boomers. The baby boomer generation makes up 44% of the U.S. population, but controls 70% of the U.S. disposable income (Nielsen and BoomAgers, 2012). By the year 2020, the millennials will make up 46% of the workforce (Brack, 2012). It is now more important than ever that these young adults are taught the importance of managing their personal finances.

The challenge is that the millennial generation values are different from older generations. Flexibility in the workplace is more important to them than money. If they do not like a job, they will quit because the worst thing that can happen is that they will be forced to move back home with their parents (Espinoza, Ukleja, & Rusch, 2010). This is why they are also known as the "boomerang" generation. According to a research study completed by Parker (2012), 29% of the millennials born between the years 1977 - 1986 are returning home to live with their parents or never left.

"Generation X and Generation Y have accumulated less wealth than their parents did at that age over 25 years ago" (Steuerle, McKernan, Ratcliffe, & Zhang, 2013, p. 1). They may not be able to make up the lost ground. This fact can be seen as a problem considering "wealth is not just money in the bank, it is insurance against tough times, tuition to get a better education

and a better job, savings for retirement, and a springboard into the middle class" (McKernan, Ratcliffe, Steuerle, & Zhang, 2013, p. 1).

It is estimated that by 2016 the Social Security system will be paying out more than it takes in each year. By 2036, it is projected that the trust fund will be exhausted (U.S. Social Security Administration, 2011). Successful retirement planning requires adults to understand investment, retirement rules, and the legal implications of their financial decisions (FLEC 2006). Those who choose to ignore these statistics and not plan for retirement will find that they still have to work or live in poverty during their retirement years. According to Donohue (2011), individuals living below poverty are another contributing factor as to why Americans have negative financial behavior. She feels even if individuals have the financial knowledge, without capital it is very difficult for them to have a positive financial behavior.

According to the US Census Report (2013), 46.5 million Americans lived in poverty in 2012. Millions of individuals are struggling with earning the necessary income to pay for the basic necessities of life. The federal poverty levels are published and updated annually. Table 4 shows the 2013 poverty guidelines for a family size of 1 through 8 for the 48 states and the District Columbia (Assistant Secretary for Planning and Evaluation (ASPE), 2013). The benchmark (100%) in 2013 was $11,490 (without any type of supports or subsidies) for a family size of 1. To give an example of how to use the chart, assuming a family size of 1 had an income of $5,745, the poverty level would have been 50% ($5,745 of $11,490). If another family size of 1 had an income of $22,980, the poverty level would have been 200% ($22,980 of $11,490).

Table 4

2013 Poverty Guidelines

2013 POVERTY GUIDELINES FOR THE 48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA	
Persons in family/household	**Poverty guideline**
For families/households with more than 8 persons, add $4,020 for each additional person.	
1	$11,490
2	15,510
3	19,530
4	23,550
5	27,570
6	31,590
7	35,610
8	39,630

A variety of federal and state programs use these guidelines to determine eligibility for services/assistance. These assistances include, but are not limited to the following: food stamp program, child care assistance, health care assistance, supplemental nutrition program (snap), women, infants and children program (WIC), and housing subsidies (Coalition for Homelessness Intervention & Prevention (CHIP), n.d). When determining if an individual (family) qualifies for assistance, the food stamp program uses 130% of the poverty level and WIC program uses 185% of the poverty ([Intermediary Director], personal communication, August 14, 2014).

It is expected that the student loan debt will be the cause of the next financial crisis (NBC News, 2012). The student loan debt has increased to over 1 trillion dollars (Weinberg, 2013). The proportion of 25-year-olds with student loan debt has increased from just 25% in 2004 to more than 40% in 2012 (Gersten, 2013). It is important millennials understand how to budget

their finances so that in the event that this crisis materializes, they will be in the position to manage it.

Financial coaching can be the ideal solution to prepare young adults for this possible crisis (Collins, Baker, & Gorey, 2007). The Financial Capability Demonstration Project (2013) showed financial coaching for the younger clients were more successful than for older ones in increasing their credit scores. Fifty-five percent of the clients between the ages of 25 and 39 increased their credit scores, while 41% of those ages 55 and over did so.

Race. In his June 16, 2008 speech in Flint, Michigan, presidential candidate Barack Obama said: “The economic recession that started in 2008 continues to impact our country and the effects among minority populations are far worse than most can imagine” (Obama, 2008, n.p). Statistics show minorities have lower average credit scores, higher loan default rates, and lower amounts saved for retirement. They have a tendency to live paycheck-to-paycheck and use predatory or alternative financial systems (e.g., payday loans) to aid them when they are unable to manage from one paycheck to the next (Harris Interactive, 2011). In 2011, African-Americans had an average net worth of $4,995, whereas Caucasians had an average of $110,729 (Census, 2012). There are several reasons why these statistics exist. One of the major reasons is that minorities’ typically have less financial knowledge than non-minorities (Hilgert & Hogarth, 2003). Another reason is how minorities and non-minorities perceive money. Ivanic, Overrbeck, and Nunes (2011) completed a study and found some African-Americans signify having money and spending money with status, and they will pay more for items (even if it is a “want” rather than a “need”) when they feel their status is threatened.

One of the responsibilities of financial coaches is to understand the culture of their clients. They must know the cultural differences and facilitate action plans to help change

negative financial behaviors into positive ones (Collins, Baker, & Gorey, 2007). As previously discussed, Annie E. Casey Foundation study had more than 80% of its participants from a racial/ethnic minority group. The results of this study indicated financial coaching does have a positive effect on minority groups (Collins & O'Rourke, 2012).

Learning Theories Associated with Financial Coaching

According to Lusardi, Clark, Fox, Grable, and Taylor (2010), "Most financial literacy programs have been developed with little attention to adult learning theory or adult education. Without educational theories, teaching methods and strategies, educational programs become arbitrary devices that lack a defined direction or purpose" (p. 17). Additionally, theories stimulate research by providing a lens to reveal understanding and discourse to engage in critical analysis. Theories identify best practices for each dimension and help maximize student achievement (Federal Depository Insurance Corporation, 2004).

Learning theories play a major role in educating adults. "Theories are the result of the need people have to make sense out of life. They enable organizations to interpret enormous amounts of information that exist in the world" (Evans, Forney, Guido, Patton, & Renn, 2010, p. 23). "Theories do not give us solutions, but they do provide direction for finding solutions when teaching adults" (Merriam & Cafferella, 1999, p. 250).

