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ABSTRACT

People living under the poverty line are more likely to practice negative financial behaviors and have low financial capability than those living at a higher socioeconomic level, this hinders low income individuals from properly navigating the complex financial market. Recent research has found that financial coaching bundled with employment trainings, income support, and financial trainings/workshops will increase financial capability. However, additional studies on the impact of financial coaching in increasing financial capability are needed. The following research aimed to contribute to the existing literature on the impact of financial coaching in the context of an integrated service model by analyzing a financial empowerment program for low income individuals in the Dallas-Ft. Worth area.

Two groups were compared: the experimental group received employment trainings, income support, financial training workshops, and financial coaching sessions while the comparison group received the first three services but did not participate in financial coaching sessions. This allowed researchers to compare and assess the impact of financial coaching on financial capability long term. While financial coaching did not have significant impacts on all components of financial capability, we see improvement in two of the financial outcomes: income and savings. Findings indicate that those that are male, employed, and banked (i.e., have a checking account) might benefit more from all the services provided in this program. In conclusion, this study emphasized the need for the agency to reexamine their evaluation plan and expand on certain services such as

the employment trainings and the income support provided to increase client retention and data collection. Recommendations on how to improve the program's evaluation plan are included at the end. Further investigation is needed to validate these findings using an experimental study with a larger sample size.

A Comparative Evaluation on the Impact of Financial Coaching in Increasing Financial
Capability for Low-Income Individuals in an Employment Program

A Thesis

Presented to

The Faculty of the School of Social Work

Abilene Christian University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science in Social Work

By

Desiree Sanabria Guadamuz

May 2020

This thesis, directed and approved by the committee for the thesis candidate Desiree Sanabria Guadamuz, has been accepted by the Office of Graduate Programs of Abilene Christian University in partial fulfillment of the requirements for the degree

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This thesis is dedicated to my parents, siblings, and husband. To Pablo, Desiree, Paola and Pablito, thank you for encouraging me to reach my dreams and always believing that I could achieve them. Despite the physical distance, your support was always a phone call or a message away and it helped me get through the tough times. To my husband, Chance Juliano, life is amazing with you by my side. Thank you for providing spiritual and emotional support in times when my goals felt too difficult to accomplish and for cooking dinner for weeks on end so I could finish this project. You are the best cook, theologian, and husband a girl could ask for. I love you.

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CHAPTER I

INTRODUCTION

Millions of Americans currently live below the poverty line. Data from the 2018 American Community Survey show that almost 42 million people in the United States (13% of the U.S. population) live in poverty. Some 40% of those in poverty are Black or Hispanic, 24% have less than a high school degree, and 30% are unemployed (American Community Survey, 2018), and tend to have low levels of financial literacy (Kehiaian & Williams, 2012). Therefore, it is no surprise to find that those most affected by the 2008 financial crisis were individuals with low levels of financial literacy: non-white, less skilled younger workers with a high school diploma or less, that were forced into unemployment and bankruptcy (Couch, Reznik, Gayle, Iams, & Tamborini, 2018).

Financial literacy is defined as the ability to make informed financial judgments and effectively manage one's own money (Steen & MacKenzie, 2013), this definition makes it easy for some to attribute the 2008 crisis, not solely but partly, to the lack of people's ability to manage their money and make sound financial choices (Frank, 2009).

That is why many experts prescribe financial education interventions to all Americans as the solution to avoid future financial downfalls; resulting in an increase of financial literacy programs in the past two decades (Collins, 2014; Fernandes, Lynch, & Netemeyer, 2014).

However, despite the increase of financial literacy programs, many individuals only have access to unsafe financial services and practices, such as payday loans, auto

loans with incredibly high interest rates, defined contribution retirement systems managed by employees that do not understand how much should be put away, etc. With 42 million individuals living under the poverty line who are more vulnerable and inclined to make unwise financial decisions that contribute to worsening their poverty levels (increased debt, low credit, zero savings for emergencies, etc.) it seems logical to equip them with financial literacy skills that could serve as a protecting factor from them making these mistakes. Unfortunately, financial education and literacy programs have been implemented in the past with very low outcomes. A meta-analysis of 201 financial education and financial literacy programs between 1967 and 2013 found that the impact of these programs on the improvement of financial behaviors is minuscule with an effect size average of $r=0.002$ when a small effect size by social science standards is $r < 0.10$, a medium effect size is $0.10 < r < 0.40$, and large effect size is $r > 0.40$, meaning financial education and literacy programs only account for 0.02% of the variation in financial behaviors (Fernandes, Lynch, & Netemeyer, 2014).

The question then became, if financial literacy provides the necessary knowledge and skills to navigate the complex financial market and helps individuals from falling into the abyss of debt and bankruptcy, how can trainings for low-income individuals create the behavior changes targeted?

Financial capability is a term that envelops the knowledge and skills of financial literacy while understanding the barriers that individuals present when applying their financial knowledge and skills. Financial capability makes an argument that public policies and financial institutions need to increase accessibility to financial products and services in order for an individual to fully participate in economic and social life

(Sherraden & Ansong, 2016). If an individual has the ability to act in their financial interest (the necessary knowledge and skills), but is not given the opportunity to act in financial matters for several reasons (i.e., affordability, eligibility requirements, complex application process, etc.) then financial capability cannot truly be achieved by the individual because of the barriers imposed by the system they are a part of (Sherraden & Ansong, 2016).

An intervention that has proven successful in increasing financial capability and overcoming the barriers individuals face in accessing financial services is financial coaching (Collins, 2014; Sherraden & Ansong, 2016; The Center for Financial Security, 2015). Changes in financial behavior seen through financial coaching include decreased debt, increased savings, increased credit score, increased number of assets, etc. (Sherraden & Ansong, 2016; The Center for Financial Security, 2015).

This intervention has been more effective than traditional financial education and literacy programs with research indicating it might be due to the particularities of coaching (i.e., client-driven, goal setting, just in time services, financial incentives, monitoring, support, etc.) that incorporates access to financial products and services (Collins & O'Rourke, 2012). However, despite this discovery, there are limited studies that include all of the necessary variables that would allow to create a rigorous evaluation of these coaching programs such as key characteristics of the curriculum, of the instructors, of the participants, as well as the particularities of the financial coaching provided (i.e., number and duration of coaching sessions), and a comparison group to more accurately assess the impact of financial coaching (Fernandes, Lynch Jr., & Netemeyer, 2014; The Center for Financial Security, 2015). Several field studies showed

higher positive outcomes for programs aiming to increase financial capability through financial coaching (Collins & O'Rourke, 2012). A few randomized control trials studying the effectiveness of financial coaching identified the impact of financial coaching and positive client outcomes including goal formation, confidence, budgeting, and saving (CFPB, 2016; Theodos et al., 2015). However, additional studies on the impact of financial coaching are needed.

Additionally, many of these programs explain that financial coaching is not provided as a stand-alone intervention, but offered with wrap-around services to fulfill other needs of low income individuals such as income needs (i.e., food, clothing, housing, health, transportation, etc.) and employment needs (i.e., employment trainings, job attainment and retention skills). This wrap-around service strategy known as bundled services, integrated service delivery, working families model, or family self-sufficiency program (depending on the organization that implements the strategy) have proven to contribute to the impact of financial coaching and financial capability that leads to long term financial stability (The Center for Financial Security, 2015).

Problem Statement

The purpose of this study was to contribute to the limited literature by evaluating the effectiveness of a financial empowerment program that utilizes financial coaching and a bundle of other services to increase financial capability among low-income individuals. A quasi-experimental pretest-posttest comparison group design allowed for a comparison and assessment of the influence of financial coaching in the desired financial behaviors.

This study focused on the following research question: How effective are the bundled services for both the experimental group (group that received employment services, income support, financial trainings and financial coaching), and the comparison group (group that received employment services, income support, financial trainings, without the financial coaching) in increasing financial capability of households experiencing financial distress at 3, 6, and 12 months after completion of the program? In other words, did financial capability increase for both groups? A second research question looked at the effectiveness of the bundled services received by the experimental group (employment services, income support, financial trainings, and financial coaching) at 3, 6 and 12 months after completion of the 4- or 8-week employment trainings in achieving higher financial capability than individuals that did not receive any financial coaching (comparison group). This second research question asks if financial capability was greater for the experimental group. A third research question assessed levels of financial coaching. In other words, do individuals that receive more financial coaching sessions experience higher financial capability after completion of the services than individuals that received less financial coaching sessions (zero included)?

Definition of Terms

Several concepts used throughout this study are commonly considered interchangeable. Here is the definition of these terms that the researcher will use and expand on further in the text:

Financial Education/Financial Workshops/Financial Trainings

“Financial Education is the focus on the acquisition of knowledge”, specifically financial knowledge through workshops/classroom setting (Collins & O’Rourke, 2012, p.

43). Financial education includes background on economics and personal finance, containing topics such as income, money management, spending, credit, and saving and investing (NCEE, 2002 and JumpStart Coalition, 2006 as cited in Johnson & Sherraden 2007). Financial education, financial workshops, and financial trainings are used interchangeably. For the purposes of this study we will utilize the term financial trainings when referring to the acquisition of knowledge in a workshop/classroom setting.

Financial Literacy

“Financial Literacy is the measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions” (Remund, 2010, p. 284).

Financial Capability

“Financial capability combines knowledge and skills with access to financial policies and instruments and the opportunity to act according to one’s best financial interest” (Johnson & Sherraden, 2007, p.119).

“Financial capability is an individual and structural idea that combines people’s ability to act with their opportunity to act. From this perspective, financial capability does not reside within the individual, but rather in the relationship between the individual and social institutions” (Sherraden & Ansong, 2016, p.6).

Financial Coaching

Financial coaching involves a higher focus on behavior change. “Financial coaching is simply an application of coaching techniques designed to develop a client’s

capability to manage their own finances and sustain economic security in accordance with their self-defined goals. The coach helps the client set goals, define the short- and intermediate-term steps to achieve the goals, form specific intentions to implement steps toward those goals and then monitor.s the client and provides feedback on performance” (Collins, 2014).

CHAPTER II

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

A preliminary search of existing literature was completed to gather information on financial interventions for low income individuals and to explore what research has been conducted thus far. Sources for the literature review were obtained via the ACU and EBSCO OneSearch and Google Scholar. Criteria excluded any sources that were not from scholarly, peer-reviewed journals with the exception of the use of minimal grey literature from nonprofit organizations and government reports. The following search terms were used to find relevant references: financial education, financial literacy, financial capability, financial coaching, low-income individuals, and bundled services.

