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This dissertation, directed and approved by the candidate's committee, has been accepted by the College of Graduate and Professional Studies of Abilene Christian University in partial fulfillment of the requirements for the degree

## **Doctor of Education in Organizational Leadership**

Yee L. Cope

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Date November 18, 2019

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School of Educational Leadership

Using Behavior Economic Nudges to Facilitate Client Follow-Through in Financial Coaching

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Education in Organizational Leadership

by

Charlene Hurst

December 2019

### Dedication

This paper is dedicated to my family: Courtney, Danielle, Jasmine, Michael, and Travis, who supported me through this journey. Their words of encouragement and gestures of faith in my abilities are what got me through. And to my grandchildren: Brandon, Austin, Joshua, Landon, Michael III, Makenzie, Kayden, and Kyrie who gave up so many weekends with their "nanny."

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#### Abstract

While benevolence-based programs have been a large part of meeting immediate financial needs of the poor, they lack the relational aspect needed to facilitate long-term behavior change. Recently many social service organizations have adopted financial coaching as a promising replacement for benevolence programming. The field of coaching has dealt with its own challenges. Most coaching practitioners surveyed in 2016 and 2019 acknowledged lack of client follow-through as their number one challenge. Behavior economics offered nudges as a solution. Nudges are cues placed within the physical environment to prod clients toward behavior change. A quantitative field study was conducted to evaluate 2 program models: a traditional financial coaching model and a behavior economic financial coaching model. The goal was to determine if nudges could produce significant outcomes with client goals of becoming banked and/or increasing savings. A sample population of 70 clients was randomly assigned to 1 of the coaching models. Baseline banking and savings data were collected from both groups. Clients in the behavior economics group received priming and framing as nudges at initial and subsequent coaching sessions. The study found that the behavior economic coaching model produced statistically significant differences in savings increases versus the traditional model. Implications of action for community-based nonprofits offering coaching include initially measuring client intentions to complete goals and integration of nudges throughout sessions. An integrated coaching model was produced and serves as the core foundation for improving client engagement and program outcomes.

Keywords: nudges, financial coaching, benevolence, behavior economics, cues, priming

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#### **Chapter 1: Introduction**

Community-based social service organizations exist mainly to fill the financial and social needs of the poor that are not being met by governmental assistance programs (Paynter & Berner, 2014). Social service nonprofits have tried to positively impact the lives of low-income individuals, mainly through a benevolence-based approach that provides food, rental, medical, and utility assistance. These efforts have largely served as temporary fixes for problems experienced by the poor, because they treat symptoms of poverty versus underlying causes (Jindra & Jindra, 2016).

Community-based social service nonprofits are increasingly recognizing financial coaching's potential for moving the poor towards financial stability. Financial coaching offers client support and guidance while they work towards their self-defined goals. Financial coaching resonates with clients because of its relational aspect. Coaching incorporates all aspects of financial capability (Delgadillo, 2014b; Jindra & Jindra, 2016). Research shows that programs aimed at moving individuals out of poverty must address their financial capability (Huang, Nam, Sherraden, & Clancy, 2016). Merely equipping the poor with financial knowledge has revealed insignificant effects on desired financial behaviors (Reich & Berman, 2015; West, 2012). A major aspect of financial products and services (Baker & De La Rosa, 2015; Von Stumm, Fenton, & Furnham, 2013). Financial coaching provides clients with the opportunity to acquire financial knowledge and financial management skills. Most importantly, financial coaches work to connect clients with mainstream or alternative credit and savings products that allow for building assets (Rothwell, Khan, & Cherney, 2016).

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#### Background

Financial coaching has grown within the last decade as a social intervention to the challenge of helping low-income families reach financial stability. In 2016 there were an estimated 2,265 financial coaches practicing in 453 organizations nationwide (Lienhardt, 2017). Financial coaching helps clients diagnose the root cause of their financial instability, such as lack of debt management skills, or lack of employment that offers wages sufficient for supporting their household. Coaching also offers the financial knowledge, tools, and guidance needed to make a positive financial impact in client's lives (Maud, 2016). Financial coaching clients work on self-defined financial goals and learn the positive behaviors needed to accomplish long-term financial wellness for themselves.

Furthermore, financial coaching is a future-focused, action-driven process that draws upon constructivist theory. Constructivism posits all adults have past experiences that feed their ability to handle new learning situations (Delgadillo, Palmer, & Goetz, 2016). Applied to financial coaching, it is believed that clients possess natural resourcefulness enabling them to find solutions to their own financial issues (Delgadillo et al., 2016). For a financial coaching client, these issues could involve their inability to save or budget and thus be prepared for future financial crises (Hall, 2015). These issues could touch on early life experiences and long held beliefs they hold surrounding money, or attitudes towards banking institutions (Delgadillo & Britt, 2015). Financial coaches work to help clients overcome these and other challenges to moving forward financially.

Researchers have categorized financial coaching as a form of self-directed adult learning (Cox, 2015; Delgadillo & Britt, 2015). Collins, Olive, and O'Rourke (2013) referred to financial coaching as a distinct and powerful intervention that draws from adult learning theory. This

perspective of financial coaching reinforces its potential to go beyond basic financial knowledge, resulting in a tailored financial roadmap that clients can use in transforming their financial lives. The map should address possible internal, external, and client-imposed roadblocks to success, such as procrastination, lack of financial management skills, or timely access to financial products (Baker & De La Rosa, 2015; Von Stumm et al., 2013).