There are a number of ways to categorize theory as it relates to or explains how adults learn. Merriam and Cafferella (1999) discussed five orientations that help to organize adult learning theories including behaviorist, cognitivist, humanist, constructivist, and social learning. The behaviorist orientation explains adult learning by stating that the environment shapes our behavior, as learning takes place by observing others. The cognitivist orientation explains adult learning as how our mind processes new information. When teaching adult learners, the

cognitivist educator focuses on learning how to learn. The humanist orientation views the educator's role as one of facilitating development of the whole person. The constructivist orientation will interpret the educator's role as making meaning to encourage a transformation in perspective. There are three adult learning theories that aid in understanding how adults learn in relation to financial literacy. These theories are transformative learning, social learning theory, and andragogy. They help inform why and how financial coaching works and aid in making this field more effective.

Transformative learning theory. The transformative learning theory is classified as a constructivist orientation. It is a learning process set into motion by a disorienting dilemma that is caused by a life crisis. This crisis cannot be resolved through the application of previous problem-solving strategies. When a caterpillar transforms into a butterfly it takes on a completely new identity. The goal of transformative learning is to have the same dramatic effect. Transformative learning is more than acquiring new knowledge in addition to what people already know (Mezirow, 1978). It "shapes people; they are different afterward, in ways both they and others can recognize" (Clark, 1993, p. 47). "Transformative learning develops autonomous thinking" (Mezirow, 1997, p. 5). It is the way adults interpret their life experiences and how they make meaning of them (Merriam & Caffarella, 1999).

This theory helps to understand individuals that are going through a life crisis involving their personal finances. The following illustration demonstrates individuals going through a financial crisis, using the six steps of the transformative learning process. The first step, the crisis: individuals are getting further and further in debt no matter what they do. The second step: individuals engage in self-examination. This is often accompanied by feelings of guilt or shame, with individuals turning to religion or some other form of support. The third step:

individuals critically assess the assumptions. The fourth step: individuals realize that others have gone through a similar process. The fifth step: individuals explore options for forming new roles, relationships, or actions. This step leads to formulating a plan of action. There are four parts involved with this step: (1) acquiring knowledge and skills, (2) trying out new roles, (3) re-negotiating relationships and negotiating new relationships, and (4) building competence and self-confidence. In the sixth and final step, individuals are reintegrated back into their lives based on the new, transformed perspective (Mezirow, 1991).

It is during the fifth and sixth steps that individuals will seek out a financial coach in efforts to help them to be more successful at achieving the final step, which would include the financial goal(s). As previously mentioned, financial coaching is not meant to replace financial education classes or financial counseling. It is intended to complement these types of programs.

Social learning theory/social cognitive theory. Social learning theory, later renamed social cognitive theory, combines elements from both behaviorist and cognitivist orientations. Miller and Dollard (1941) introduced the premise that people learn from observing others (behaviorist orientation to learning), and that they must imitate and model/reinforce (the cognitive orientation to learning) what they have learned. In the 1960s, Bandura expanded on this premise by researching the cognitive process involved with observing others (Merriam & Caffarella, 1999). This theory explains how people learn new things and develop new behaviors through personal factors, environmental influences, and behavioral factors (Wood & Bandura, 1989). The principal belief behind this theory is the concept of self-efficacy. Self-efficacy refers to the confidence individuals have in their ability to successfully carry out a behavior. People must believe in their capability to perform the behavior.

According to Ozmete and Hira (2011), this theory can be used to help people by stimulating financial behavior change. One of the roles of a financial coach is to encourage the participants, thereby increasing their self-efficacy. “When the emphasis is on mentoring and modeling, social learning is the core approach” (Taylor, Marienau, & Fiddler, 2000, p. 357).

Andragogy. Andragogy is known as an adult learning theory, and it explains how adults learn. Knowles (1968) introduced the concept of andragogy. This theory is defined as “the art and science of helping adults learn” (Merriam & Caffarella, 1999, p. 272). It is also classified as a humanist orientation which is based on five assumptions (also known as characteristics) about the learner (Merriam & Caffarella, 1999, p. 272).

1. As persons mature, their self-concept moves from that of a dependent personality toward one of a self-directing human being.
2. Adults accumulate a growing reservoir of experience, which serves as a rich resource for learning. Unlike children, adults bring different life experiences, expectations, and goals to the learning experience.
3. The readiness of adults to learn is closely related to the developmental tasks of their social role.
4. There is a change in time perspective as people mature, from future application of knowledge to immediacy of application. Thus, adults are more problem centered than subject centered in learning endeavors.
5. Adults are motivated to learn by internal factors rather than external ones.

Andragogy is a problem-centered model. Lindeman (1926) stated that adults acquire new knowledge in efforts to solve a problem, not for the purpose of accumulating information. Adults are able to relate new knowledge to existing knowledge or assumptions. Therefore, new

knowledge can be most effective when adults can use it immediately or relate it to existing knowledge (rather than stored to be used for future use). Financial coaches aid adults in turning this newly acquired financial knowledge into a positive financial behavior.

Chapter Three

Methods

Background

There are seven organizations operating in the city that provide financial coaching. One of the seven sites did not have any data available, and therefore, was excluded from this study. If participants seek assistance outside the area in which they live, they are referred to the site that covers that area. Each site provides financial, employment, and income coaching. When participants receive all three coaching services, this system is referred to as bundling and follows the Centers for Working Families (CWF) approach when providing services to its clients. The CWF approach is a model pioneered by the Annie E. Casey Foundation in Baltimore. It was designed to help low-income families reach financial stability and move up the economic ladder. Abt Associates found that clients who received bundled services are three to four times more likely to achieve a major financial outcome than clients only receiving one type of service (Burnett & St George, 2008). This approach is considered to be holistic in that individuals gain and maintain employment, increase earning potential, improve financial literacy, and acquire valuable knowledge and skills that will help build long-term assets for them and their families. The success of this program is measured by the participants' (1) increase in credit scores, (2) increase in net worth, (3) increase in net income, and (4) new employment (Intermediary, 2013).

The [Intermediary] collects common data points from each of these organizations. [It does] not provide services directly to participant. Grants to support staffing, information technology, and technical assistance to the sites that meet with the participants are all provided by [the Intermediary]. This non-profit organization helps bring capital into low-income communities. Its mission is to "make sure residents of [Intermediary] sustainable communities

have the skills and funding they need to support themselves in jobs and other activities based on opportunities available in Indiana" (Intermediary, 2013).

[The Intermediary] builds sustainable communities by achieving the following goals: (1) expanding investment in housing and other real estate, (2) increasing family income and wealth, (3) stimulating economic development, (4) improving access to quality education, and (5) supporting healthy environments and lifestyles. As part of the sites' agreement with [the Intermediary], each site must provide data monthly to [it]. [The Intermediary] also verifies each site is following the CWF model ([Intermediary Director], personal communication, August 6, 2013; Grain, Jackson, Kuka & Qaddoura, 2011).