Search Strategies

To ensure the most relevant and applicable information, research articles published before 2000 were not included apart from articles that described the current theories being used in this research's practice model that could date back to the 1940's when these theories were first developed. All articles used were found to be reliable and credible due to the exclusion of non-peer-reviewed journal articles. There was limited use of grey literature (nonprofit and government reports) due to the lack of published peer-reviewed journals that included recent and comprehensive findings on the impact of financial coaching in the field. The gray literature utilized was taken from nationally renowned nonprofit organizations and government agencies: Annie Casey Foundation, Urban Institute, Consumer Financial Protection Bureau, United Way, and the University

of Wisconsin-Madison: Center for Financial Security reports. A review of this type of literature is not intended to be a competing form of evidence on the impact of financial coaching, but as supplementary and complementary evidence.

Financial Capability

In order to accomplish financial stability among low income individuals, researchers have used several related terms such as financial literacy and financial capability. The Organisation for Economic Co-operation and Development (OECD, 2014) defines financial literacy as:

Knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life. (p. 33)

This definition is similar to Remund's (2010):

Financial literacy is the measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions. (p. 7)

This definition entails that the individual must not only acquire the knowledge and skills but know how to effectively apply it to the different changing contexts they find themselves in. This concept of financial literacy is common in the literature (Perry &

Morris 2005, Remund, 2010; U.S. Department of Commerce, Bureau of Economic Analysis 2008).

A new concept has developed in the literature that expands the term of financial literacy. Financial capability explains that the individual's capacity to effectively apply their financial skills is dependent on the access to financial services and products provided by financial institutions (Sherraden & Ansong, 2016). In other words, an individual must have internal capabilities, meaning financial knowledge and skills, along with external conditions, meaning an array of opportunities provided by institutions to participate in financial matters) (Sherraden & Ansong, 2016). These internal and external factors are both necessary in order to solidify what has been learned and create the desired financial behavior changes (Dolan, Elliott, Metcalfe, & Vlaev, 2012; Sherraden & Ansong, 2016). This vocabulary of external capabilities moves us away from the idea that the individual is solely responsible for its financial stability. It broadens the responsibility to the societal systems of which they are a part. Thus, a shift from the use of the term *financial literacy* to an increase in the use of the term *financial capability* is observed in the literature. As an individual increases their financial capability, they gain more financial stability (Sherraden & Ansong, 2016). Thus, when discussing what financial stability encompasses, this thesis uses the term *financial capability* which includes *financial literacy*.

Major Outcome Indicators of Financial Capability

In the financial capability literature, there are several outcome indicators such as budgeting, saving, banking, debt, credit, and confidence.

Income and Budgeting

Without income, there is very little incentive to learn about money management; therefore, studies have found it more effective to include participants that are making some sort of income, regardless of the type: full-time, part-time, seasonal, or temporary employment or government benefits (i.e., SSI, SSD, etc.). This is due to the fact that financial literacy skills can be better applied when participants are able to practice what they are learning (Koenig, 2007).

For this reason, unemployment is a big barrier to changes in financial behavior. Without employment that provides sufficient income, the expectation that participants will create a monthly budget becomes increasingly more difficult to achieve. The lack of a job could instead worsen these behaviors by pushing individuals into more debt, lower credit score, and lower net worth. In Harrow's (2016) study on the levels of credit card debt in the United States, it was found that individuals with the lowest net worth have the highest credit card debt (\$10,300), which is almost \$2,000 above the national average.

Budgeting is an uncommon practice even for employed individuals. According to a 2013 Gallup Poll, only one in three Americans has a personal budget, spending plan, or financial plan, meaning 70% of the population may be aware of income and general expenses, but not the details of where every dollar goes (Gallup, Inc., 2013). Without a budget, it becomes easy to overspend. Overspending can cause all types of financial difficulties such as increased debt, cancellation of services, evictions, etc. This will be covered in more detail in the section on debt.

Savings, Asset Building, and Net Worth

Without a consistent revision of a budget it also becomes more difficult to plan for long-term financial goals and asset building, such as buying a car or house, funding education, paying taxes, setting up retirement plans, or preparing for emergencies (i.e., medical expenses, car problems, unemployment, etc.). For this reason, saving is another topic discussed in the financial capability literature (Collins, 2014). A study done by the Federal Reserve (2017) found that 40% of Americans would not be able to cover a \$400 emergency and would borrow or use a credit card even though they would not be able to pay it off in their next payment.

One-fifth of adults stated they were unable to pay all bills every month, meaning that the lack of savings could be due to the inability to pay off monthly bills (“Federal Reserve Board Report on the Economic Well-Being of U.S. Households,” 2017). However, another cause is the individual’s mindset. Many seek instant gratification through spending, a common factor in a consumerist society like the United States with the average American overspending \$18,000 a year on non-essentials (Holmes, 2019). Therefore, it is necessary to create an asset-building mindset that is able to focus on long term goals without forgetting short term responsibilities. To accomplish this goal, it is required to have a step-by-step plan to achieve saving goals along with knowledge and access to financial products (bank services, credit cards, etc.).

An additional concept linked to saving and asset building is net worth. OECD’s (2019) definition of household net worth is the “representation of total assets minus the total value of outstanding liabilities (debt) of households” (p. 33). In the long term, asset building with low debt leads to high net worth, which leads to more financial stability.

Banking

Although the majority of the population (95%) has a bank account, 5% (13 million) of Americans have a checking account but do not have a savings account (“Federal Reserve Board Report on the Economic Well-Being of U.S. Households,” 2017). Of that 5%, the majority are low-income individuals with only 1% making more than \$40,000 a year. “Federal Reserve Board Report on the Economic Well-Being of U.S. Households,” 2017).

There are many reasons to why some individuals remain unbanked, such as the method by which they get paid (i.e., checks, cash) and lack of formal employment. Additionally, mistrust of financial institutions, misuse of banking services that result in high unexpected fees, and lack of formal identification are other reasons why individuals do not use banking services (Padua & Doran, 2016).

Consequently, it is necessary for individuals to become familiarized with banking services in order to overcome the fear of the unknown and minimize any additional charges in banking services or risk becoming unbanked due to financial mistakes. Furthermore, banks need to take steps to remove the barriers for low-income individuals to access banking services, such as allowing different forms of identification (Padua & Doran, 2016). Benefits to banking include facilitating money management, payment of bills, development of a savings plan, and development of asset acquisition that is linked to financial stability (Sherraden, 2013).

Debt

Without the necessary knowledge to manage one’s income, develop savings, and utilize banking and loan services, it is easy to acquire debt. Consumer debt in the United

States is almost \$14 trillion with the most growth seen in four areas: mortgages, credit cards, student loans, and auto loans (Federal Reserve Bank of New York, 2019).

The average American owes almost \$8,000 in credit card debt, and of the 30% of adults in the United States who went college, 40% of those have student loans (Federal Reserve Bank of New York, 2019); with individuals paying an average of \$200 to \$300 month towards these loans (The Fed—Report on the Economic Well-Being of U.S. Households, 2017). Payday loans typically have two-week short repayment terms and an annual interest rate greater than 300%, making it highly unlikely for an individual to pay back these loans (Platts-Mills & Chung, 2018). Real estate (mortgage loans) and auto loan ratios per household have been in decline since the 1980s as creditors write off their bad debts and as lenders raise required down payments and principal repayment rates on newly issued loans, making it more difficult for the current generation to build assets (Campbell & Hercowitz, 2010).

The downward spiral into debt is fast and difficult to escape, but many individuals, especially those with low income and low literacy levels, are unaware of the warning signs. For this reason, this topic is covered in most if not all financial capability programs and it is an importance outcome indicator to measure.

Credit

This research discusses the amount of consumer debt held by Americans. However, the effects of debt on credit score has not been discussed in this study. Individuals with low financial literacy levels oftentimes do not understand how to build credit. Concepts such as revolving credit and the breakup of the credit score are unknown as well as the consequences of low credit. Low credit can result in difficulty finding

housing, obtaining loans, purchasing a car, etc. Thus, low credit contributes to the perpetuation of the cycle of poverty (“Credit Scores,” 2013).

Confidence

It is possible to see how each of the concepts discussed is linked to financial capability and therefore necessary to include as topics to cover in financial trainings and outcomes to measure when evaluating financial capability programs. An additional topic linked to financial capability is that of self-confidence. This is a personal trait linked to internal capabilities (Sherraden & Ansong, 2016). When creating a Financial Capability Scale (The Center for Financial Security, 2015), it was found that asking about self-confidence in goal attainment was predictive of credit and savings behaviors (Collins & O’Rourke, 2013).

A study that looked at the relationship between financial strains and a person’s self-esteem found a positive correlation among these two, meaning that individuals in low socioeconomic status that are most affected by financial strains struggle the most with stigmatization, self-identity, and self-esteem (Sousa, 2017). Seeing that the population targeted for this study are low-income individuals, it is important to assess their level of confidence in achieving financial goals when evaluating their level of financial capability.

Bundled Services Models to Increase Financial Capability:

Working Families Success Model

An intervention model that provides bundled services is used in several financial capability programs, including financial coaching programs. These agencies provide multiple services to help families holistically and provide a solution to other needs they

might have besides employment and financial knowledge and skills; such as food, clothing, transportation, housing, etc. Agencies have developed their own version of the bundled services model: United Way's One Stop Centers, Local Initiatives Support Corporation's (LISC) Financial Opportunity Centers, HUD's bundled services program, and the Annie E. Casey Foundation's Working Families Success Model.

The agency in this study was funded by the Annie E. Casey Foundation and therefore implemented the Working Families Success Model. The emergence of these models makes sense when in today's society the most basic needs discussed in the first two stages of Maslow's (1943) hierarchy of needs are achieved through financial sources: renting/buying a house, paying bills to receive utility services, purchasing food and clothing, etc. However, in order to obtain and maintain these services individuals are required to navigate the complex financial world of bills, loans, credit, savings, banking services, etc. The requirement to keep pace with these compound skills combined with low income, lack of assets and access to services creates barriers to obtaining financial stability (Sherraden & Ansong, 2016). Bundled services models attempt to tackle these different barriers.

A national United Way report (2011) provides important information about this service model. The 80 agencies included in this report are working with United Way offer financial services and complement these with supportive services to achieve financial stability through their Financial Stability One-Stop Centers. These supportive services include rent assistance, GED and higher education resources, legal aid, food and clothing resources, and application to government benefit programs. Employment trainings and services (i.e., job placement, resume building, job readiness training,

interview prep, and follow up) are also offered. United Way's Financial Stability One-Stop Centers report found that each component (i.e., financial services, employment trainings, and income support) were necessary to help clients reach financial stability.

An empirical study (Rankin, 2015) completed by the Local Initiatives Support Corporation (LISC) also supports the effectiveness of this type of service model. This study looked at 40,000 people who visited Financial Opportunity Centers. Bundled services were offered such as employment, income support, and financial management skills. Results showed an increase in employment and retention with 76% of participants expanding income.

Family Self-Sufficiency programs funded by HUD have also utilized bundled services that include financial coaching. They reported several findings including debt reduction and credit score increase (Kimbrel, 2011).