As an example, one promising financial capability programming model being piloted in Dallas-Fort Worth since 2014, is the Working Families Success (WFS) model. This integrative approach to client programming provides individuals with employment and income support services, along with financial coaching as a core component. This model also focuses on helping clients to build financial security by connecting them with asset building products (Communities Foundation of Texas [CFT]: Working Families Success, 2016). For the purposes of this study, only the financial coaching component will be measured, as it is considered the cornerstone of this program model for assisting low-to-moderate income clients, and many social service nonprofits offer financial coaching as stand-alone programming (CFT, 2016; Lienhardt, 2017; NeighborWorks, 2013).

The history of social service organizations meeting the needs of the poor has mainly consisted of providing clients with financial assistance for rent, utilities, and food. Program goals were activity-based, focusing on how many individuals an organization could feed, or how many utility bills could be paid on a yearly basis (Jindra & Jindra, 2016). This benevolence-based and transactional approach lacked the relational element that is necessary to assist with a myriad of additional issues that often complement the basic unmet needs of food, clothing, and shelter facing the poor. These additional issues often include unaffordable and inadequate medical care, homelessness, low education, cycles of abuse, mental and physical disabilities, lack of access to

mainstream credit products, and little or no work experience (Beverly, 2001; Huang et al., 2016; Jindra & Jindra, 2016; U.S. Department of Health and Human Services [HHS], 2004). For the poor to move past crisis and achieve long-term financial stability, Sherraden et al. (2015) proposed that "people must be financially capable and able to accumulate assets" (p. 3). Financial capability implies that an individual has the skill, confidence, knowledge, and opportunity to make sound financial decisions that can improve their financial well-being (Rothwell et al., 2016).

Public or private forms of financial assistance to the poor, such as the Supplemental Nutrition Assistance Program (SNAP) that provides food assistance for low-income households, as well as community-based social service programs that address singular issues of poverty, fail to comprehensively treat underlying causes of poverty that can keep individuals from advancing financially (Beverly, 2001; Gilbert, Nanda, & Paige, 2014; Huang et al., 2016; Jindra & Jindra, 2016; HHS, 2004). For example, the SNAP program is hailed as an anti-poverty tool that kept 15.6 million households from experiencing food insecurity in 2016. In 2017 the federal agency responsible for administering the program used only 6.5 percent of the program's \$70 billion budget for "state administrative costs, including eligibility determinations, employment and training and nutrition education for SNAP households, and anti-fraud activities" (p. 4), meaning an even smaller amount of that 6.5 percent went towards programs or activities that address lack of recipient employment and job training which are underlying causes of poverty (Center on Budget and Policy Priorities, 2018).

Financial coaching has the potential to succeed where benevolence has failed by employing a holistic and relational approach to helping clients improve their financial situations. This approach is focused on addressing the many poverty-related issues mentioned above. The basic structure of financial coaching allows for regular monthly sessions where coaches build rapport with clients and equip them with financial knowledge (the difference between a credit score and a credit report), financial skills (how to pull a credit report), and opportunities to practice those skills (pulling a credit report). Coaching further works to foster client-financial institution relationships that can provide opportunities for saving and accumulating assets (Collins et al., 2013; Sherraden et al., 2015; Theodos et al., 2015). In this sense, financial coaching is geared toward client demonstration of behavioral change, including the willingness and ability to change.

The nationwide growth of financial coaching within community-based social service nonprofits has not been without challenges. There were 232,385 social service nonprofits registered in the U.S. during 2013. Over 83% of those were classified as small, with revenue budgets under \$500,000 a year (Norris-Tirrell, 2014). Most nonprofits engaging in financial coaching work are small and community-based, meaning they only focus on helping the needy within their own community (Jindra & Jindra, 2016). In a 2016 Financial Coaching Census conducted by Asset Funders Network (Lienhardt, 2017), 453 U. S. social service organizations were surveyed to gauge their successes and challenges with offering financial coaching services. Of the responding financial coaches, 57% identified "lack of follow-through by existing clients" as their number one challenge. Lack of client follow-through represents client disengagement and goal failure at some point in the financial coaching process.

#### **Statement of the Problem**

The use of financial coaching as an intervention in the community-based social service nonprofit, presents practical issues for the organization's viability. Financial coaching requires clients to be active participants and leaders in their progress towards financial stability (Collins et al., 2013; Delgadillo & Britt, 2015). The inability to consistently influence clients towards positive financial behavior change is an obstacle facing practicing financial coaches within the United States. Most of the coaches surveyed cited their number one challenge as a lack of follow-through from their existing clients (Jindra & Jindra, 2016; Lienhardt, 2017; Maud, 2016). Lack of client follow-through affects the community-based nonprofit's ability to produce positive program-related outcomes. Failure to fulfill their mission of moving the poor forward can in turn threaten the nonprofit's ability to remain viable and maintain funder and societal stakeholder relationships (Chen, 2015; Jones & Mucha, 2014; McDowell, Li, & Smith, 2013).