In order to understand the financial coaching process, a financial coach from each site was interviewed for this study, with the exception of Site E where no coach was interviewed and the Site A, where two were interviewed. The coaching process typically begins with individuals attending a group meeting with all of the coaches (financial, employment, and income). The main purpose of this initial meeting is for sites to explain what coaching is all about. These individuals (usually low- or moderate-income wage earners) come to the coaching site for some type of assistance. They may be seeking help in paying a bill, finding a job and/or requesting food and shelter. No matter why the individuals are there, each site's goal is to help the individual become a part of and succeed at receiving services from the coaching process.

Only the individuals who have the financial knowledge and are ready to proceed will go forward with regular one-on-one meetings with the financial coach. The participants' financial goal will determine how long they will meet with the coach. Individuals who are not ready for individual coaching are asked to complete financial education workshops before they are allowed

to go forward. Some will also meet with the employment and income coaches during this educational process.

Participants' initial credit report (soft inquiry) is pulled at the initial one-on-one meeting with a financial coach. The coaches are asked to periodically (preferably each month) pull a credit report for each participant to determine how the credit scores are changing. No time limit is set for how long the coach will work with a participant, but it could take up to two or more years, if needed. Retention can be a problem. Some participants will not meet with coaches for months, if they are unprepared or dealing with life problems, and will return later. Some leave and never return. The individuals are not charged for any of the services provided.

Population. Creswell (2005) defines a population as "a group of individuals who have the same characteristics" (p. 145). The population in this study included adults who visited one of the six sites and in an urban city received financial coaching services during the period beginning November, 2008 and ending December, 2013.

Sample. To select participants in this study, a purposive sampling technique was used. In a purposive sampling technique, the participants are selected because they meet certain criteria specified by the researcher (Johnson & Christensen, 2012). The specific criteria for selection required the availability of a baseline credit score and a subsequent credit score between the periods noted above. If the participants' baseline credit score was zero or they did not have a subsequent credit score, they were not included in the sample. If the participants had multiple credit scores reported during this period, the last credit score generated was used.

A total of 869 individuals met the criteria. Table 6 shows the demographic information by site. There were approximately 72% females (625 of 867); 28% males (242 of 867), with 2 unknown. The Generation Y group consisted of 39% (340 of 868); Generation X group 29%

(254 of 868); Baby Boomers 30% (258 of 868); Silent Generation 2% (16 of 868), with 1 unknown. African-Americans made up 65% (567 of 866) of the participant group; Caucasians with 27% (232 of 866); other which consisted of Indiana/Alaskan, Asian, Bi-racial, Hawaiian, Multi-Racial and other that comprised of 8% (67 of 866), with 3 unknown.

Research Design

The design of this study is quantitative, non-experimental, descriptive research. The extent to which financial coaching did or did not improve the credit scores of the participants is examined. All six sites were analyzed collectively and separately. The effects of demographic variables, including gender, age, and race for the six sites were also analyzed collectively and separately. Due to the sensitivity and the confidentiality of certain data, the study does not identify the name of the Intermediary, financial coaching sites, participants' names, social security numbers, or any type of identifying information.

Procedures

An electronic data file (MicroExcel) obtained from the Intermediary contained the following information for each participant: financial coaching site location, gender, age, race, credit score from TransUnion Credit reporting agency prior to receiving financial coaching, and credit score from TransUnion after the financial coaching had started.

Table 5

Demographic Characteristics of Sample by Site

	Site A	Site B	Site C	Site D	Site E	Site F	Total	%
Total participants	380	144	34	38	145	128	869	
Gender								
Missing	2	-	-	-	-	-	2	
Male	116	36	3	9	34	44	242	28%
Female	262	108	31	29	111	84	625	72%
Total	380	144	34	38	145	128	869	100%
Age								
Missing	-	1	-	-	-	-	1	
Generation Y	138	81	21	20	45	35	340	39%
Generation X	122	42	7	14	29	40	254	29%
Baby Boomers	114	20	6	4	65	49	258	30%
Silent Generation	6	-	-	-	6	4	16	2%
Total	380	144	34	38	145	128	869	100%
Race								
Missing	3	-	-	-	-	-	3	
African American	272	133	31	29	57	45	567	65%
Caucasian	81	5	2	4	80	60	232	27%
Indian/Alaskan	2	1	-	1	-	3	7	1%
Asian	1	1	-	-	1	-	3	0%
Bi-racial	5	2	-	-	1	2	10	1%
Hawaiian	-	-	-	-	-	1	1	0%
Multi-racial	8	2	1	-	1	7	19	2%
Other	8	-	-	4	5	10	27	4%
Total	380	144	34	38	145	128	869	100%

Data Analysis

As was discussed in Chapter Two, studies have shown financial coaching helps women improve credit scores more than men, younger participants more than older (Financial Capability Demonstration Project, 2013), and it has helped minorities more so than non-minorities (Collins & O'Rourke, 2012). As a result of these studies, the electronic data file received from the

Intermediary was used in a paired sample *t*-test to analysis the first hypothesis. A regression analysis was used to test the following hypotheses 2 – 4. The four hypotheses were:

Hypothesis 1: Financial coaching improves the credit scores of its participants. An analysis was completed on the total of all six sites and evaluated on each site separately.

Hypothesis 2: Financial coaching has a greater impact on improving credit scores for women compared to men. An analysis was completed on the total of all six sites and evaluated on each site separately.

Hypothesis 3: Financial coaching has a greater impact on improving credit scores for younger participants compared to the older ones. An analysis was completed on the total of all six sites and evaluated on each site separately.

Hypothesis 4: Financial coaching has a greater impact on improving credit scores for minorities compared to non-minorities. An analysis was completed on the total of all six sites and evaluated on each site separately.

The paired samples *t*-test (also called a dependent *t*-test) is used to compare the means of two related samples. It is ideal for comparing pre- and post-test scores for a group of participants (Cronk, 2008). This test determines whether or not two scores are significantly different from each other.

A "regression analysis is a set of statistical procedures used to explain or predict the values of a dependent variable based on the values of one or more independent variable(s)" (Johnson & Christensen, 2012, p. 472). Considering that it is presumed the independent variable causes a change to occur in the outcome (dependent variable), the following linear regression equation can be used $Y = a + bX$. The "Y" represents the predicted value of the dependent variable, "a" represents the amount for "Y" if the independent variable is zero, "b" is the slope,

and "X" represents the single independent variable (Gay, Mills, & Airasian, 2009). A simple regression analysis has one independent variable and a multiple regression analysis has two or more. For this study, the change in credit scores (difference between pre- and post- financial coaching) is the dependent variable. The credit scores received from TransUnion were used for each participant when determining the credit change scores. The coaching from each of the six sites was the independent variables. A regression analysis was used to assess the effect of demographics of program participants including gender, race, and age to determine if significant differences exist.