The Center for Working Families Success Model is a popular bundled services model that works with a network of organizations funded by the Annie E. Casey Foundation. These organizations have seen positive outcome results when integrating coaching with other services such as asset building and workforce development (Gewirtz & Waldron 2013).

The organization that participated in this current research study is one of the 10 agencies that partnered with Community Foundation of Texas and Annie E. Casey Foundation to implement the Working Family Success Network of North Texas (WFSNT) of 2014.

There are three core components to the Working Families Success Model:

- Employment Services: Skill assessment, job training, certification programs, job search/ placement assistance, and retention support
- Income Support: Benefit screening/ application assistance, temporary financial assistance, housing assistance, tax prep, and food/clothing support
- Financial Coaching: Financial education, counseling, access to financial services, support on improving credit and saving/asset-building programs.

These components are not meant to be stand-alone programs but should be incorporated into the existing programs and clients the organization is working with in order to increase clients’ financial stability (“Working Families Success—Communities Foundation of Texas,” n.d.).

Financial Coaching

Financial Coaching has been considered a major source of increasing financial capability. Collins and O’Rourke (2012) provides a conceptual framework that distinguishes financial coaching from other traditional forms of teaching financial capability, which is presented in Figure 1.

| | Financial Coaching | Financial Education | Financial Counseling |
|------------------------------|--------------------------------|---------------------|-----------------------|
| Length of Service | Weeks, Months+ | Hours, Days, Weeks | Minutes, Hours, Weeks |
| Didactic Sessions | Never | Mostly | Some |
| Accountability/ Follow Up | Always | Little-None | Some |
| Outcomes | Skills, Self-Directed Behavior | Knowledge, Skills | Problem Solving |
| Client Type | Stable | Mostly Stable | In Crisis |

Figure 1. Distinctions among financial coaching, financial education, and financial counseling according to Collins & O’Rourke (2012).

According to researchers, financial coaching applies the basic techniques of coaching to financial education. Coaching strategies such as specialized training, client-driven, goal setting, just in time products, access to financial products, follow up, and incentive techniques such as connection with financial products have resulted in higher financial outcomes than other traditional forms of teaching.

Other traditional forms of teaching include financial trainings and financial counseling that have different purposes from financial coaching. Financial education may occur at one point in time or over the course of a few weeks. It usually presents information in a unidirectional manner, meaning it presents financial facts without adapting to the needs of each individual since its main purpose is the acquisition of financial knowledge. Accountability and follow up are uncommon in financial education since it is not focused on a client's readiness to act but on their ability to absorb the information provided at that time (Collins & O'Rourke, 2012).

Financial counseling is also time-limited, sometimes taking place over a course of a few hours in order to solve a specific financial problem. Counseling provides specific financial advice to a client on what to do. Accountability and follow up only occur when the solution to a problem involves several steps. Financial counseling's main focus is solving the presenting problem; therefore, clients are commonly in a crisis situation and need support making financial decisions and taking action (Collins & O'Rourke, 2012).

Financial coaching differs from the first two interventions in many ways. First, financial coaching is a process that takes place over a series of weeks or months. Second, financial coaches never engage in "telling" clients what they should do, especially when it comes to didactics (financial education). This does not mean that financial knowledge

is not important, but that financial coaching is complementary and not a replacement of financial education. Third, accountability and follow up are essential aspects of financial coaching. Lastly, outcomes revolve on the facilitation of skills and behavior through reaching the financial goals that were set by the client at the start of the client and coach relationship (Collins & O'Rourke, 2012).

Focusing on improving financial capability through financial coaching when working with low-income individuals has proven to be the most ideal intervention since it does not diminish the importance of financial knowledge through financial education nor the application of that knowledge through financial skills, but enhances this with the importance of access to financial products and services provided by financial institutions. For this reason, financial coaching works well with the goals of financial capability because it introduces the client to financial products and services and helps the client access financial institutions at the right time depending on goals of the client.

Theories Explaining the Bundled Services Model to Increase Financial Capability

The literature on the effectiveness of financial coaching finds an increase in informing and achieving goals, as well as an increase in goal confidence (self-efficacy). Financial coaching interventions are also associated with increases in budgeting, savings, reducing debt, and improving credit scores for clients with goals in those areas (The Center for Financial Security, 2015). Although recent findings on the effectiveness of financial coaching are promising, further research published in peer review journals is necessary to build a robust body of knowledge around the effectiveness of financial coaching (The Center for Financial Security, 2015).

This literature review has identified three major theories that explain why the current practice model is expected to increase financial capability: Maslow's (1943) hierarchy of needs, Prochaska and DiClemente's (1983) transtheoretical model of change (TMC), and DeShazer's (1982) solution-focused theory.

Maslow's (1943) hierarchy of needs explains that there are categories of needs in order of importance from bottom to top, with basic physiological needs at the bottom (food, water, shelter, clothing, sleep, breathing), followed by safety and security (employment, property, health, social stability, family), love and belonging, self-esteem (confidence), and self-actualization (Jerome, 2013). According to the theory, each set of needs must be met first before being able to focus on the next stage of needs.

Additionally, the level of satisfaction with the previous set of needs will determine the motivation to achieve the next set (Taormina & Gao, 2013). When applying this to financial coaching programs it is important to remember that low-income individuals participating in financial literacy programs must have their basic physiological needs met before moving on to safety needs where they will seek employment, asset building, and stability.

The transtheoretical model of change (TMC) explains that change is not necessarily a static outcome but an ongoing process. According to Prochaska and DiClemente (as cited in Jordan, 2008) in TMC theory, it is necessary for individuals to go through different levels of change before achieving new behaviors.

According to Prochaska and DiClemente's (1983) TMC, there are five stages of change individuals experience before achieving a permanent change:

1. Precontemplation Stage: Individuals do not believe that their behavior is problematic.
2. Contemplation Stage: Individuals become aware of their problematic behavior but are not committed to changing them. They may also consider their behavior is simply a reaction to an external factor/threat (financial difficulties, feeling threatened by other people).
3. Preparation Stage: Individuals decide to change their behaviors and make small gradual cognitive changes; in other words, they initiate adjustments to their thought patterns.
4. Action Stage: Make the necessary life modifications in order to change their behavior, such as their environment and their reactions to certain situations.
5. Maintenance Stage: The focus of this stage is to avoid relapse.

A study on the application of the TMC on financial education found that individuals who choose to enroll in a financial literacy program are aware that behavior changes to make life modifications are necessary in order to accomplish financial stability, meaning they are in the Action Stage of the process (Shockey & Seiling, 2004). Participants at this stage are more receptive to the material being taught in the employment trainings and financial trainings but will require follow up through Financial Coaching Sessions (Maintenance Stage) to ensure they do not relapse into the previous negative financial behaviors.

Maslow's (1943) hierarchy of needs emphasizes the importance of making sure all physiological needs are met to enable the client to focus on other needs such as security and self-actualization. TMC theory (DiClemente, 1983) explains how

supplementary to those needs being fulfilled is the client's understanding and acceptance that there is a problem and that a change in behavior and life practices is necessary. For example, clients that go through the financial empowerment and employment training program must be aware of their negative financial practices and must be committed to creating a change. However, this awareness is not enough to make break bad financial habits and begin making healthy financial choices.

A third theory that complements the first two is solution-focused theory. This theory has its principles in Milton Erickson's methods of client interaction (as cited by De Shazer, 1982). Erickson's three principles consisted of meeting the client where they are, changing the client's outlook on their problem to gain control, and allowing a change that meets the needs of the client (DeShazer, 1982). Steve DeShazer took these principles and developed what is known as *solution-focused brief therapy*. Solution-focused brief therapy is strengths-based and does not pursue deep psychological evaluation of the problem but focuses on tasks and goals to solve a problem through guidance and coaching (Gillen, 2005). Additionally, the client maintains a high level of autonomy, and sessions are guided based on client interests and goals (Gillen, 2005). For this reason, the application of solution-focused theory to financial coaching comes naturally. In financial coaching, the coach is there to facilitate the improvement of personal financial management practices by helping the client realize their ability to solve their financial problems through changes in their financial behavior, changes they are capable of making. This enhances the client's sense of self-efficacy, control, and their ability to accomplish these goals (Collins & O'Rourke, 2012). As a result, the client will be motivated to pursue behavioral change. The continuous monitoring from the coach helps

the client understand what those changes entail and keeps them on target to maintaining the change until it becomes a habit.

Evaluating the Influence of Financial Coaching on Financial Capability Through a Bundled Services Program: The Financial Empowerment Program

This thesis introduces a financial coaching program that used the Working Families Success Model (“Working Families Success—Communities Foundation of Texas,” n.d.) described earlier. This financial coaching program called The Financial Empowerment program provided the following bundled services: employment services, income support service, and financial coaching services. For the purposes of this study the researcher split the financial coaching services into two (financial coaching sessions and financial trainings). This distinction helped assess the specific influence of financial coaching on financial capability. Therefore, the Financial Empowerment Program evaluated for this study consisted of four components in total: employment services, income support services, financial trainings, and financial coaching sessions.

The employment services were run by an employment team of seven full-time staff and two volunteers. These employment services were led by a separate employment program within the agency that collaborates extensively with the Financial Empowerment program to achieve program goals by recruiting, establishing employer partnerships, and providing employment trainings. The financial coaching sessions and financial trainings were run by two full-time staff and one volunteer, and the income support was run by one full-time employee, for a total of ten staff members and three volunteers that helped implement the four components of the program.

Low-income individuals were eligible to sign up for one of the two employment service trainings offered in this program: a 4-week food and hospitality service training and an eight-week construction (Welding and Electrician) training. Along with these trainings, participants received soft skills workplace training that included mock job interviews, conflict resolution techniques, job search, resumé building, and job application support. Additionally, they received income support through a resource coach that did benefits screening/application assistance, provided food/clothing support referrals, public transportation assistance, and temporary financial assistance to participants who are single mothers with dependent children. The third component was financial trainings. Three financial trainings were taught by financial coaches that covered three main topics: budgeting, credit, and banking. These trainings were incorporated into the four- or eight-week employment trainings.

In order to qualify for the program, individuals had to complete the application process, be a US citizen, legal resident or legal alien with work authorization, have income under the national poverty line, as well as commit to coming to classes for the duration of the trainings (four or eight weeks, depending upon the program to which they applied) Monday through Friday from 9 to 3 p.m.

Thus, all participants going through the employment program received Component 1 (employment trainings), Component 2 (income support), and Component 3 (mandatory financial trainings). Additionally, all participants in the employment program were offered the opportunity to sign up for Component 4: free of cost, client-driven, one-on-one financial coaching sessions after they concluded their employment trainings.

The income and employment parts of the program naturally aligned with Maslow's (1943) hierarchy of needs, which emphasizes the need to cover most basic physiological needs (e.g., water, food, and shelter), in order to allow an individual to focus on other needs such as employment, self-esteem, and self-actualization. The eligibility requirements and application process of the employment trainings consisting of a paper application, an in-person interview, and a group simulation activity, allowed to implement Prochaska and DiClemente's (1983) transtheoretical theory of change and ensure that the participant was at the Action Stage and ready to take steps towards making changes in their financial behaviors. The theories suggest that both groups would increase financial capability, with the group receiving financial coaching having a higher level of financial capability than the group that did not because of the follow up provided to these clients (maintenance stage of the transtheoretical theory of change).