As indicated earlier, traditional benevolence-based programming appears to be largely ineffective in addressing long-term needs of the poor because it focuses on crisis management and symptoms of poverty versus prevention, lacks a relational aspect that supports clients, and fails to equip individuals with the financial skills and capabilities needed to change behaviors and build financial assets (Beverly, 2001; Huang et al., 2016; Jindra & Jindra, 2016; HHS, 2004). Research suggests financial coaching holds significant promise for giving the poor the tools needed to reach financial self-sufficiency (Collins & Murrell, 2010; Hall, 2015; NeighborWorks, 2013). The problem is a lack of understanding and utilization within the financial coaching sector of behavioral economic influencers that can promote positive outcomes for coaching clients.

#### **Purpose of the Study**

The primary purpose of this quantitative field study was to determine the effects of behavioral economic strategies within an intervention financial coaching model compared with the effects of a traditional financial coaching approach. Specifically, a coaching model is developed in this research based on the dual process cognitive theory, and the behavior economic concept of choice architecture. Nudging is a form of choice architecture which suggests human behavior can be positively influenced through cues placed within the context or environment (Thaler & Sunstein, 2009c; Theodos et al., 2015; Vyvyan, Blue, & Brimble, 2014). The nudging strategies of priming and framing were used within this study.

If the model performs as expected, financial coaching clients of community-based nonprofits should exhibit measurable improvement in financial behaviors as measured through specified outcome indicators. Application of this coaching model in one field experimental condition will be compared with client outcomes within an existing financial coaching program that does not utilize any behavioral economic strategies. Client outcome data in the form of two specific financial outcomes were collected in the study.

#### **Research Questions and Hypotheses**

This study sought to create a financial coaching intervention program by applying literature-based expected behavioral and motivational factors to financial coaching. The influence of these factors were measured as specific financial outcomes applied in financial coaching with an experimental group receiving these factors in comparison to a control group receiving traditional financial coaching service methods described below in the RQs as statistically significant differences.

**RQ1**: To what extent, if any, will there be a statistically significant difference between increased savings outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?

**Null hypothesis (H**01): The null hypothesis for H1 states there will be no statistically significant difference between increased savings outcomes of financial coaching clients

placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ).

Alternative hypothesis (H<sub>1a</sub>): The alternative hypothesis for H<sub>1</sub> states there will be a statistically significant difference between increased savings outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model  $(\overline{x}_1 \neq \overline{x}_2)$ .

**RQ2**: To what extent, if any, will there be a statistically significant difference between banked status outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?

**Null hypothesis (H**<sub>02</sub>): The null hypothesis for H<sub>2</sub> states there will be no statistically significant difference between banked status outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ). **Alternative hypothesis (H**<sub>2a</sub>): The alternative hypothesis for H<sub>2</sub> states there will be a

statistically significant difference between banked status outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 \neq \overline{x}_2$ ).

#### **Definition of Key Terms**

**Banked status.** Banked status is a term that indicates an individual's present relationship with any type of federally insured banking institution. For the purposes of this study, an

individual can possess one of three statuses: banked, unbanked, or underbanked. A banked individual possesses either a checking or savings account. An individual possessing neither a savings nor checking account is considered unbanked. An underbanked individual has a checking or savings account, but not both, and uses non-banking financial products or services such as check cashing services (Federal Deposit Insurance Corporation [FDIC], 2017). The pre and post study banking status of all sample members will be documented to determine through comparative analysis if any positive change can be attributed to the presence of the intervention.

**Chime bank.** A free web-based checking and savings account that offers automated savings features. Another feature is zero fees, no minimum balance, and 24,000 free ATMS.

**Framing.** Framing is a behavioral economic strategy that suggests the way information is presented makes a difference in an individual's perception of the information and subsequent choices (Thaler & Sunstein, 2009a). For the purposes of this study, a framing strategy is considered any communication, either verbal or written, given to the experiment group that is intended to influence their banking or savings choices toward the expected outcomes, where that same communication is not extended to the financial coaching control group.

**Increased savings**. Increased savings denotes the individual's success in improving the balance in their savings account held at a financial banking institution.

**Priming.** Priming is a behavioral economic strategy that attempts to influence or stimulate an individual's behaviors by getting them to state their intentions to complete an action (Thaler & Sunstein, 2009b). For the purposes of this study, a priming strategy is considered any communication, either verbal or written, given to the experiment group that is intended to influence their banking or savings choices toward the expected outcomes, where that same communication is not extended to the financial coaching control group (Thaler & Sunstein, 2009b).

**SaverLife.** A matched savings product that is designed to help encourage people to start and maintain a regular savings habit.

**Savings account.** A place where cash can be stored securely while interest is earned on the money. The money is stored in a bank that is federally insured which means up to \$250,000 of an individual's money is covered against loss (Armstrong, 2018).

**Supplemental Nutrition Assistance Program (SNAP).** SNAP is a state-funded program that offers supplemental food benefits to low-income individuals. Benefits are awarded on a card, called an EBT card that allows the beneficiary to purchase food using non-cash credits. Benefit amounts are determined by family size and are also income-based (United States Department of Agriculture, 2018). For the purposes of this study, a SNAP recipient is considered any individual who is presently receiving non-cash food benefits through a state-funded food supplement program. Individuals receiving SNAP benefits were identified on pre and post intervention surveys for demographic tracking purposes.