Considering poverty levels have been identified as one of the causes of negative financial behavior (Donohue, 2011), a Pearson correlation coefficient (also known as the Pearson product-moment correlation coefficient or the Pearson r) was used to test the relationship between the age of the participants and their poverty levels. This statistical test determines the strength of the linear relationship between age and poverty levels (Cronk, 2008).

Chapter Four

Results

Hypothesis 1: Financial coaching improves the credit scores of its participants

An analysis was conducted on the total of all six sites and on each site separately. A paired-samples *t*-test was conducted to compare the last credit score and the first credit score (see table 6) of the participants. For the six sites combined, the last credit score (M = 568.18) was significantly higher than the first credit score (M = 562.80; $t(868) = -2.77$, $p < .01$). Therefore, the first hypothesis was supported.

A paired-samples *t*-test was conducted to compare the last credit score and the first credit score (see table 6) for all six sites. For five sites there was no significant differences between the last credit score and the first credit sore: Site A difference between the last credit score (M = 562.06) and the first credit score (M = 556.47; $t(379) = -1.89$, $p > .05$); Site B difference between the last credit score (M = 548.80) and the first credit score (M = 549.93; $t(143) = .23$, $p > .05$); Site D difference between the last credit score (M = 585.21) and the first credit score (M = 573.29; $t(37) = -1.26$, $p > .05$); Site E difference between the last credit score (M = 593.54) and the first credit score (M = 586.21; $t(144) = -1.54$, $p > .05$); and Site F difference between the last credit score (M = 579.16) and the first credit score (M = 573.76; $t(127) = -1.01$, $p > .05$). Only for Site C was there significant difference between the last credit score (M = 550.21) and the first credit score (M = 535.26; $t(33) = -3.23$, $p < .01$).

Table 6

Paired Samples t-test results

Site	First Score	Last Score	*t*	*df*	*p*
All	562.80	568.18	-2.77	868	0.00
Site A	556.47	562.06	-1.89	379	0.06
Site B	549.93	548.80	0.23	143	0.82
Site C	535.26	550.21	-3.23	33	0.00
Site D	573.29	585.21	-1.26	37	0.22
Site E	586.21	593.54	-1.54	144	0.13
Site F	573.76	579.16	-1.01	127	0.32

Table 7 illustrates the average credit score before financial coaching and after financial coaching for all six sites combined and for each site separately. The average credit score from all 869 participants before financial coaching began was 563 and the last average credit score was 568. There was only one site, Site B, which saw a decrease in the average credit scores.

Table 7

The Average Credit Scores by Site

	Total Participants	First Score	Last Score	Difference
All Sites	869	562.80	568.18	5.38
Site A	380	556.47	562.06	5.59
Site B	144	549.93	548.80	(1.13)
Site C	34	535.26	550.21	14.95
Site D	38	573.29	585.21	11.92
Site E	145	586.21	593.54	7.33
Site F	128	573.76	579.16	5.40

Table 2, in Chapter Two, explains the different levels of credit scores, showing information provided in the first two columns of Table 8 below. Table 8 uses this breakdown to illustrate the changes in different levels of the participants before and after receiving financial coaching. It shows there were fewer participants in the "Poor" and "Bad" credit categories after receiving financial coaching.

Table 8

Credit Score Levels – Before and After Receiving Financial Coaching

Credit Score	Description	# of Participants Before receiving Financial coaching	# of Participants After receiving Financial Coaching	Difference
Excellent	750 +	28	25	(3)
Good	700 – 749	22	31	9
Fair	650 – 699	60	81	21
Poor	600 – 649	131	129	(2)
Bad	Below 599	628	603	(25)
	Total	869	869	

For hypotheses 2 through 4 a hierarchical regression analysis was conducted on the total of all six sites collectively and evaluated on each site separately (see table 9). First score, gender (hypothesis 2), age (hypothesis 3), and race (hypothesis 4) were entered into the regression to predict the last score. Race (Minorities = 0, Non-minorities = 1) and gender (Female = 0, Male = 1) were re-coded into dummy variables.

Table 9

Hierarchical Regression Analysis Results

	Dependent Variable						
	Last Score						
	All Sites	Site A	Site B	Site C	Site D	Site E	Site F
Constant	144.72**	160.05**	211.43**	118.71	239.70**	94.25**	169.02**
First Score	.72**	.71**	.59**	.82**	.64**	.77**	.74**
Race	3.94	2.65	-16.36	11.27	-9.80	5.58	-3.38
Gender	-3.60	-3.20	-8.07	19.69	19.43	1.56	-6.96
Age	.41**	0.20	0.50	-0.33	-0.65	1.02**	-0.21
R^2	.53**	.48**	.29**	.65**	.48**	.70**	.53**

Note. N = 868, * $p < .05$, ** $p < .01$.
Unstandardized coefficient is reported
Gender: Female = 0; Male = 1
Race: Minorities = 0; Non-Minorities = 1

Hypothesis 2: Financial coaching has a greater impact on improving credit scores for women compared to men

For hypothesis 2 gender was not significantly related to the last score for all six sites (B = -3.60, $p > .05$), Site A (B = -3.20, $p > .05$), Site B (B = -8.07, $p > .05$), Site C (B = 19.69, $p > .05$), Site D (B = 19.43, $p > .05$), Site E (B = 1.56, $p > .05$), Site F (B = -6.96, $p > .05$). Therefore, hypothesis 2 was not supported (see Table 9).

The regression indicated there was no gender difference in average credit scores. However, when comparing the average increase in credit scores, the females had a slightly higher increase than males. Table10 shows the breakdown of the average credit score increases before financial coaching and after receiving financial coaching for all six sites combined and each site separately. The average credit scores for females increased by 6.79 points. The average credit scores for males increased by 1.70 points. This study also supports the fact that female's credit scores are typically lower than males. Before financial coaching, the average credit score for females before financial coaching ranged from 348 to 810. After financial coaching, it ranged from 420 to 811. Before financial coaching, the average credit score for males ranged from 407 to 816. After financial coaching, it ranged from 424 to 820.

Table 10

Average Credit Score Increases (Decreases) by Gender

		Total Participants	First Score	Last Score	Difference
Females	All Sites	625	560.09	566.88	6.79
	Site A	262	554.50	561.40	6.90
	Site B	108	549.99	551.50	1.51
	Site C	31	535.03	548.58	13.55
	Site D	29	575.38	582.72	7.34
	Site E	111	583.05	589.77	6.72
	Site F	84	564.15	574.76	10.61
Males	All Sites	242	569.80	571.50	1.70
	Site A	116	560.80	563.34	2.54
	Site B	36	549.75	540.69	(9.06)
	Site C	3	537.67	567.00	29.33
	Site D	9	566.56	593.22	26.66
	Site E	34	596.56	605.82	9.26
	Site F	44	592.09	587.57	(4.52)

Hypothesis 3: Financial coaching has a greater impact on improving credit scores for younger participants compared to the older ones

Contrary to hypothesis 3, age was positively related to the last score for all six sites (B = .41, $p < .01$) and the Site E site (B = 1.02, $p < .01$). The relationship between age and the last credit score for all other sites was not significant (Site A, B = 0.20, $p > .05$; Site B, B = 0.50, $p > .05$; Site C, B = -0.33, $p > .05$; Site D, B = -0.65, $p > .05$; Site F, B = -0.21, $p > .05$). Therefore, hypothesis 3 was not supported (see Table 9).