The implementation of three financial trainings was based on the literature recommendations that insist on the importance of providing financial education (knowledge), asserting that financial coaching was not a replacement for financial education. The fourth and optional component of the program was the one-on-one financial coaching sessions. This part of the program focused on collaborative goal setting, strengths-based, solution-focused elements of financial coaching, as well as the "opportunity to act" aspect of financial capability through the introduction of financial products and services accessible to clients. This last financial coaching component is optional, meaning that the division of two groups of clients took place naturally: participants that received employment services, income services (as needed), financial trainings, and financial coaching one-on-one sessions was one group (experimental

group) and the second group (comparison group) only received the first three components: employment services, income services (as needed), and financial trainings.

Conclusion of Literature Review

The literature review revealed there was limited published research on the effectiveness of financial coaching to increase financial capability. However, the existing literature showed that financial coaching creates an increase in financial capability. Therefore, to fill the gap of limited literature on the subject the following research aimed to evaluate the impact of financial coaching in the context of a bundled services model with a comparison group to compare and assess the influence of financial coaching on financial capability.

Based on the research and information explored in the literature review, the researcher created a conceptual logic model (Figure 2) to outline the program process and evaluate the effectiveness of a bundled services Financial Empowerment program. This logic model included the following hypotheses as supported by the literature:

- Hypothesis 1: Low-income individuals that received bundled services will demonstrate increased financial capability three months, six months, and one year after completion of the services. In other words, both the experimental group and comparison group will increase financial capability.
- Hypothesis 2: Low-income individuals that received bundled services and ongoing financial coaching (experimental group) will experience higher financial capability three months, six months, and one year after completion of the services than individuals that did not receive financial coaching (comparison group).

- Hypothesis 3 (level of financial coaching services): Low-income individuals that received more financial coaching sessions will experience higher financial capability after completion of the services than individuals that received less financial coaching sessions (zero included).

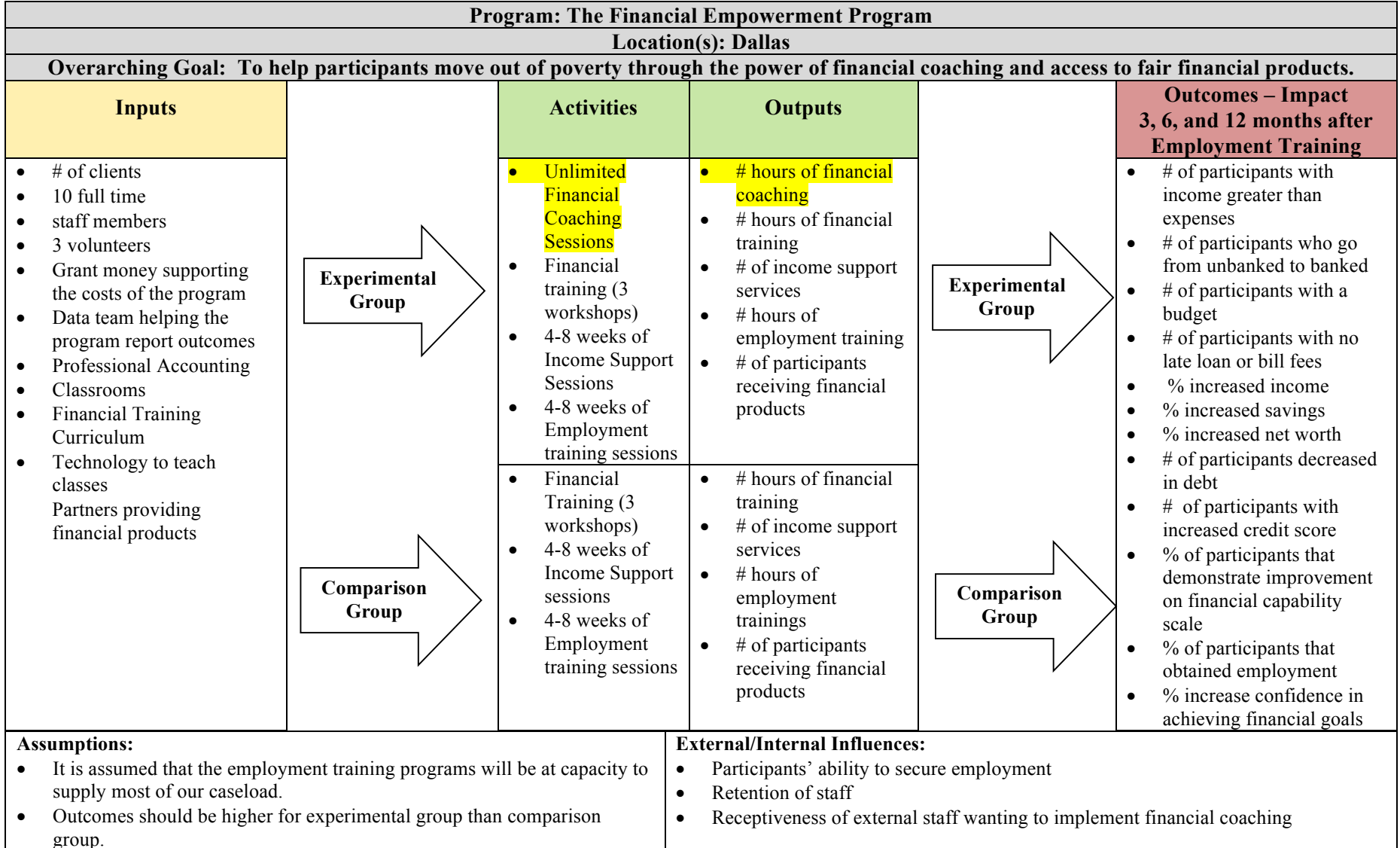


Figure 2. Financial Empowerment Program Logic Model

CHAPTER III

METHODOLOGY

The purpose of the study was to investigate the impact of financial coaching on financial capability at a non-profit organization located in Dallas, Texas, that works with low-income individuals. Based on a literature review, the present study developed a theoretical model to provide an understanding of the factors associated with financial capability. This section aimed to test this theoretical model through a quasi-experimental pretest-posttest design study with a comparison group using secondary data from the non-profit's database (Efforts to Outcomes—ETO database). This database was also used by Cities for Financial Empowerment Fund to collect and analyze financial program data (An Evaluation of Financial Empowerment Centers: Building People's Financial Stability as a Public Service, 2017).

Research Design

A quasi-experimental pretest-posttest comparison group design study should be considered when an intervention takes place, but the researcher cannot implement a randomized selection of the participants in the study (Wyk, 2010). In this study, participants chose to abstain or participate in financial coaching sessions (i.e., financial education and financial coaching). Those that received financial trainings but did not receive financial coaching sessions (i.e., financial education only) were used as the comparison group. A quasi-experimental design study allowed researchers to compare two groups that were similar at baseline but diverge when only one group received an

additional intervention. The quasi-experimental design allowed to examine the effect of one of the components of the program (financial coaching). This type of study allowed us to compare the changes in outcome over time between experimental and comparison groups to estimate impact (White & Sabarwal, 2014).

Quasi-experimental study designs aim to demonstrate causality between an intervention and an outcome but do not utilize random assignment. This became the greatest weakness of this design to its internal validity (Harris et al., 2006). A way to reduce this weakness was by establishing a comparison group and obtaining pretest measurements on both the experimental and the comparison group to assess the initial comparability of the groups (Harris et al., 2006). Additionally, it was helpful to demonstrate that the outcome varies statistically with the intervention at posttests. However, statistical significance does not imply causality (Harris et al., 2006). It is for this reason that instead of using the term *causal effects* of financial coaching on financial capability researchers used the term *impact*. Therefore, the study evaluated the impact financial coaching had on increasing financial capability.

In this study, there was a pretest and posttest of the experimental and comparison group with follow-ups at three months, six months, and one year as seen in Figure 3 below.

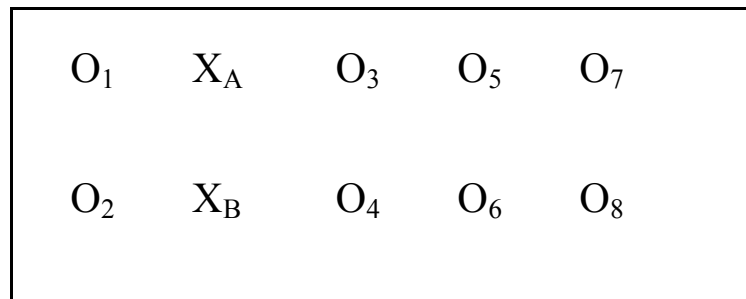


Figure 3. Depiction of quasi-experimental pretest-posttest comparison group design with time series.

Sample

The study population of this study were low-income individuals that were seeking employment or seeking better employment. The sample was taken from individuals in the Dallas-Fort Worth area that signed up for the employment training program with the agency participating in this study from January 2016 to December 2019. Because this study used a sample of program participants in an agency in a certain period in time, it is considered convenience sampling. The sampling frame for this study were low-income individuals living under the poverty line that were completing an employment training program at a nonprofit organization in Dallas, Texas, and actively pursuing employment or better employment. Participants were provided mandatory financial education and employment trainings, offered income support as needed, as well as voluntary financial coaching sessions.

This study used a convenience sample of 221 individuals who participated in the employment training, income support, and financial training. Out of those 221, 163 received more than two financial coaching sessions, and 58 participants received one or less from January 1, 2016, to November 1 of 2019, with the comparison group having 36% of participants and the experimental group with 74% of participants. The financial empowerment program began in 2016. It is for this reason that the sample included all participants enrolled from January of 2016 to November 1, 2019, when the sampling took place.

The sampling frame for this study were clients enrolled in the employment financial empowerment program as found on ETO, the nonprofit's database system. In

addition to the enrollment list, demographic information was identified, as well as the inclusion criteria for the experimental and comparison group.

The comparison group criteria were as followed: (1) enrollment and completion of the employment training program from January 1, 2016, to October 31, 2019, (2) received some form of income support (3) attendance to financial trainings. For the experimental group, the same first three criteria of the comparison group were used as well as a fourth criteria: (4) attendance to financial coaching sessions (the intervention).

Data Collection

The principal investigator applied to the Institutional Review Board of Abilene Christian University for the approval of study as non-human research, as the data had already been collected and the data set would be de-identified. IRB approval was granted, data was analyzed, and identifying information was kept confidential. The data collection instruments utilized in the study were created and implemented by the nonprofit organization participating in this study and were not created nor implemented by the researcher. The researcher gained access to participant responses that the organization had collected and entered into their ETO database system.