**Temporary Assistance for Needy Families (TANF).** TANF provides cash assistance to needy or low-income families to help pay for basic items and needs including clothing, utilities, transportation, laundry, and medical supplies not covered under medical assistance programs. Unlike SNAP, recipients must be individuals or families whose household include children 18 years of age or younger (Texas Health and Human Services, 2019a).

Women and Children (WIC). The Special Supplemental Nutritional Program for Women, Infants, and Children, also known as WIC, is a nutrition program for pregnant and breastfeeding women, and for children under five years of age. Recipients receive non-monetary funds on a card to purchase healthy food items for themselves and their young children such as fruits, vegetables, and dairy items, and formula for their infants. Women can also receive one-onone nutrition counseling (Texas Health and Human Services, 2019c)

#### Summary and Preview of the Next Chapter

Financial coaching as a form of adult learning, is structured to provide the opportunities for access to financial capability that are needed for poor individuals to move out of poverty (Cox, 2015; Jindra & Jindra, 2016). The challenge to this intervention is the lack of follow-through many coaches experience with coaching clients not completing their self-selected financial goals. This study proposed to explore the effect that behavior economics strategies of contextual cues or nudges can have on the outcomes of a financial coaching program within a community-based, social services environment. The study also explored the landscape of financial coaching as a growing phenomenon in the social service sector and coaching's ability to promote financial behavior change through financial capability measures. The literature presented in Chapter 2 will cover some of the findings in past and present behavioral economics research to determine what is already known about motivation factors that influence financial behavior change, and what behavioral theories can be practically applied to the financial coaching context to implement or improve a financial coaching program.

#### **Chapter 2: Literature Review**

#### **Overview and Background of Literature**

As indicated in the previous chapter, the primary purpose of this study is to determine whether utilization of the contextual behavioral economic influencers, such as priming and framing, lead to greater improvement in financial behaviors for community-based, nonprofit financial coaching clients, than a financial coaching model that does not utilize this same behavioral economic strategy.

Stated another way, this study proposed to explore strategies for enhancing client motivation and engagement leading to improved client financial behavior indicators and program outcomes. The literature surrounding the topic of behavioral economics offers numerous strategies that can be implemented or integrated into a financial coaching program model. Some of these include priming, framing, defaults, and loss aversion (Thaler & Sunstein, 2009a, 2009b, 2009c). Tools for the implementation and measurement of behavioral economic cues will be developed to determine their effectiveness in facilitating successful client goal achievement and financial behavior change.

This literature review is divided into five major sections. First, an overview of the landscape of poverty in America covers representative topics such as: (a) statistical data representing the depth of poverty in the U.S.; (b) how poverty is measured; (c) the various financial assistance programs available to those classified as living in poverty and their purposes, as well as benevolence-based client financial assistance; (d) client financial capability; (e) a brief overview of the structure, purpose, and challenges of financial coaching; and (f) behavioral economics theory as it relates to a financial environment. The second section of this literature review covers pros and cons of benevolence-based financial assistance to the poor. The third

section of the review deals with the connection between financial capability and client behavior change. This section covers: (a) the definition of financial capability, (b) the difference between financial education and financial literacy, and (c) the connection between financial capability and access to financial products. The next section of this literature review addresses the features of financial coaching in detail. This section also offers a brief rationale for the use of behavioral economic strategies within this study. In providing this rationale, the section on financial coaching will include the following: (a) background on the growth of financial coaching within the last decade, (b) explanation of the purpose and structure of financial coaching, (c) evidence of the success of financial coaching initiatives, (d) the relationship between financial coaching and constructivism, (e) challenges to financial coaching as a practice, (f) the threat these challenges present to the viability of the community-based social service nonprofit, and (g) the link between financial coaching and behavior economics.

The last section of the literature review offers a theoretical framework of behavior change based on dual-process cognition, one of many such theories. In this instance, the study focused on the use by humans of an automatic and reflective system of the brain, also referred to as System 1 and System 2, when making decisions. Behavior economics researcher Richard Thaler (Thaler & Sunstein, 2009a) used this dual-process theory to help advance the use of "nudges" for influencing positive client behaviors. To build this framework, this section is divided into the following components: (a) behavior economics defined, (b) an overview of the neoclassical theory of economics, (c) past contributions to behavior economics, (d) a discussion of dualprocess cognitive-theory and how it relates to behavior and choices, (e) an overview of the behavior change concepts of nudging, heuristics, and choice architecture, and (f) definitions of some nudging strategies and examples of their use in a financial context. The review concludes with a summary of the objectives for this study.

Overall, public and private organizations offering benevolence to the poor, fail to holistically address their underlying needs, such as lack of employment and opportunities for accumulating financial assets (Baker & De La Rosa, 2015; Huang et al., 2016; Von Stumm et al., 2013). Financial coaching has the potential to succeed as an intervention for helping low to moderate income individuals gain financial stability (Collins et al., 2013; Theodos, Stacy, & Daniels, 2018). One of the challenges for the social service nonprofit offering financial coaching, is the ability to get their existing clients to follow-through with financial coaching. This would be manifested by the completion of client financial goals (Lienhardt, 2017). Some of the obstacles to client follow-through are lack of transportation to financial coaching sessions, unrealistic client-held timeframes for reaching goals, the location of coaching sessions, and the time commitment required (Theodos et al., 2015).