The results of the regression analysis for this study did not support the hypothesis that financial coaching improved credit scores for younger participants compared to the older ones. In fact, the results of this study found just the opposite. Financial coaching helped the older participants more than the younger. Table 11 shows the average credit scores before and after financial coaching, for all six sites combined and each site separately by generation. When comparing all six sites combined, the baby boomers had the highest credit score improvement (increased 9.12 points) than Generation Y (increased 4.18 points), Generation X (increased 3.91 points), and the Silent Generation (decreased 6.82).

The results of the Pearson Correlation found there was a correlation between the age of the participant and their poverty levels ($r = .127$, $n = 861$, $p < .01$). This result indicated younger participants have higher poverty levels than the older ones. Table 12 illustrates the poverty levels of generation y, baby boomers, and the total of all participants. Of the 662 participants that were below poverty level, 274 (41%) were generation y. This also represents 82% (274 of 336, 4 missing) of generation y's population.

Table 11

Average Credit Score Increases (Decreases) by Generation

		Total Participants	First Score	Last Score	Difference
Generation Y	All Sites	340	548.76	552.94	4.18
	Site A	138	548.30	553.09	4.79
	Site B	81	554.70	548.16	(6.54)
	Site C	21	527.29	541.48	14.19
	Site D	20	545.10	574.00	28.90
	Site E	45	545.60	543.09	(2.51)
	Site F	35	555.83	571.67	15.84
Generation X	All Sites	254	555.26	559.17	3.91
	Site A	122	554.80	559.36	4.56
	Site B	42	536.40	541.36	4.96
	Site C	7	536.00	558.43	22.43
	Site D	14	598.71	590.50	(8.21)
	Site E	29	564.00	560.34	(3.66)
	Site F	40	597.69	594.47	(3.22)
Baby Boomers	All Sites	258	584.76	593.88	9.12
	Site A	114	560.71	569.70	8.99
	Site B	20	557.20	564.25	7.05
	Site C	6	562.33	571.17	8.84
	Site D	4	625.25	622.75	(2.50)
	Site E	65	625.25	645.29	20.04
	Site F	49	597.69	594.47	(3.22)
Silent Generation	All Sites	16	625.38	618.56	(6.82)
	Site A	6	697.50	678.17	(19.33)
	Site E	6	575.33	571.67	(3.66)
	Site F	4	592.25	599.50	7.25

Table 12

Poverty Levels of Generation Y, Baby Boomers, and Total Participants

	Gen Y	Baby Boomers	Total
Total Participants	340	258	868
Below Poverty			
0% - 69%	234	149	558
70% - 99%	40	31	104
	274	180	662
% of Total *	82%	70%	77%
Above Poverty			
100% - 124%	23	25	65
125% - 174%	23	28	75
175% - 199%	4	11	23
200% - 224%	6	4	14
225% - 299%	4	3	12
300% or more	2	5	10
Missing	4	2	7
	66	78	206

* Missing information excluded from total participants

Hypothesis 4: Financial coaching has a greater impact on improving credit scores for minorities compared to non-minorities

For hypothesis 4, race was not significantly related to the last score for all six sites (B = 3.94, $p > .05$), Site A (B = 2.65, $p >.05$), the Site B (B = -16.36, $p >.05$), Site C (B = 11.27, $p >.05$), Site D Site (B = -9.80, $p >.05$), Site E (B = 5.58, $p > .05$); Site F (B = -3.38, $p >.05$). Therefore, hypothesis 4 was not supported (see table 9).

Table 13 shows the first score – before receiving financial coaching, the last score – after receiving financial coaching, and the increase (decrease) for each race for all sites combined and each site separately. Although there was very little difference in the average credit score

increases between African-Americans (4.44) and Caucasian (4.48), there was a difference in the ranges in credit scores. Table 14 shows these ranges. Both African-Americans' and Caucasians' low and high ranges in credit scores did improve. It can be seen that the African-Americans' low credit score before financial coaching was 348 after it was 420. The Caucasians' low credit score before financial coaching was 390, and after it was 442.

Table 13

Average Credit Score Increases (Decreases) by Race

		Total Participants	First Score	Last Score	Difference
All Sites		869	562.80	568.18	5.38
	Caucasian	232	581.86	586.34	4.48
	African-American	567	551.97	556.41	4.44
	Indian/Alaskan	7	579.29	574.00	(5.29)
	Asian	3	667.00	642.00	(25.00)
	Bi-racial	10	546.90	561.00	14.10
	Hawaiian	1	647.00	614.00	(33.00)
	Multi-Racial	19	589.89	622.47	32.58
	Other	27	594.78	611.00	16.22
	Missing/Unknown	3	557.67	580.00	22.33
Site A		380	556.47	562.06	5.59
	Caucasian	81	570.93	574.42	3.49
	African-American	272	551.54	556.53	4.99
	Indian/Alaskan	2	514.00	535.50	21.50
	Asian	1	717.00	726.00	9.00
	Bi-racial	5	542.20	570.00	27.80
	Multi-Racial	8	599.75	616.75	17.00
	Other	8	533.38	544.88	11.50
	Missing/Unknown	3	557.67	580.00	22.33
Site B		144	549.93	548.80	(1.13)
	Caucasian	5	553.80	533.60	(20.20)
	African-American	133	548.12	548.87	0.75
	Indian/Alaskan	1	554.00	534.00	(20.00)
	Asian	1	659.00	530.00	(129.00)
	Bi-racial	2	598.50	575.00	(23.50)
	Multi-Racial	2	55.50	572.50	517.00
Site C		34	535.26	550.21	14.95
	Caucasian	2	629.00	640.00	11.00
	African-American	31	527.55	544.26	16.71
	Multi-Racial	1	587.00	555.00	(32.00)