Data was extracted from the organization's database (ETO) by a member of the agency's outcome team, and they transferred the de-identified data to an Excel spreadsheet that was shared with the researcher. The Excel spreadsheet did not contain any of the following information: names, any geography/location information smaller than zip codes, dates (except year), telephone, tax, email, SSN, medical record, health plan, account, license, VIN or license plate, device/serial #, URLs, IP address, finger or voiceprints, full-face photos or other identifiable photos, or any other unique element that

could be used to re-identify the participants. This data was analyzed through a statistical analysis system. The data set in the statistical analysis system will be destroyed within three years or when the researcher stops utilizing their work computer, whichever occurs first.

The indicators entered in the ETO system were collected at baseline when clients signed up for the financial empowerment program, and they were followed up on a quarterly basis. Participants were called via phone or were emailed and asked to answer the follow-up questions. This allowed for assessments to be done four times a year.

Instruments

Outcome or DV (Financial Capability)

Researchers intended to measure financial capability through two processes: (1) the scores obtained in the Financial Capability Scale and (2) complementary variables collected through a financial update questionnaire. The financial update questionnaire collected common indicators found in the financial capability literature, such as income, debt, credit score, and savings that support the findings of the Financial Capability Scale.

The Financial Capability Scale (FCS) was developed in 2011 by the Center for Financial Security at the University of Wisconsin as a project funded by the Annie E Casey Foundation (Collins & O'Rourke, 2013). This is a six-item scale with a total of eight points maximum. Each item is rated using a yes/no response (yes=0, no=1) with the exception of the second and third questions, which have a 0, 1, 2 response, meaning the scale has eight points total.

The FCS has questions targeted to assess: planning behavior (“Over the last three months, have you followed a personal budget, spending plan, or financial plan?”),

confidence (“ How confident are you in your ability to achieve a financial goal you set for yourself today?”), savings (“Have you set aside funds that would cover your expenses for three months if you or someone in your family lost a job, got sick or had another emergency?”), economic self-sufficiency (“Over the past three months, would you say your household’s spending on living expenses was less than its total income?”; “In the last three months, have you paid a late fee on a loan or bill?”).

The FCS has a relatively weak internal reliability measure, with a Cronbach’s alpha of about 0.60. However, the FCS has the advantage of being inexpensive and easy to use, as well as helpful in diagnosing a client’s readiness for change at the start of a program and measuring their financial capability over time (Collins & Rourke, 2013).

To compensate for the low reliability score, Collins (2015) recommends complementing the data collected from the FCS through other additional outcome variables that programs use or report to funders. This way the combined results of the FCS and complementary outcomes variables would provide insight on the impact of the program. In the literature of the past two decades certain financial outcome variables have been consistently used to measure financial capability, such as increase in income, decrease in debt, expenses less than income, increase in savings, increase in credit score, and insurance coverage (Dodd-Ramirez & Griffin, 2017; Huston, 2010; Miller, Reichelstein, Salas, & Zia, 2014; Parker et al., 2016).

Unfortunately, when reviewing the data, it was not possible to analyze financial capability using the FCS due to the low number of posttest responses to the scale. However, the financial update questionnaire had a higher response rate on some of the complementary outcome variables used to measure financial capability. Through the

financial update questionnaire, the following outcome variables were measured: (1) total household income and individual wages (2) total household expenses, (3) savings (4) banked (i.e., having a checking account), (5) debt, and (6) credit score.

IV (Level of Financial Coaching Sessions)

The number and duration of financial coaching sessions was used in order to measure the percentage of financial coaching services received by the participants. The number of times is unlimited for each participant and duration is from ten minutes to two hours.

Control Variables

Participants were asked basic demographic questions, the control variables used were gender, employment status, and banked vs. unbanked (i.e., checking account) to see if these variables had an impact on financial outcomes.

Setting and Intervention

Financial coaches attended a financial training provided by Central New Mexico Community College through a partnership with the Community Foundation of Dallas and WINGS (Women's Enterprise Center). All financial coaches in the organization completed the five day/40-hour training on coaching techniques and financial topics ("Financial Coaching Program," n.d.). The coaching techniques included the following topics: The COACH model, coaching skills and strategies, values clarification, changing limiting beliefs, coaching through barriers, and goal setting. The financial topics covered in the training were: a financial health model, income generation, spending plans, debt alleviation, credit and ratios, investing, retirement, and estate planning.

Once coaches are certified they provide three financial trainings to all students enrolled in the employment program. Financial coaching sessions were offered to all students in the employment program. Students had to specifically request and schedule one-on-one coaching sessions with the financial coach. These sessions were free of cost. They could take place via phone or in person depending on the participant's preference, sessions lasted between 10 minutes to two hours, and participants could receive as many sessions as they would like even after the completion of the employment training, income support, and financial trainings.

Data Analyses

Descriptive analyses were conducted to examine the demographic information for both the comparison group and the experimental group and assess the differences in interventions (financial coaching sessions) for each group. The average number of financial coaching sessions and average duration of coaching sessions was included and compared between groups. Those in the experimental group are expected to have higher averages in the number of financial coaching sessions received as well as average duration of each coaching session and the comparison group should have 0 to 1 financial coaching session where baseline intake information was collected.

A paired *t*-test was utilized to examine the change in each outcome between the pretest and the posttest scores for each group. An ANCOVA test was then conducted to compare the post score in the experimental group after controlling for the pretest score and controlling for certain variables (gender, marital status, employment, and whether they had a checking account or not). ANCOVA is considered a commonly used statistical tool for this purpose because it includes covariates (i.e., pretest) so that the group

difference is significant even after the effects of the covariates are controlled (Rubin & Babbie, 2013). A regression analysis was performed to examine if the number of financial coaching sessions received had an effect on posttest scores.

CHAPTER IV

RESULTS

To understand the impact of financial coaching on participant financial capability, data was collected before and after the financial coaching program using a pretest and multiple posttests that took place every three months. Collected data was analyzed using SPSS statistical software.

Participants

The study attempts to investigate the effectiveness of financial coaching for low income individuals completing an employment, income support and financial training in a non-profit organization in Dallas, Texas. Table 1 shows the detailed information of the participants' demographic background. The study had 58 participants in the comparison group and 163 in the experimental group for a total of 221 participants. The descriptive statistics showed that 60.2% were male participants that accounted for the majority of total participants ($N=133$). Of those 133 male participants 69% were from the comparison group ($N=40$) and 57% from the experimental group ($N=93$). Participants ranged from ages 19 to 69 with the average age being 39 years old in the comparison group ($SD=13.58$) and 41 in the experimental group ($SD=12.39$). The largest race group consisted of African Americans, with a total number of 161, accounting for 73% of the total sample, 69% of the comparison group ($N=40$) and 75% of the experimental group ($N=121$). Single head of household participants (i.e., single, divorced, separated,

widowed) made up 50% of total participants ($N=111$), 81% of the comparison group ($N=21$), and 90% of the experimental group ($N=91$).

Table 1

Characteristics of the Sample: Comparison Group (N =58) and Experimental Group (N=163)

| Variable | Category or Range | CTL (N=58) | | EXP (N=163) | |
|----------------|------------------------------|------------|-------|-------------|-------|
| | | N | % | N | % |
| Age | 19~69 | 38.75 | 13.58 | 40.51 | 12.39 |
| Gender | Male | 40 | 69.0 | 93 | 57.1 |
| | Female | 18 | 31.0 | 70 | 42.9 |
| Race | African American | 40 | 69.0 | 121 | 74.7 |
| | Hawaiian or Pacific Islander | 1 | 1.7 | | |
| | Other | 2 | 3.4 | 7 | 4.3 |
| | White | 6 | 10.3 | 15 | 9.3 |
| | Hispanic | 9 | 15.5 | 19 | 11.7 |
| Marital Status | Single | 18 | 69.2 | 74 | 74.7 |
| | Married | 5 | 19.2 | 9 | 9.1 |
| | Divorced | 1 | 3.8 | 12 | 12.1 |
| | Separated | 1 | 3.8 | 2 | 2.0 |
| | Widowed | 1 | 3.8 | 2 | 2.0 |

Note. EXP (Experimental Group (Financial Trainings + **Coaching**); CTL (Comparison group): Financial Trainings only.

Table 2 shows a description of the financial coaching intervention. The number of financial coaching sessions ranged from 0 to 22 sessions, with a mean of 0.5 in the comparison group ($SD=0.50$) meaning half of participants only received the first intake session, while the other half did not receive any coaching sessions. In the experimental group participants received an average of 6 sessions ($SD=4.06$). The average duration of the financial coaching sessions in the experimental group was 29 minutes. For the 50% in the comparison group that received 1 financial coaching session (intake session) the average duration was 17 minutes.

Table 2

Characteristics of the Intervention: Comparison Group (N=58) and Experimental Group (N=163)

| Variable | Category or Range | CTL (N=58) | | EXP (N=163) | |
|--|-------------------|------------|------|-------------|------|
| | | M | SD | M | SD |
| FC Session (Number of Sessions) | 0~22 | 0.50 | 0.50 | 5.75 | 4.06 |
| Min Duration of FC Session (Minutes) | 0~120 | 16.8 | 21.6 | 12.6 | 8.4 |
| Max Duration of FC Session (Minutes) | 0~120 | 16.8 | 21.6 | 49.2 | 18.6 |
| Avg Duration of FC Session (Minutes) | 0~120 | 16.8 | 21.6 | 28.8 | 7.8 |

Note. EXP (Experimental Group (Financial Trainings + **Coaching**); CTL (Comparison group): Financial Trainings only.

Descriptive Statistics of Major Variables

Table 3 presents descriptive statistics of major variables, including the interventions’ pretests and posttests for the comparison group and experimental group. The comparison group received three components of the financial empowerment bundled services program: financial trainings, income support and employment trainings. These three components lasted four to eight weeks depending on the type of employment training they signed up for. In addition to these three components the experimental group received an optional fourth component: financial coaching sessions. These sessions took place after completing their employment trainings, income support, and financial training. Pretests and posttests were collected for each group. The pretest is the targeted area baseline at the start of their employment training. Post-tests are follow-ups that took

place every three months after they completed the employment training program; however, due to the inconsistency of quarterly follow up responses, posttest score is the mean value of all available posttests. The intervention is the number and duration of financial coaching sessions participants received. It is important to note the desirable outcomes for the intervention: wages, total household income, savings, and credit scores should increase after the intervention, and debt and income less than expenses ratio should decrease after the intervention.

Hypothesis Testing

Table 3 shows the pretests (baseline) and posttest results for each major outcome: participant's wages, overall household income, overall household expenses, savings, and debt. The valid responses for each outcome varied, ranging from the minimum of 6 to 129 responses. Wages posttest for the experimental group was the outcome with the highest number of responses ($n=129$); however, we see a minimum difference in wages mean from pre-test comparison group ($M=13$) to posttest in comparison group ($M=12$) as well as in pretest experimental group ($M=10$) to posttest experimental group ($M=12$).