#### **Poverty in America**

**Poverty by the numbers.** Benevolence-based assistance offered by many public and private organizations, serve as a necessary safety net to meet the basic living needs of society's poor. The sheer number of people living in poverty today makes a case for the need of that safety net. According to 2017 community surveys conducted by the U.S. Census Bureau to determine the number of individuals living in poverty, 13.4% of the U.S. population, or 42,583,651 people, were living below their state's federal poverty threshold for their applicable household size, and 6% of those individuals, or 2,555,019 people, were living below 50% of their state's poverty threshold (Bishaw & Benson, 2018). According to the survey, these results or numbers did not include a host of other groups, many of which could possibly also fall into these poverty

categories, such as those living in nursing homes, correctional institutes, college dormitories, or military barracks. To put this in perspective, the Federal Poverty Threshold for a household of four in 2017 (2 adults and 2 children residing in the same home) was a yearly income of \$24,858 (HHS, 2017). On a local level, using this same scenario, in 2017 a total of 4,076,905 people or 14.7% of individuals in Texas were living below the income threshold for a family of four (Bishaw & Benson, 2018; United States Census Bureau, 2019). In 2017, an additional 6.4% or 1,775,415 people in Texas were living below 50% of the poverty threshold. For a family of four, that yearly income level would have been below \$12,429 (Bishaw & Benson, 2018; United States Census Bureau, 2018; HHS, 2017).

How is poverty measured? The United States Census Bureau uses official income guidelines created by the federal government to determine who qualifies as living in poverty within the United States. That guideline is the Federal Poverty Threshold (Hauver, Goodman, & Grainer, 1981; Lee, 2018; United States Census Bureau, 2018). It should be noted that federal poverty threshold levels are different from federal poverty level (FPL) guideline numbers which are issued by the Department of Health and Human Services and used to determine an individual's eligibility for government funded benefits such as subsidized childcare. The FPL guidelines are considered a "simplified version" of the poverty thresholds (Lee, 2018; Rossi & Curtis, 2013; United States Census Bureau, 2019). The difference in the two measures can be seen by the 2017 FPL guideline yearly income numbers for a family of four, which was \$24,600, slightly less than the federal poverty threshold of \$24,858 (HHS, 2017). This means a family of four surviving on a yearly income of \$24,600 or less, would be eligible for benefits that include the Head Start childcare program, and Supplemental Nutrition Assistance Program (SNAP), a state-funded food benefits program (United States Census Bureau, 2019). **Financial assistance to the poor.** The needs of the poor can be many and varied. Some of those needs include food, shelter, employment, and medical care (Paynter & Berner, 2014). Assistance to the poor from non-governmental organizations such as nonprofits and churches, are usually in the form of financial assistance with utilities, rent, and medical needs, or non-monetary in the form of food or clothing. The need for nonprofits to sponsor food pantries in particular, has grown within the last 20 to 25 years in response to government cuts and policy changes to social service programs (Daponte & Bade, 2006; Ellen, 2018; Gray, Nelson, Shaffer, Stebbins, & Farina, 2017; Jindra & Jindra, 2016; Paynter & Berner, 2014). Individuals and families living in poverty can qualify for several federal and state administered programs that offer monetary and non-monetary assistance aimed at closing financial gaps for the poor. Applicants for state administered benefits must adhere to eligibility and enrollment guidelines for their respective state (United States Department of Agriculture, 2018). Following are descriptions of several public assistance programs:

Supplemental Nutrition Assistance Program (SNAP). SNAP is a state-funded program that offers supplemental food benefits to low-income individuals and families. Benefits are awarded on a card, called an EBT card that allows the beneficiary to purchase food using noncash credits. Benefit amounts are determined by family size and are also income-based. Recipients include families with children, seniors, disabled, and temporary assistance for adults 18 to 49 without children (Texas Health and Human Services, 2019a; United States Department of Agriculture, 2018).

**Temporary Assistance for Needy Families (TANF).** TANF provides cash assistance to needy or low-income families to help pay for basic items and needs including clothing, utilities, transportation, laundry, and medical supplies not covered under medical assistance programs.

Unlike SNAP, recipients must be individuals or families whose household include children 18 years of age or younger (Texas Health and Human Services, 2019b).

**WIC**. The Special Supplemental Nutritional Program for Women. Infants, and Children, also known as WIC, is a nutrition program for pregnant and breastfeeding women, and for children under five years of age. Recipients receive non-monetary funds on a card to purchase healthy food items for themselves and their young children such as fruits, vegetables, and dairy items, and formula for their infants. Women can also receive one-on-one nutrition counseling (Texas Health and Human Services, 2019c).

Housing Choice Voucher Program. The housing choice voucher program is a federal housing program designed to assist low-income, senior, and disabled individuals secure affordable housing within the private rental market. The program is administered by local public housing agencies and allow participants to choose the type and location of their housing within program guidelines. Participants receive a voucher to present to their landlord that serves to subsidize their monthly rent (Electronic Code of Federal Regulations, 2019).