Site D		38	573.29	585.21	11.92
	Caucasian	4	539.25	559.00	19.75
	African-American	29	579.72	587.66	7.94
	Indian/Alaskan	1	495.00	535.00	40.00
	Other	4	580.25	606.25	26.00
Site E		145	586.21	593.54	7.33
	Caucasian	80	592.15	602.29	10.14
	African-American	57	566.54	568.28	1.74
	Asian	1	625.00	670.00	45.00
	Bi-racial	1	505.00	466.00	(39.00)
	Multi-Racial	1	810.00	811.00	1.00
	Other	5	679.20	708.20	29.00
Site F		128	573.76	579.16	5.40
	Caucasian	60	586.52	585.72	(0.80)
	African-American	45	546.49	551.11	4.62
	Indian/Alaskan	3	659.33	626.00	(33.33)
	Bi-racial	2	528.00	572.00	44.00
	Hawaiian	1	647.00	614.00	(33.00)
	Multi-Racial	7	557.43	626.00	68.57
	Other	10	607.50	617.20	9.70

Table 14

Range in Credit Scores Before and After Receiving Financial Coaching

	Before		After	
	Low	High	Low	High
African-Americans	348	778	420	801
Caucasian	390	816	442	820

Chapter Five

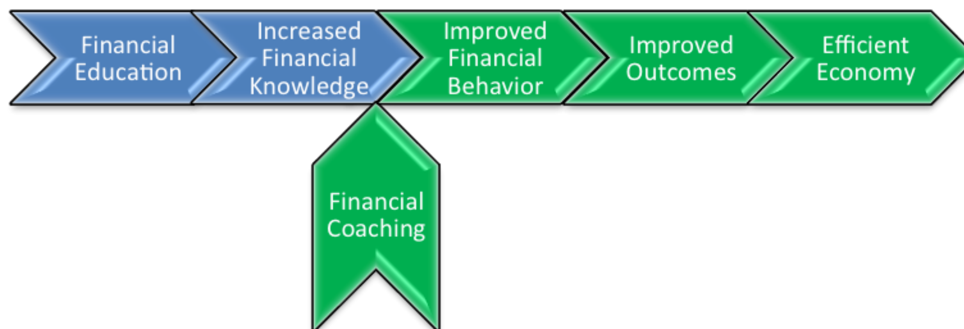
Discussion

The great recession of 2008 made it more transparent that many Americans lack the basic financial knowledge needed to effectively manage their personal finances (Hira, 2009; Fox, Bartholomae, & Lee, 2005). Research supports the theory that the more financial knowledge an individual has, the better their financial behavior (Gray, Sebstad, Cohen, & Stack, 2009; Hathaway & Khatiwada, 2008; Hogarth, Hilgert, & Schuchardt, 2002; Martin, 2007; and Mason & Wilson, 2000). As a result, there has been an increase in the number financial education programs. Yet, there has been little evidence to determine the effectiveness of these programs.

As noted earlier in this study, the theoretical framework of financial literacy starts with financial education and ends with an efficient economy. Figure 6 illustrates this theoretical framework and also shows how financial coaching fits into it.

Figure 6

Using Financial Coaching to Bridge the Gap Between Increased Financial Knowledge and Improved Financial Behavior



Increased financial knowledge does not always mean improved financial behavior (Tisdell, Taylor, & Sprow, 2011). Financial coaching is designed to unlock individuals'

potential, maximize performance, and improve their financial behavior through the use of financial knowledge and experience (Palmer & Whybrow, 2008). Considering there have been very few studies to support the effectiveness of financial coaching, this study was designed to provide empirical evidence for the emerging field of financial coaching.

A sample of 869 participants from six financial coaching sites was used to test four hypotheses focused on the effectiveness of financial coaching. This chapter provides the findings and interpretations of these results.

Findings and Interpretations

As noted early in the study when the hypotheses were first presented, the following hypotheses emerged from a review of literature. The following hypotheses emerged from a review of literature. A number of studies show that financial coaching can improve financial behavior leading to better outcomes (Hilgert & Hogarth 2003) or “increase assets, decrease debt, and build wealth” (Bajtelsmit & Rastelli, 2009). By virtue of the coaching process and changed behavior, it has been argued that credit scores can be improved (Financial Capability Demonstration Project, 2013; Collins, Murrell & O’Rourke, 2012; Collins, Baker, & Gorey, 2007). In addition, studies have indicated that women tend to improve credit scores more through financial coaching than men (Financial Capability Demonstration Project, 2013; Elliehausen, Lundquist, and Staten, 2007), that younger participants are more likely to improve credit scores through financial coaching than older ones (Financial Capability Demonstration Project, 2013; Collins, Baker, & Gorey, 2007; Elliehausen, Lundquist, and Staten, 2007), and that minorities are more likely to improve credit scores through financial coaching than non-minorities (Financial Capability Demonstration Project, 2013; Collins & O’Rourke, 2012). A more in-depth examination of these results from the literature is provided in Chapter Two.

Hypothesis 1: Financial coaching improves the credit scores of its participants

For hypothesis 1, when the six sites were combined, the last credit score (M = 568.18) was significantly higher than the first credit score (M = 562.80; $t(868) = -2.77$, $p <.01$). Therefore, the first hypothesis was supported.

The credit score most widely used is the FICO score created by Fair Isaac Corporation. Fair Isaac calculates the FICO score by using information gathered from the consumer's credit report maintained at the credit reporting agencies. It is a 3-digit number, ranging from 300 to 850, that represents a snapshot of an individual's risk level (TransUnion, 2007). The higher the number, the better the credit score. Most recent data available showed a score of 750+ as "excellent," 700-749 as "good," 650-699 as "fair", 600-649 as "poor", and below 599 as "bad".

Before financial coaching began, the average credit score from all 869 participants was 563 and the last average credit score was 568. Considering both of these scores were below 599, both would be considered "bad". Many mortgage companies require a minimum credit score of 620 for conventional, not backed by the government, home loans. For government backed Federal Housing Authority (FHA) home loans, 580 is the minimum required credit score ((Hill, 2013). Although these average credit scores appear "bad" at the outset, for a number of participants scores improved to "fair" and "good" after financial coaching. As a result, with ongoing and persistent effort, these participants may reach a point, whereby, major purchases may be possible.

When the sites were analyzed separately, for five of the six sites there was no significant difference between the first and last credit scores for participants. Only for Site C was there a significant difference between the last credit score (M = 550.21) and the first credit score (M = 535.26; $t(33) = -3.23$, $p < .01$). For Site B there was a slight decrease in the last score, with a

difference between the last credit score (M = 548.80) and the first credit score (M = 549.93; $t(143) = .23$, $p > .05$). With the exception of the latter site, there were positive increases for all other sites.

One explanation for these positive results may lie in the co-active coaching model that was described in Chapter Two. The financial coaches at each site use this model to guide their interactions with clients. All financial coaches bring to the coaching relationship with the client a set of specific approaches emphasizing listening, intuition, action/learning, self-management, and intuition. It is with these approaches that the coaches utilize their talents and skills as a coach. They help to create the basis for which the coaching unfolds. The coach consistently draws from these skills during the practice of coaching. Depending on the responses of the participant, the coach determines which skill is necessary to continue. Having a common coaching approach across all sites that each financial coach uses may explain the positive results of this initial finding. This approach is supported by Tisdell, Taylor, and Sprow (2011), who noted that merely trying new techniques or teaching strategies will have little impact without understanding how they fit into the objectives of the financial literacy program, the teaching approach, and the needs of the learners. The co-active model is a coherent program emphasizing a common and specific teaching approach designed to meet the needs of learners.