Household Income at pretest ($M=826$) for the comparison group is higher than the household income at pretest for the comparison group ($M=572$), the results at posttest, however, show a similar income mean for both the comparison group ($M=1480$) and experimental group ($M=1487$) with a higher increase average by 7. Household Expenses posttest responses for the comparison group was the outcome with the lowest number of valid responses ($N=6$), making it difficult to assess the impact of the intervention on this outcome.

Participants in the comparison group had more savings at posttest ($M=1632$) than the experimental group ($M=742$). Participants in the comparison group had more debt ($M=18,573$) at posttest than the experimental group ($M=12,176$). Although the descriptive statistics indicate the improvement in most cases after the interventions, hypothesis tests were conducted to see if the change after intervention was significant enough to reject the null hypothesis.

Table 3

Descriptive Statistics of Major Outcomes

| | Comparison group | | | | | Experimental Group | | | | |
|-----------------------------|------------------|-----------|-----------|----------|-----------|--------------------|-----------|-----------|----------|-----------|
| | <i>N</i> | <i>Mn</i> | <i>Mx</i> | <i>M</i> | <i>SD</i> | <i>N</i> | <i>Mn</i> | <i>Mx</i> | <i>M</i> | <i>SD</i> |
| Wages | 17 | 0 | 24 | 13 | 6 | 47 | 0 | 23 | 10 | 6 |
| Wages Posttest | 40 | 7 | 24 | 12 | 3 | 129 | 4 | 29 | 12 | 3 |
| Household Income | 52 | 0 | 4600 | 826 | 1378 | 99 | 0 | 5400 | 572 | 987 |
| Household Income Posttest | 26 | 0 | 3360 | 1480 | 820 | 125 | 0 | 7420 | 1487 | 1103 |
| Household Expenses | 52 | 0 | 4186 | 784 | 1188 | 101 | 0 | 3549 | 588 | 769 |
| Household Expenses Posttest | 6 | 0 | 1250 | 277 | 504 | 60 | 0 | 3453 | 770 | 722 |
| Savings | 37 | 0 | 2000 | 150 | 447 | 96 | 0 | 3000 | 197 | 583 |
| Savings Posttest | 16 | 0 | 2000 | 393.32 | 608.13 | 87 | 0 | 11560 | 742.33 | 1698.38 |
| Debt | 33 | 0 | 146372 | 12781 | 28667 | 97 | 0 | 200000 | 11064 | 33750 |
| Debt Posttest | 14 | 0 | 147659 | 18573 | 38632 | 87 | 0 | 119358 | 12176 | 18612 |
| Credit Score | 16 | 440 | 895 | 574 | 104 | 36 | 501 | 714 | 573 | 56 |
| Credit Score Post Test | 13 | 354 | 718 | 558 | 85 | 46 | 1 | 895 | 574 | 116 |

Paired-Samples *t*-tests for Outcomes

A paired-samples *t*-test was conducted to compare pretest and posttest scores of income and savings outcomes for each group at a two-tailed alpha level of 0.05. Table 4

displays the results. For household income in the comparison group, the difference in the scores between pretest ($M=305$, $SD=600$) and posttest ($M=1484$, $SD=886$) was found to be statistically significant, $t(21) = -7.77$, $p < .001$. For experimental group, the difference in the scores between pretest ($M=628$, $SD=1038$) and posttest ($M=1371$, $SD=1199$) was found to be statistically significant, $t(71) = -4.39$, $p < .001$. For the remaining outcome variables, there was no statistical difference between pretests and posttests. Because the data was not normally distributed and the sample size for each analysis was small for some, a non-parametric alternative for the paired-samples t-test was performed to compare the results. All the analyses found the same results except for one analysis, the savings outcomes of the experimental group. In this analysis, the change from pretests and posttests were statistically significant ($z=-2.787$, $p=0.005$).

Table 4

Paired-samples t-tests for the Change between Pretests and Posttests

| | Control (pre) | | | Control (post) | | Change | | <i>N</i> | Exp (pre) | | | Exp (post) | | Change | |
|--------------|---------------|----------|-----------|----------------|-----------|----------|--------------|----------|-----------|-----------|-------|------------|-----------|--------------------------|----------|
| | <i>N</i> | <i>M</i> | <i>SD</i> | <i>M</i> | <i>SD</i> | <i>t</i> | <i>p</i> | | <i>M</i> | <i>SD</i> | | <i>M</i> | <i>SD</i> | <i>t</i> | <i>p</i> |
| Wage | 15 | 12 | 5 | 13 | 4 | -1.237 | 0.236 | 37 | 10 | 6 | 12 | 4 | -1.738 | 0.091 | |
| IncomeHH | 22 | 305 | 600 | 1484 | 886 | -7.773 | 0.000 | 75 | 628 | 1038 | 1371 | 1199 | -4.387 | 0.000 | |
| ExpensesHH | 5 | 250 | 559 | 333 | 543 | -1.000 | 0.374 | 35 | 864 | 994 | 735 | 666 | 0.731 | 0.470 | |
| Savings | 4 | 500 | 1000 | 789 | 962 | -1.036 | 0.377 | 48 | 270 | 728 | 803 | 2021 | -1.840 | 0.072^a | |
| Debt | 3 | 1009 | 1747 | 2009 | 1740 | -1.000 | 0.423 | 48 | 13628 | 37499 | 12811 | 19857 | 47 | 0.883 | |
| CreditScores | 1 | na | na | na | na | na | na | 8 | 563 | 55 | 553 | 32 | 0.802 | 0.449 | |

Note: ^a Non-parametric alternative test showed significance

ANCOVA for Outcomes

Because participants received the intervention at different time points and posttests were collected at different time points, there was inconsistency in data structure. For each outcome, this study compared a baseline value (pretest) and the mean value of available posttests. An ANCOVA analysis for each outcome was conducted to examine the effect of the intervention on the posttest after controlling for the effect of the pretest score. Although there were a few violations of some assumptions, any remedy to address this issue was not used because this study attempts to explore the effect of the intervention by examining overall patterns.

Impact of Intervention on Wages

The impact of the intervention on this outcome was examined using a regression (the impact of the number of FC sessions) and an ANCOVA (the impact of being in the experimental group). A regression analysis shows that the number of FC sessions did not increase wages significantly. Two factors were statistically significant on the posttest scores: being male and having a checking account at the baseline. These results are consistent with those from an ANCOVA analysis. An ANCOVA revealed a statistically not significant effect of the Intervention on Wage: $F = .081, p = .777, \eta_p^2 = .002$, after controlling for the statistically insignificant effect of the pretests: $F = .810, p = .373, \eta_p^2 = .017$. The estimated marginal mean of outcomes for the Comparison group ($M = 12.57$) was higher than that of the Experimental Group ($M = 12.23$) and this difference observed in the sample was statistically insignificant. However, two covariates were significant. Participants who had a checking account had higher wages compared to the counterpart ($t = 2.689, p = .01$). Males had higher wages compared to females ($t = 2.664, p = .011$).

Table 5

Effect of Financial Coaching on Posttest-Wages: Regression and ANCOVA

| Factor | Regression | | EXP group | | ANCOVA | | EM Mean | |
|------------------|--------------|----------|-----------|----------|---------------------|--|-----------------|-----------------|
| | # of session | | | | Partial Eta Squared | | CTL | EXP |
| | <i>t</i> | <i>p</i> | <i>F</i> | <i>p</i> | | | (<i>N</i> =15) | (<i>N</i> =37) |
| Intervention | 0.789 | 0.434 | 0.081 | 0.777 | 0.002 | | 12.574 | 12.226 |
| Pretests | 0.711 | 0.481 | 0.810 | 0.373 | 0.017 | | | |
| Male | 2.732 | 0.009 | 7.097 | 0.011 | 0.134 | | | |
| | | | (t=2.664) | | | | | |
| Employed | 0.489 | -0.627 | 0.419 | 0.521 | 0.009 | | | |
| Checking Account | 2.434 | 0.019 | 7.230 | 0.010 | 0.136 | | | |
| | | | (t=2.689) | | | | | |

Note. EM Mean (Estimated Marginal Mean) is an estimated group mean using the linear model that takes into account the effect of the covariates including pretests.

Impact of the Intervention on Household Income

A regression analysis shows no statistically significant effect of any of the factors. This is consistent with results from an ANCOVA. An ANCOVA revealed a statistically (not significant) effect of the Intervention on household income: $F = .079$, $p = .375$, $\eta_p^2 = .009$, after controlling for the statistically insignificant effect of the pretests: $F = .029$, $p = .058$, $\eta_p^2 = .003$. The estimated marginal mean of outcomes for the Comparison group was higher than that of the reference group (Experimental Group) and this difference observed in the sample was statistically insignificant.

Table 6

Effect of Financial Coaching on Posttest-Household Income: Regression and ANCOVA

| Factor | Regression | | ANCOVA | | | | |
|--------------------|--------------------------|----------|-----------------------|----------|--------------------------------------|---|------|
| | # of session <i>t</i> | <i>p</i> | EXP group <i>F</i> | <i>p</i> | <i>Partial</i> <i>Eta Squared</i> | <i>EM Mean</i> <i>CTL</i> <i>EXP</i> (<i>N=22</i>) (<i>N=75</i>) | |
| Experimental Group | -0.617 | 0.539 | 0.795 | 0.375 | 0.009 | 1583 | 1341 |
| Pretests | 1.573 | 0.119 | 0.299 | 0.586 | 0.003 | | |
| Male | 0.648 | 0.519 | 3.609 | 0.061 | 0.038 | | |
| Employed | 1.901 | 0.061 | 2.671 | 0.106 | 0.029 | | |
| Checking Account | 1.705 | 0.092 | 0.299 | 0.586 | 0.003 | | |

Note. EM Mean (Estimated Marginal Mean) is an estimated group mean using the linear model that takes into account the effect of the covariates including pretests.

Impact of the Intervention in Household Expenses

A regression analysis shows no statistically significant effect of any of the factors. This is consistent with the results from an ANCOVA. An ANCOVA revealed a statistically (not significant) effect of the Intervention on household income: $F = .261$, $p = .631$, $\eta_p^2 = .008$, after controlling for the statistically insignificant effect of the pretests: $F = 3.630$, $p = .065$, $\eta_p^2 = .096$. The estimated marginal mean of outcomes for the Comparison group was lower than that of the reference group (experimental group) and this difference observed in the sample was statistically insignificant.