#### **Pros and Cons of Benevolence-based Assistance**

Most public or private forms of financial assistance to the poor singularly address issues of poverty, meaning the program only addresses food insecurity, or only addresses housing instability and affordability (Electronic Code of Federal Regulations, 2019; Texas Health and Human Services, 2019c; United States Department of Agriculture, 2018). In fact, poor coordination of benefits between public assistance programs such as SNAP, TANF, WIC, and medical assistance programs is common (Gilbert et al., 2014; Martin et al., 2014). Gilbert et al. (2014) conducted a 12-month study among 23,065 WIC eligible participants in the state of Maryland to determine concurrent participation in other public assistance programs, including SNAP, TANF, and medical assistance programs for the low-income. Study results showed that 68.4% of WIC participants were concurrently enrolled in a medical assistance program, 31% were concurrently enrolled in WIC and SNAP, 9% were concurrently enrolled in WIC and TANF, and 28% of WIC participants were not concurrently enrolled in any program. It was also revealed that only 8% of Maryland WIC recipients were concurrently enrolled in all three additional programs involved in the study (Gilbert et al., 2014). A similar study was conducted in Connecticut between WIC and Head Start/Early Head Start (HS) childcare program participants. The results indicated low collaboration between programs with less than half of the WIC staff (47%) reporting they had collaborated with HS staff to coordinate client benefits (Martin et al., 2014). This lack of coordination weakens the ability of public assistance to effectively move the poor towards financial stability.

Another issue with public benevolence programming is lack of support offered to individuals attempting to exit public assistance and transition to financial independence. Instead of moving from poverty to self-sufficiency, Breitkreuz and Williamson (2012) offered that these individuals graduate to the category of "working poor" (p. 661). This serves as a deterrent for families to move away from public assistance towards self-sufficiency. This disincentive is referred to as the cliff effect and occurs when an individual receiving public assistance experiences an increase in monthly income from a source such as employment. When this increase, no matter how small, puts them above the eligibility limits for assistance, their benefits are often quickly terminated. Dinan, Chau, and Cauthen (2007) offered that "a small increase in earnings can lead to a sharp reduction in benefits-often referred to as a 'cliff'-leaving the worker no better off, or even worse off, than before" (p. 1). This cliff usually occurs during the period between when the individual starts a job and their first few paychecks spent trying to meet all their monthly experiences without public assistance. The benefit cliff often puts these individuals in a condition where it is more beneficial to return to public assistance than struggle while trying to smooth out their financial situation.

Similarly, with community-based social service nonprofits, their encounters with the poor are usually cyclical and transactional in nature. Clients may receive food and financial assistance, but no clear plan for improving their overall situation (Jindra & Jindra, 2016). This client revolving door has prompted community-based nonprofits to trial more relational approaches, such as financial coaching, to help the poor attain long-term stability. Financial coaching is a social intervention that has shown promising success in the last decade for helping low-to-moderate income individuals reach financial stability, mainly because it focuses on a holistic, client-centered, and relational approach to behavior change (Collins et al., 2013; Collins & O'Rourke, 2012; Fernandes, Lynch, & Netemeyer, 2014; Theodos et al., 2018).

Despite difficulties experienced by benevolence-based programming, there has been some successes in addressing material hardships among the poor. One example involves the Salvation Army, a nonprofit whose previous programming for addressing needs of the poor mainly consisted of utility and rental payments and food assistance. In stark contrast, their new Pathway to Hope Program utilizes more of a relational approach. The program states its purpose is to "address the root causes of poverty" and help individuals "over challenges like unemployment, unstable housing, and lack of education" (Jindra & Jindra, 2015; Salvation Army, 2019). Implemented in 2011, the Pathway to Hope Program is structured similar to financial coaching. Pathway to Hope allows participants to meet regularly with a case manager to work on financial and employment goals. Limitations of this initiative are that the program is only available to families with children and presently exists in limited capacity in several northeastern counties. The Salvation Army has plans to expand the program in other counties in the future (Salvation Army, 2019). In contrast, financial coaching which presently exists in over 453 organizations nationwide, is open to individuals as well as families (Collins & O'Rourke, 2012; Lienhardt, 2017; Roder, 2016; Theodos et al., 2018).

Data offered by the Salvation Army's Pathway to Hope program suggests it has been successful in addressing needs of the poor. Results indicate that 89% of participants surveyed reported an increase in their stability. Also, 81% of program graduates achieved their goals related to housing, and 63% achieved goals related to employment (Campbell, Virani, & Lanney, 2016; Salvation Army, 2019). It must be noted that there is no indication of how program outcomes related to housing and employment goals were measured. The Pathway to Hope program indicates participants are paired with a case-manager to assess their situation and set measurable goals. It is unclear whether it is client or case-manager that sets these goals (Salvation Army, 2019).

Public and private benevolence-based agencies have begun to acknowledge that successfully helping the poor to move forward means concurrently addressing underlying issues associated with a life of poverty. These issues include lack of education or marketable work skills, lack of stable income, and lack of access to mainstream credit and savings products used to accumulate financial assets (Beverly, 2001; Huang et al., 2016; Jindra & Jindra, 2016; Sherraden et al., 2015; HHS, 2004). Even city-level governments have begun to grasp the positive benefits of such an approach in building strong communities. Their awareness has sparked the creation of Financial Empowerment Centers (FEC) in at least six cities: New York, Denver, Lansing, Nashville, Philadelphia, and San Antonio (Cities for Financial Empowerment Fund, 2017). FECs provide free financial counseling services to all city residents. Concerted efforts were made to include public assistance recipients and homeless shelter residents in the FEC initiative. In some instances, participation was required as a prerequisite to receiving public benefits. The results for 5,305 FEC participants over a 30-month period showed that 31.4% reached their goal of becoming banked, 34.7% established or improved their credit, 36.5% reduced debt, and 28.1% increased their savings. This initiative suggests that the public sector now realizes that supplying financial assistance to the poor is not enough to bring about long-lasting, impactful change in their financial situations.