Although, having a common coaching approach across all sites that each financial coach uses may explain the positive results of this initial finding, it may also explain the negative results for Site B. Studies have shown the learning process of individuals can be influenced by the educator's beliefs (Cherry, n.d.). If the educator has negative attitude on a particular issue, that attitude may affect the learner's learning process.

The literature supports the positive results that may come from financial coaching. A number of authors have described the value of financial coaching for shaping positive behaviors among clients seeking financial assistance (Kaufmann, 2006; Collins, Murrell, & O'Rourke, 2010; Collins, Olive, & O'Rourke, 2013; Elliehausen, Lundquist, and Staten (2007). These positive behaviors focus on paying bills on time, keeping balances low on credit cards and other revolving credit, applying for and opening new credit accounts only as needed, paying off debt rather than moving it around, not closing unused credit cards as a short-term strategy, and checking the accuracy of reports of lenders to a credit bureau. Opposite behaviors related to any of these choices can have an immediate, negative impact on a credit score. Research studies have identified the positive results of financial coaching, noting that clients coached were more likely to have financial goals than persons without coaches and that they were more likely to increase credit scores (Collins & O'Rourke, 2012; Financial Capability Demonstration Project, 2013).

Diversity

Traditional coaching and training models are no longer effective if they do not consider diversity as a theme (Passmore, 2013). In this study, how effective financial coaching was at increasing the credit scores for diverse groups was examined. Hypotheses 2 through 4 addressed gender, age, and race data.

Hypothesis 2: Financial coaching has a greater impact on improving credit scores for women compared to men.

Statistics show women outlive men by five to six years (Kirkwood, 2010), earn an average of 23% less than men (DeNavas-Walt, Proctor, & Smith, 2013), and have lower levels of pension or survivors' benefits than men (American Association of University Women, 2011).

According to Weir and Willis (2000), these factors put women at higher risk than men for having financial problems. Yet, according to a study completed by Hilgert and Hogarth (2003), women have less financial knowledge than men. Given these circumstances, it is important to underscore the results of the Financial Capability Demonstration Project (2013), which showed financial coaching helped 51% of female clients increase their credit score compared to only 39% of the men in the study.

For hypothesis 2, gender was not significantly related to the last score for all six sites (B = -3.60, $p > .05$), the Site A (B = -3.20, $p > .05$), the Site B (B = -8.07, $p > .05$), Site C (B = 19.69, $p > .05$), Site D (B = 19.43, $p > .05$), Site E (B = 1.56, $p > .05$), Site F (B = -6.96, $p > .05$). This finding runs contrary to what was found in the literature, where it was indicated that financial coaching helps women more than men (Financial Capability Demonstration Project, 2013).

When comparing the average increase in credit scores, females had a slightly higher increase than males. Before financial coaching, the average credit score for females ranged from 348 to 810. After financial coaching, it ranged from 420 to 811. Before financial coaching, the average credit score for males ranged from 407 to 816. After financial coaching, it ranged from 424 to 820.

Nonetheless, while women appear to be at higher risk than men of having financial problems (Weir & Willis, 2000), they are slowly making changes to overcome financial barriers (Donohue, 2011). Their progress in overcoming these barriers, according to Derichs-Kunstmann (1994), has to do with the way they tend to learn. The author points out that women learn in a more applied way than men, emphasizing the usefulness and applicability of knowledge acquired. Such an approach to learning financial planning and management skills, reflected in

the co-active financial coaching model used at the six sites, may have a more practical value, thus increasing the likelihood of understanding the behaviors needed to increase credit scores over time.

Hypothesis 3: Financial coaching has a greater impact on improving credit scores for younger participants compared to the older ones.

Financial coaching can be the ideal solution to prepare young adults for this possible crisis (Collins, Baker, & Gorey, 2007). The Financial Capability Demonstration Project (2013) showed financial coaching for the younger clients were more successful than for older ones in increasing their credit scores. Fifty-five percent of the clients between the ages of 25 and 39 increased their credit scores, while 41% of those ages 55 and over did so.

Contrary to hypothesis 3, age was positively related to the last score for all six sites (B = .41, $p < .01$) and the Site E (B = 1.02, $p < .01$). The relationship between age and the last credit score for all other sites was not significant (Site A, B = 0.20, $p > .05$; Site B, B = 0.50, $p > .05$; Site C, B = -0.33, $p > .05$; Site D, B = -0.65, $p > .05$; Site F, B = -0.21, $p > .05$). Therefore, hypothesis 3 was not supported

Older participants' average credit scores increased more than that of younger ones' scores. This result contradicts other research that has shown financial coaching helps the younger participants increase their credit scores more than the older (Financial Capability Demonstration Project, 2013). One reason for this result may be due to the fact that older participants have more resources to address financial issues. Eighty-two percent of the generation y participants were living at the poverty level. As Donohue (2011) pointed out, having the necessary capital is necessary to help change financial behaviors. Another may be the lack of maturity and experience with dealing with financial matters among younger participants.

Hypothesis 4: Financial coaching has a greater impact on improving credit scores for minorities compared to non-minorities.

One of the responsibilities of financial coaches is to understand the culture of their clients. They must know the cultural differences and facilitate action plans to help change negative financial behaviors into positive ones (Collins, Baker, & Gorey, 2007). As previously discussed, Annie E. Casey Foundation study had more than 80% of its participants from a racial/ethnic minority group. The results of this study indicated financial coaching does have a positive effect on minority groups (Collins & O'Rourke, 2012).

For hypothesis 4, race was not significantly related to the last score for all six sites (B = 3.94, $p > .05$), Site A (B = 2.65, $p > .05$), Site B (B = -16.36, $p > .05$), Site C (B = 11.27, $p > .05$), Site D (B = -9.80, $p > .05$), Site E (B = 5.58, $p > .05$); Site F (B = -3.38, $p > .05$). Therefore, hypothesis 4 was not supported.

While there was little difference in the increase of average credit scores between races, when comparing the ranges in average credit scores between African-Americans and Caucasians, African-Americans' range in average credit scores did improve slightly more than the range of Caucasians. African-Americans had an average credit score ranging from 348 to 778, before receiving financial coaching. Caucasians had an average credit score ranging from 390 to 816. Even after receiving financial coaching, African-Americans had an average credit score ranging from 420 to 801. Caucasians had average credit score ranging from 442 to 820. This finding was not surprising, given that the literature has indicated that the credit scores of minorities tend to be lower than that of Caucasians (Board of Governors of the Federal Reserve System, 2007). What was surprising was the fact that financial coaching did not have as positive an impact on the performance of minorities as described in the literature (Collins & O'Rourke, 2012).