Table 7

Effect of Financial Coaching on Posttest-Household Expenses: Regression and ANCOVA

| Factor | Regression | | EXP group | | ANCOVA | | |
|------------------------------|--------------------------|----------|-----------|----------|------------------------------------|----------------------------------|-----------------------|
| | # of session <i>t</i> | <i>p</i> | <i>F</i> | <i>p</i> | <i>Partial Eta Squared</i> | <i>EM Mean CTL (N=5)</i> | <i>EXP (N=35)</i> |
| Experimental Group | 1.120 | 0.271 | 0.261 | 0.613 | 0.008 | 542 | 705 |
| Pretests | 1.722 | 0.094 | 3.630 | 0.065 | 0.096 | | |
| Male | -1.063 | 0.295 | 0.747 | 0.393 | 0.022 | | |
| Employed | 0.824 | 0.416 | 0.902 | 0.349 | 0.026 | | |
| Having a checking account | 0.798 | 0.430 | 1.770 | 0.192 | 0.049 | | |

Note. EM Mean (Estimated Marginal Mean) is an estimated group mean using the linear model that takes into account the effect of the covariates including pretests.

Impact of the Intervention on Savings

A regression analysis shows no statistically significant effect of any of the factors. This is consistent with results from an ANCOVA. An ANCOVA revealed a statistically (not significant) effect of the Intervention on savings: $F = .019$, $p = .890$, $\eta_p^2 = .000$, after controlling for the statistically insignificant effect of the pretests: $F = 2.493$, $p = .121$, $\eta_p^2 = .051$. The estimated marginal mean of outcomes for the comparison group was lower than that of the reference group (experimental group) and this difference observed in the sample was statistically insignificant.

Table 8

Effect of Financial Coaching on Posttest-Savings: Regression and ANCOVA

| Factor | Regression | | ANCOVA | | | | |
|---------------------------|--------------------------|----------|-----------------------|----------|--------------------------------|--|-----|
| | # of session <i>t</i> | <i>p</i> | EXP group <i>F</i> | <i>p</i> | <i>Partial Eta Squared</i> | <i>EM Mean</i> <i>CTL</i> (N=4) <i>EXP</i> (N=48) | |
| Experimental Group | 0.865 | 0.392 | 0.019 | 0.890 | 0.000 | 671 | 812 |
| Pretests | 1.280 | 0.207 | 2.493 | 0.121 | 0.051 | | |
| Male | 1.578 | 0.121 | 3.266 | 0.077 | 0.066 | | |
| Employed | 0.442 | 0.660 | 0.394 | 0.533 | 0.008 | | |
| Having a Checking Account | -0.640 | 0.526 | 0.166 | 0.685 | 0.004 | | |

Note. EM Mean (Estimated Marginal Mean) is an estimated group mean using the linear model that takes into account the effect of the covariates including pretests.

Impact of the Intervention on Debt

A regression analysis shows no statistically significant effect of any of the factors. This is inconsistent with those from an ANCOVA. An ANCOVA revealed a statistically (not significant) effect of the intervention on debt income: $F = .213$, $p = .646$, $\eta_p^2 = .005$, after controlling for the statistically insignificant effect of the pretests: $F = 2.196$, $p = .145$, $\eta_p^2 = .047$. The estimated marginal mean of outcomes for the comparison group was lower than that of the reference group (experimental group) and this difference observed in the sample was statistically insignificant. However, there were two statistically significant covariates. Participants who had a checking account had more debt compared to the counterpart ($t=2.252$, $p=.029$). Participants who were employed had less debt compared to those that were unemployed ($t=-2.205$, $p=.033$).

Table 9

Effect of Financial Coaching on Posttest-Debt: Regression and ANCOVA

| Factor | Regression | | ANCOVA | | | |
|---------------------------|--------------------------|----------|--------------------------------|--------------|--|---|
| | # of session <i>t</i> | <i>p</i> | EXP group <i>t</i> <i>p</i> | | <i>Partial</i> <i>Eta</i> <i>Squared</i> | <i>EM Mean</i> <i>CTL</i> <i>EXP</i> (<i>N=3</i>) (<i>N=48</i>) |
| Experimental Group | 0.865 | 0.392 | 0.213 | 0.646 | 0.005 | 7194 12487 |
| Pretests | 1.280 | 0.207 | 2.196 | 0.145 | 0.047 | |
| Male | 1.578 | 0.121 | 0.015 | 0.902 | 0.000 | |
| Employed | 0.442 | 0.660 | 4.860 | 0.033 | 0.097 | |
| | | | (t=-2.205) | | | |
| Having a Checking Account | -0.640 | 0.526 | 5.070 | 0.029 | 0.101 | |
| | | | (t=2.252) | | | |

Note. EM Mean (Estimated Marginal Mean) is an estimated group mean using the linear model that takes into account the effect of the covariates including pretests.

Impact of the Intervention on Credit Score

A Regression and ANCOVA analysis for the credit scores is not presented because the valid cases for the comparison group was 1 (experimental group $N=8$). The implementation of financial empowerment bundled services program that include financial coaching to increase financial capability is a popular intervention in the nonprofit sector and it is funded by many grants. As the focus continues on the implementation of these bundled services, it is necessary to evaluate the effectiveness of these services in improving the long-term financial capability of clients that participate in the program. This study attempted to assess the effectiveness of the financial

empowerment bundled services program on increasing participants' financial capability and the specific effect of financial coaching sessions in this improvement.

CHAPTER V

DISCUSSION

Summary of Hypothesis Testing

Through the statistical analysis of the data we were able to test the three hypotheses.

- Hypothesis 1: Low-income individuals that received bundled services (both the experimental group and the comparison group) will demonstrate increased financial capability three months, six months, and one year after completion of the services. This was partially supported.
- Hypothesis 2: Low-income individuals that received bundled services and ongoing financial coaching (experimental group) will experience higher financial capability three months, six months, and one year after completion of the services than individuals that did not receive financial coaching (comparison group). This was not supported.
- Hypothesis 3 (level of financial coaching services): Low-income individuals that received more financial coaching sessions will experience higher financial capability after completion of the services than individuals that received less financial coaching sessions (zero included). This was not supported.

Results indicated that hypothesis one is partially supported. Both the comparison group and experimental group experienced improvement in one or two financial

outcomes related to financial capability: income and savings. The comparison group had a statistically significant increase in income and the experimental group had a statistically significant improvement in income and savings. This indicated that participants receiving employment trainings, financial trainings, and income support will increase their income; however, their savings significantly compared to those that do not. This supports the literature that indicates that savings and access to a bank account include many benefits, such as facilitating money management, payment of bills, development of a savings plan, and development of asset acquisition that is linked to financial stability (Sherraden, 2013).

The other two hypotheses were not supported after the data was analyzed and the results were identified. However, when controlling for certain variables: gender, employed or not employed, and banked vs. not banked (checking account), researchers identified which of these variables had a significant impact on some of the financial outcomes. Participants in the experimental group that were male or were banked (had a checking account) had significantly higher wages than females or participants with no checking account. Additionally, participants that remained employed decreased their debt, indicating that those that are male, employed, and banked, and in other words experience more work stability, might benefit more from the services provided in this program. This is supported in the literature that indicates that financial coaching is ideal for individuals that are more stable and not in crisis (Collins & O'Rourke, 2012). Additionally, the literature suggests that unemployment and lack of income are barriers to increasing financial capability since financial literacy skills can be better applied when

participants are able to practice the money management skills they are learning (Koenig, 2007).

Discussion of Major Findings

Combined with the results of the paired-samples *t* tests and the non-parametric alternative test all the services offered to both the comparison group and experimental group appeared to be beneficial in increasing income. The intervention (financial coaching) appeared to be effective in specifically increasing savings since there was a statistically significant increase in the experimental group compared to the comparison group.

The results of the ANCOVA show that when controlling for gender and checking account we see a statistical significance in wages with males making more than females and those with a checking account having higher wages post intervention. When controlling for checking account and employment we see that participants with a checking accounts had a higher debt and those employed had less debt than those that were unemployed.

The agency participating in this study has incoming students starting every 4 to 8 weeks year-round with an average of 150 to 250 new students each year. After each participant concludes their four- or eight-week employment trainings, receives income support, and financial trainings they have the option of receiving financial coaching sessions. Those that receive financial coaching sessions are followed up more consistently however, regardless of their participation in financial coaching sessions, participants should be followed up with every three months after they completed their trainings to assess barriers they might face in achieving long term financial stability.

Unfortunately, a high percentage of students do not respond to the agency's efforts to follow up; therefore, there is a high level of inconsistency in follow-ups and a small number of responses, reducing the statistical power of the study due to small samples from both the comparison group and experimental group. The highest number of responses corresponded to the wages updates, this is understandable considering wages is the first question asked to participants when contacted for updates. Furthermore, participants in the experimental group are receiving financial coaching sessions; and therefore, are more engaged with the staff at the agency, making it easier to collect their updates every quarter.

The overall findings from this study indicated that Maslow's (1943) theory could be reasoning for participant's improvement in wages/income. The bundled services programs provide wraparound services while the participants are in the program allowing them to have their basic needs met which then permits them to focus on employment opportunities. Once participants are employed and able to pay for their basic needs without the support of the agency and obtain some level of financial stability, they are able to pursue other goals such as savings that will lead to asset building and long-term financial stability.

Transtheoretical Model of Change pushes for participants' awareness of problematic behaviors and maintenance of those new behaviors through financial coaching sessions to avoid relapse into negative financial behaviors. The effectiveness of the financial coaching sessions (maintenance stage) is seen through the increase of savings in the experimental group that indicates an improvement in a previously negative

behavior (no savings). However, the sample size of the comparison group was small, meaning further students with larger sample sizes are necessary to confirm the effect.

The effectiveness of solution-focused brief therapy through financial coaching was assessed through hypothesis 3. A regression analysis allowed researchers to see if the more financial coaching sessions a participant received the higher their financial outcomes. Results showed there was no statistical significance of the effect of financial coaching on the six financial outcomes. However, several outcomes were not measured due to the limited number of responses, such as budgeting behavior, confidence level, and self-sufficiency level. Many of these outcomes can be measured if there is consistent completion of the FCS. It is possible for financial coaching to impact some of the outcomes that were not measured in this study. Further research is necessary to measure the impact financial coaching has on other outcomes. Despite the limitations of this study there are still substantial implications to draw from the results that allow for further understandings of this financial empowerment program.

Implications of Findings and Future Research

Implications for practice, policy, and research are described below.

Implications for Practice

Nonprofit agencies that aim to improve the financial situation of low-income families need to be informed on the multiple and simultaneous services they might be required to offer in order to help their clients. Bundled services programs allow for basic needs to be met during training, basic employment skills for participants to become employable in a short period of time, and the financial knowledge and access to products needed to navigate the complex society we live in. Although this program monitored the

completion of employment trainings and financial trainings, as well as the participation in financial coaching sessions, it was not thorough in their reporting of the income support provided. Researchers were not able to identify the amount and type of income support provided to participants, making it difficult to assess the impact of this service. This could partly be due to the lack of staff and volunteers working on income support. Only one staff member was hired to provide income support (i.e., case management services). The agency could look into hiring more qualified staff, such as social workers, that have case management and solution focused intervention skills ideal for this type of program.