#### **Financial Capability and Behavior Change**

A relational approach and financial capability have been offered as necessary components to client-centered programming aimed at addressing poverty (Baker & De La Rosa, 2015; Huang et al., 2016; Jindra & Jindra, 2016; Von Stumm et al., 2013). Jindra and Jindra (2016) explained that relational work involves "working with clients over time on life changes" (p. 634). These life changes can include areas of financial, social, physical, or mental health. Baker and De La Rosa (2015) offered that "accountability through ongoing one-on-one relationships" (p. 3), is an important feature of an effective financial capability program. Huang et al. (2016) proposed that improving asset building opportunities for the poor increases their financial capability, which provides those working with this population additional leverage needed for reducing poverty. Client-centered relational work recognizes there is no quick fix for client problems. Organizations must be prepared to work with low-income individuals over an extended timeframe to help them become self-sufficient.

Various researchers have weighed in on the definition of financial capability. Von Stumm et al. (2013) offered that financial capability entails the ability of an individual to "manage living on the resources available, and to make appropriate financial decisions" (p. 344). Taylor (2011) agreed that "financial capability is concerned with making appropriate financial decisions" (p. 298), but also reinforced additional aspects of financial capability that include "understanding how to manage credit and debt and identifying products and services that are appropriate" (p. 298). Xiao, Chen, and Chen (2014) offered that "financial capability can be demonstrated by a certain level of financial literacy and performance of desirable financial behaviors" (p. 416). Financial capability includes action through behavior change in addition to demonstration of financial literacy. To better understand financial capability, it is helpful to define associated terms such as financial literacy and financial education which are often incorrectly interchanged.

Financial education and financial literacy. A comprehensive definition for financial education describes it as a process that involves the three aspects of information, instruction, and advice (Delgadillo, 2014b). The aspect of information in financial education involves providing consumers with data or facts related to finances. This could entail information on the composition of credit scores, or the differences between credit unions and banks. Instruction involves giving consumers the opportunity to understand financial concepts, acquire and practice financial skills. An example would be instructing clients on the proper way to pull their credit report and then allowing them to practice that skill. Advice means providing consumers with financial product options so they can make the best possible decision for their situation using the knowledge and skills they have acquired. For a consumer that needs to build or rebuild credit, this would mean advising them on their options for accomplishing this goal, including possible credit-building programs or financial institutions that can meet their needs (Delgadillo, 2014b). Financial literacy is described as the ability to use the financial knowledge and skills that have been acquired through financial education to successfully manage an individual's financial resources (Delgadillo, 2014a). Therefore, financial literacy encompasses financial education and

financial behavior. There is debate among researchers as to whether financial education or financial literacy alone are enough to equip the poor to make good financial decisions. Given that Taylor (2011) advised "financial capability is a broader concept that includes financial literacy" (p. 712), and financial education is needed to become financially literate, it follows that on their own, neither are enough to ensure financial capability for clients.

**Financial capability and financial access**. It has been shown that financial capability is a multidimensional concept. It involves the possession of financial knowledge and successful use of that knowledge as demonstrated through positive behavior change. Delgadillo (2014) expressed the need for an environment that gives individuals the opportunity to make those behavior changes when she defines capability as "the power, practical, or potential ability necessary for someone to do something" (p. 20). Sherraden et al. (2015) offered that "the concept of financial capability connotes both ability and opportunity: Financially capable people possess both the ability and the opportunity to improve their financial well-being" (p. 4). Further applied in a financial context, it is imperative that poor individuals have access to mainstream financial products and services. Access will give them power and opportunity to change past behaviors of not saving or not securing long-term assets such as a home or retirement savings (Baker & De La Rosa, 2015; Von Stumm et al., 2013). Financial capability is also important for the vulnerable populations of seniors and homeless (Huang et al., 2016).

#### **Financial Coaching**

**Background of financial coaching**. Financial coaching has grown in use during the last decade as a method for guiding the poor in the development of positive financial behaviors, such as saving for emergencies (Maud, 2016). Although coaching in other areas such as sports and business has been around for some time, coaching applied to financial services has only begun to

catch on within the last few years (Collins, Baker, & Gorey, 2007; Hall, 2015). Several studies have shown that financial coaching has a positive impact on the financial situation of participants (Collins & O'Rourke, 2012; Roder, 2016; Theodos et al., 2018). The field of coaching spans the country, and although data are limited, in 2016, there were a reported 2,265 practicing financial coaches within the United States and over 450 organizations that had a financial coaching program (Lienhardt, 2017).