There are a number of explanations for the disparity in performance between African-Americans. One is that African-Americans are not educated at an early age about the importance of financial planning and management and, as a result, have less knowledge than others (Hilgert & Hogarth, 2003). As a result of a lack of knowledge, financial decisions do not result in positive outcomes. Spending takes precedence over saving. Having money and spending it signifies status (Ivanic, Overrbeck, & Nunes (2011). Not paying bills on time is not uncommon (Harris Interactive, 2011). Significant amounts of income are spent on depreciable items, such as cars, trucks, consumer electronics, alcohol, and tobacco (Target Market, 2010). Without a written budget to track their cash flow, some African-Americans live paycheck-to-paycheck or use predatory or alternative financial systems, e.g., payday loans (Todd, 2002). Moreover, African-Americans typically do not have an emergency fund (Harris Interactive, 2011). These decisions lead to undisciplined financial behavior.

Because of an inability to make wise decisions that lead to financial viability, African-Americans find themselves economically "marginalized." Wise and Glowacki-Dudka (2004) define it as "power- and resource-poor positions in which individuals are related to supporting rather than to setting organizational or social missions" (p. 1). The fact that in 2012 the poverty rate for African-Americans was 27.1% compared to 9.7% for Caucasions and higher than the 15% overall poverty rate illustrates this point (ASPE, 2013). Similarly, the finding from this study that of 340 Generation "Y" participants 81% were below the poverty level and that 207 or 76% of them were African-American provides further evidence of this point.

While demographic information, such as race, is not a part of figuring credit scores, the behaviors described above that are so integral to African-American financial management are directly tied to the five different categories (payment history, amounts owed, length of credit

history, new credit, and type of credit used) used when calculating individuals' credit scores. Inference to racial discrimination from this relationship cannot be made and has been formally denied. In a report to Congress titled *Reporting to the Congress on Credit Scoring and Its Effects on the Availability and Affordability of Credit* prepared by the Board of Governors of the Federal Reserve System (2007) addressed the concern that credit scoring has an adverse effect on individuals grouped by their race, ethnicity, sex, or other personal or demographic characteristics. It was determined that "credit-scoring systems explicitly avoid make use of impermissible data, a fact that can be readily verified" (p. 37).

Nonetheless, there are glaring examples of racial discrimination. For example, Wells Fargo, the largest home mortgage lender in the United States, agreed to pay a $175 million settlement related to accusations that its independent brokers discriminated against Black and Hispanic borrowers during the housing boom (Savage, 2012). Recently, the Consumer Financial Protection Bureau (CFPB) proposed a role to address discriminatory practices of 38 auto finance companies that originate "90% of nonbank auto loans and leases and in 2013 provided financing to nearly 6.8 million consumers." This business comprises the third largest household debt in the U.S. with outstanding auto loans valued at approximately $900 billion. When an auto buyer receives indirect financing, often the lender allows the dealer to mark up the interest rate. Markups lead to different rates to similarly situated consumers, which increases the risk of discriminatory markups, resulting in tens of millions of dollars yearly (Kieler, 2014).

Conclusions

This study added much needed evidence to the emerging field of financial coaching. It was determined that financial coaching may help participants bridge the gap between financial knowledge and financial behavior. Incorporating the coaching process, holding clients

accountable, and aiding clients in setting S.M.A.R.T goals, financial coaches may develop trust and build a better rapport with their clients (Kimsey-House, Kimsey-House, Sandahl, & Whitworth, 2011). Whether the clients' financial goals are balancing the monthly budget, paying down debt, saving for a car or home, or improving a credit score, financial coaches may be helpful partners for figuring out where to start and how to keep moving forward in addressing financial planning needs. In the end, as a result, financial coaches may help adults build family financial security.

In their role as financial coaches, they are adult educators. Accordingly, "[they] need to embrace their roles and responsibilities in facilitating educational opportunities that can help adults develop these aptitudes in various contexts" (Hansman & Mott, 2010, p. 20). As Mezirow (1997) noted, "it is the educator's responsibility is to help learners reach their objectives in such a way that they will function as more autonomous, social responsible thinkers" (p. 8). When financial coaches incorporate adult education theory into their practice, more autonomous and social responsible thinkers may result, helping build an efficient economy.

Recommendations

As discussed in Chapter Two, there are currently no universal standards set for financial coaching. Some training programs appear to be nothing more than credential mills (Grant & Cavanah, 2011). Although there are core competencies that apply to any type of coaching practice, they are not required for being a financial coach (International Coach Federation (ICF) Core Competencies, 2011). With the increasing complexity of the financial service market come a variety of choices that require financial coaches to be equipped with information, knowledge, and skills in order to train their participants.

Important policy changes are in order. To obtain a license for Certified Financial Planning (CFP) or Certified Public Accountant (CPA), individuals are required to pass an examination and obtain a license. A similar approach should be developed for financial coaching. A set of common standards should be created in relation to the components of financial coaching, including non-financial or behavioral-related aspects, upon which the examination would be based.

In addition, in order to renew these licenses there ought to be a minimum number of continuing education hours required. The fundamental purpose of this recommended continuing education would be to improve the practice of professionals, as noted by Cervero (2001). Testing and licensing of financial coaching could enhance credibility for the profession.

A number of research studies ought to be considered. The [Intermediary] measures its success by increase credit scores, increase in net worth, increase in net income and new or better employment of its participants. It was noted that when participants receive bundled services (from the financial coaches, employment coaches and the income coaches) they are more likely to achieve better success when achieving the outcomes mentioned above. Future research should be completed similar to this empirical research study to reveal if the sites using the Center Working Families (CWF) model are successful in aiding clients in achieving increased net worth and increased net income.

Financial coaching requires an important non-financial aspect. This non-financial coaching role includes responsibilities that do not always involve matters of a financial nature. Therefore, financial coaches must understand both the financial and non-financial needs of their clients to promote success in meeting goals. Future research should be completed to identify these non-financial coaching responsibilities. Once these responsibilities are identified,

additional research could be completed to reveal whether there is a correlation between these responsibilities and outcomes of the sites. Additional research could be completed to see if the financial coach's attitude influenced the outcomes of the sites.

In the literature critical reflection has been described as an excellent way for individuals to analyze their behavior if they want change to take place. For example, Shaw (2012) has used the Critical Incident Questionnaire (CIQ) as a critical reflection tool when analyzing life coaches' coaching sessions. Future research should be completed for financial coaches using CIQs to compare resulting themes to those found by Shaw (2012).

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