One of the agency goals is to increase income through employment in order to help a family cover their basic needs, this is why employment trainings are offered in this program. Financial coaching is offered to help participants change negative financial behaviors. We see the benefits of financial coaching through increased income and a change in a negative behavior (i.e., savings increase vs. no savings) of the participants. However, not all participants are employed after completing the employment trainings; and therefore, may need additional support finding employment post-employment training. Without employment (consistent income) it is very difficult to see the impact of financial coaching and any improvement of negative financial behaviors (i.e., decreasing debt, becoming banked, increasing credit score). For this reason, participants need to be monitored more consistently after completing the program to see if they need additional employment and income support. This type of support will increase participant engagement and create an ideal environment for financial coaching to be more effective. There are several retention strategies implemented in other organizations that have proven to be effective. Family Pathfinders Program recommends the use of volunteer

mentors and mentee groups to increase retention with clients that want to improve financial goals (Hanich, 2016). The volunteer mentors are local entrepreneurs or individuals with financial stability that are willing to provide one on one coaching to mentees: low income individuals, many with a criminal background, that are seeking re-entrance into the job market and wanting to receive guidance on how to achieve financial goals (Hanich, 2016). An additional activity they implement is the use of mentee groups. This is a group of mentees that meet on a regular basis with one mentor/staff member to discuss any topic related to work and financial goals. Many of the participants in these mentee groups described lacking any kind of social support. Mentee groups has shown positive financial outcomes in their participants possibly due to the gap of social support that is being filled (Hanich, 2016). Another study recommended the increase of client retention through matched savings accounts and homeownership incentives for clients that reached savings or debt reduction goals (Birkenmaier et al., 2014). Implementation of volunteer mentors and mentee groups, as well as access to more financial products might help increase long term engagement with program participants.

Implications for Policy

The services provided in this program had a significant impact on participants' increase in income, savings, and reduction of debt for those that maintained employment. Therefore, policies that decrease barriers to employment are necessary in order to help low-income families improve their financial situation. A particular increase was seen in some of the financial outcomes in participants that are male, employed, and have a checking account. Considering the employment trainings are a four-week food service training geared towards food handling and alcohol serving (TABCO) certifications and an

eight-week construction (welding and electrician) training, it is understandable that in these male-dominated industries those with higher wages are males. The food service industry requires a high schedule flexibility to work nights and weekends. At first sight, food service might not be considered a male-dominated industry, the reality is that single females with dependent children that are head of household face several barriers to working in this industry. A common barrier is the lack of childcare during weekend and weeknights that limit them from finding job stability and promotions within this industry (Kalil & Ryan, 2010; Miller et al., 2010). The construction industry, although it is not limited to men, has always been an industry dominated by men but, making it more difficult for a woman to enter this field and maintain job stability and grow professionally. These are barriers to employment stability that can be removed by promoting policies at a federal and state level that increase access to childcare and afterschool programs so that single women head of household have more employment options (Blank, 2007; Edmiston, 2019). Laws that demand equal pay and access to promotion for women would give them opportunities to grow in their workplaces (Fuller, 2018; Miller et al., 2010). At an agency level, it is recommended that an evaluation of the target group be completed in order to decide what population to focus on. The agency may decide to narrow their recruitment efforts and focus on male participants, since this is the target group that most benefits from this program. If they decide to continue working with women, policies that will remove these barriers should be created such as the development of partnerships with businesses that are willing to work with women facing these barriers or increasing the income support provided to these participants to enhance their employment opportunities (i.e., child care services, financial assistance

with rent, utilities, and transportation). This study was not able to analyze the specific income support provided to each participant. Improvement in the agency's data collection in this area would allow for future research on the necessary type and amount of income support that will allow participants to obtain employment and focus on increasing financial capability.

Implications for Research

The increased savings in participants with a checking account seems to indicate that being banked (i.e., having a checking account) is beneficial to improving financial behaviors such as savings; nevertheless, the access to financial products such as a bank account comes with great responsibility. In this study participants that had a checking account had higher debt at the end of the intervention. Although one major strength of the study for research was the use of pretest and posttest on an experimental and comparison group to assess the impact of the intervention, further research with a bigger sample size would provide a better understanding of the impact the access to financial products has on debt and on other financial capability behaviors such as budgeting, credit building, confidence levels, etc.

Limitations of the Study

Several limitations were a factor to this study and impacted the results. Although the researcher recognized these limitations, they could not be addressed due to feasibility issues. Due to the fact that participants signed up voluntarily, researchers could not collect a random sample. Additionally, participants could choose to receive financial coaching sessions or abstain from them, meaning that the experimental and comparison group were created through convenience sampling; therefore, randomization of the

sample was not possible. These limitations affected the representativeness of the sample to the study population, as well as increases the possible bias in the study.

Another limitation connected to the voluntary nature of participation in the program is the level of attrition experienced by participants. As time passed the percentage of individuals signing up for financial coaching, as well as willingness of participants to provide updates on their financial situation, decreased. This could be due to the fact that once participants are employed, their availability to remain in contact is reduced, as well as their urgency to receive support services from the agency. The small sample size of the comparison group and their valid responses made it more difficult for the findings to become generalizable.

Two additional limitations identified that threaten the internal validity of the study include two extraneous variables that are not being controlled for: the level of motivation of each participant at the start of the program and the possibility of participants already having a high level of financial capability. This high level of financial capability can result in individuals believing they will not benefit from financial coaching sessions, so they may choose to abstain from these services. As a consequence, participants not receiving financial coaching may have the same or higher level of financial capability as those that are receiving the intervention.

A final limitation to discuss is the type of data that is being collected during and post intervention. There was no record of the type and amount of the income support being provided to participants and the Financial Capability Scale (FCS) and credit score updates had such low responses in the quarterly updates, that researchers were not able to analyze the impact of these services and include the results in this study.

Recommendations

The findings and limitations of this study allowed to identify some weaknesses in the evaluation plan of this financial empowerment program. Moving forward it is recommended for the agency to explore other data collection techniques and client retention strategies. Other studies in the literature recommend the data collection technique of receiving consent from participants prior to the conclusion of their employment trainings to obtain clients' credit reports (soft enquiry) several months or years after they complete the program (Birkenmaier et al., 2014; Geyer et al., 2019). This automatic report would minimize the time spent on updating financial information and allow the financial coach to focus on the areas that the clients want to discuss each time they are contacted. Additionally, correct and consistent collection of the Financial Capability Scale needs to take place in order to assess the impact of financial coaching in essential behavior changes (i.e., budgeting behavior, self-sufficiency, confidence level, etc.) through a reliable and validated instrument. The agency could consider implementing the FCS at the beginning of the employment training (baseline) and after completion of the four to eight weeks of employment trainings for participants that have found employment to assess if certain skills were acquired during that period.

Increasing client engagement after participants complete their employment trainings would boost data collection and help assess the impact of the program on long term financial goals. Participants that are unemployed after completing the employment trainings may need additional income and employment support in order to remain engaged. Without employment and stable income participants continue in crisis, and therefore are unable to benefit from financial coaching sessions. Thus, in addition to

financial coaching sessions it may be necessary to continue income and employment support services even after completing the four to eight weeks of employment training. Proper reporting of the type and amount of income support and employment support offered, as well as the barriers to employment that participants encounter (i.e., lack of childcare, required schedule flexibility, etc.) are necessary to evaluate in order to adjust program policies (i.e., recruitment policies, employer partnerships, types of employment trainings offered, etc.) and helps assess the actual cost of the program. Lastly, the agency in this study could look into the implementation of volunteer mentors and mentee groups used in other agencies. This strategy has proven to be successful in increasing participants' social support and access to financial products and services that ultimately result in an increase of client retention.

Financial empowerment programs that work within a bundled services program (i.e., offering employment trainings, income support, financial trainings, and financial coaching services) to increase participants' financial capability and long-term financial stability are becoming more popular. This study analyzed a financial empowerment program that implements all these bundled services and their effect in improving participant's financial capability. It specifically assessed the impact of financial coaching in increasing financial capability.

Financial coaching is an intervention recommended for individuals that are not in crisis. However, many of the participants in this program are low-socioeconomic individuals that are unemployed and currently in crisis. In order for financial coaching to be effective additional employment and income support might be necessary post completion of the employment training. For this reason, the type of income support and

employment support being offered during and after completing the employment training need to be properly tracked. The goal of this quantitative evaluative study was to determine the specific impact of financial coaching separate from the other bundled services provided to the target population. While financial coaching did not have significant impacts on all components of financial capability, an improvement is seen in two of the financial outcomes: income and savings. Male participants were specifically benefitted in wage increase and debt reduction. Those that were banked (i.e., had a checking account) had higher wages and participants that were employed were able to reduce their debt, meaning that those that are male, employed, and banked might benefit more from the services offered in the financial empowerment program. This is understandable when the employment trainings are focused on male-dominated industries such as electrical work and food service that require a high level of schedule flexibility on weeknights and weekends. Many single or married females with dependent children might not be able to work in these industries. Therefore, policies that will reduce these employment barriers need to be considered. Additionally, those with employment and access to financial products (i.e., bank accounts) are less likely to be in financial crisis. Financial coaching is said to be more effective with individuals that are not in financial crisis, which explains why this intervention might be more beneficial to those experiencing some level of financial stability (i.e., increased savings in participants with consistent income).

Conclusions

In conclusion, this study emphasized the need for the agency to revise their current evaluation plan including proper tracking of income support and employment

support during and after completion of employment trainings, and development of agency policies that will aim to decrease employment barriers for certain participants. It also demonstrated the need to increase client engagement strategies. Access to more financial products (i.e., checking account, matched savings account, etc.) along with volunteer mentors and mentee groups could contribute to client retention, improve longitudinal data collection, and increase long term financial capability. Further investigation is needed to validate these findings using an experimental design with a larger sample size.

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APPENDIX A
IRB Approval Letter

ABILENE CHRISTIAN UNIVERSITY
Educating Students for Christian Service and Leadership Throughout the World
Office of Research and Sponsored Programs
320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
325-674-2885



November 29, 2019

Desiree Maria Sanabria Guadamuz
Department of Social Work
Abilene Christian University

Dear Desiree,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "A Comparative Evaluation on the Impact of Financial Coaching in increasing Financial Capability for Low-Income Individuals",

(IRB# 19-151) is exempt from review under Federal Policy for the Protection of Human Subjects as:

- Non-research, and
 Non-human research

Based on:

The research does not involve interaction or intervention with living individuals, and the information I am collecting is not individually identifiable [45 CFR 46.102(f)(2)]

If at any time the details of this project change, please resubmit to the IRB so the committee can determine whether or not the exempt status is still applicable.

I wish you well with your work.

Sincerely,

Megan Roth

Megan Roth, Ph.D.
Director of Research and Sponsored Programs

Our Promise: ACU is a vibrant, innovative, Christ-centered community that engages students in authentic spiritual and intellectual growth, equipping them to make a real difference in the world.