**Structure of financial coaching.** Financial coaching is a form of adult learning and is therefore structured to meet the unique needs of each client. Coaching provides clients with tools and assistance matching their financial situations and allows them to choose goals that tie into the level of financial capability needed to improve their financial well-being (Cox, 2015; Jindra & Jindra, 2016). For some clients, financial well-being may mean learning to budget their income properly so as to open up savings opportunities. For another client, financial well-being may mean improving their credit to the level of qualifying for a prime mortgage loan. Client and coach meet monthly to work towards the client's time specific goals. Sessions typically last 60 to 90 minutes and are traditionally conducted in-person. A coach may typically work with a client for 3-4 sessions over a span of months and conduct check-ins as needed in between sessions (Collins & Murrell, 2010; Collins et al., 2013; Delgadillo et al., 2016; Theodos et al., 2015). One of the advantages of the financial coaching model is that the frequency of visits contributes to a low propensity for clients forgetting the financial knowledge and skills they have learned during sessions, and greater opportunities to practice and receive feedback on their financial behaviors (Fernandes et al., 2014).

Coaching usually starts with the client setting their goals. Goal setting may take place during the initial session, but coaching gives clients the flexibility to change those goals later as needed (Collins & O'Rourke, 2012). The coach encourages the client to come up with futurefocused goals that address their unique life situation and what the client feels is needed to help them move forward financially. These goals could involve any number of areas, but typically center on housing, education, employment, or even mental health. The coach's main role during the coaching process is not to advise, but to forge a coach-client relationship built on trust and mutual respect. This relationship is helpful in allowing the coach to offer guidance and suggestions as needed, for the client to be forthcoming about their personal finances, and for the coach to hold the client accountable for reaching their goals (Delgadillo & Britt, 2015). The ultimate goal in financial coaching is for clients to engage in positive behaviors that can lead to long-term financial stability (Berzin, Catsouphes, & Gaitan-Rossi, 2015; Collins & O'Rourke, 2012; Jindra & Jindra, 2016). Financial coaching is not compliance-based, so client desire and readiness to change behaviors could be a predictor of their level of follow-through. Financial capability scales exist for gauging client readiness for coaching (Collins et al., 2013). While coaches are expected to enhance client motivation, the ultimate level of client engagement resides with the coaching client.

**Successful financial coaching initiatives.** As mentioned, regular coaching sessions allow for important relationship building between coach and client and are necessary for addressing client goals in an effective manner. Instead of merely focusing on how to resolve a single triggering crisis and then dismissing the client, Collins et al. (2013) offered that financial coaching focuses on the client's overall situation and is "an ongoing process that involves setting goals, establishing a concrete plan of action, monitoring one's progress, and ideally forming new positive financial habits" (p. 1). The impact of financial coaching on client financial capability was assessed during a 2014 randomized study conducted by the Urban Institute under the
directive of the Consumer Financial Protection Bureau (CFPB). The study targeted 945 low-tomoderate income individuals. Clients were separated into a treatment group that had unlimited access to financial coaching as well as regular program services such as employment assistance or free tax preparation services, and a control group that only had access to the regular services (Theodos et al., 2018).

The study's results indicated financial coaching had a positive effect on client savings outcomes, client likelihood to pay down debt, the acquisition of new financial skills such as using a budget, and the reduction of client financial stress. The study found that coaching had no significant effect on reduction in client use of alternative financial services such as payday loans. The study suggested the benefits of financial coaching are manifested in the client acquisition of new financial skills and in positive financial behavior changes rather than through the attainment of financial knowledge. This study further proposed that financial coaching either as part of an integrated services model or as a stand-alone intervention, holds significant promise for improving the financial well-being of the low-to-moderate income (Theodos et al., 2018).

**Financial coaching and constructivism.** Colburn (2000) offered that humans use their past experiences to construct their own world views or reality. Therefore, no two individual's realities are going to be identical. Those realities may be constructed around beliefs that are long held, which can make them hard to change. To assist the client in working towards their solutions, the financial coach strives to apply tenets of constructivist theory that states humans can rewrite or reconstruct their own realities since they are created in our minds or imaginations (Colburn, 2000; Delgadillo et al., 2016).

Colburn (2000) suggested for someone to change their reasoning, and thus their associated behavior around a belief, three things are necessary. First the individual must clearly

examine or understand their own ideas around the belief. Next, the person must clearly see and understand any problems associated with their beliefs. And lastly, the individual must be presented with alternative beliefs that they can examine to determine what might be a better fit for them personally. The financial coaching model uses powerful questions to address these first two requirements (Collins et al., 2013; Delgadillo et al., 2016). Colburn (2000) offered that "challenging questions help people understand the flaws in their ideas" (p. 11). The financial coach then works to help the client clarify the direction they will take to resolve their issue or reach their goal. The coach may accomplish this by offering suggestions and guidance towards a solution the client feels is a good fit for their personal situation. This further demonstrates the financial coach's role to offer guidance as well as accountability as needed in the client-coach relationship (Berzin et al., 2015; Collins et al., 2013; Collins & O'Rourke, 2012; Delgadillo et al., 2016; Jindra & Jindra, 2016). As will be discussed later in this literature review, behavior economics suggest despite humans possessing the ability to successfully handle their own financial situations, many fail because of predictable and systematic errors in the human decision-making process (Kahneman, 2011b, 2012).

**Challenges to financial coaching client success.** One of the major challenges to the use of financial coaching among the poor is the lack of client follow-through in working toward the completion of self-defined goals aimed at moving clients toward financial self-sufficiency (Lienhardt, 2017). Research shows lack of time and transportation needed to attend coaching sessions, inconvenient locations of sessions, unwillingness to discuss financial issues, unrealistic time-frame expectations for reaching goals, language barriers, and lack of trust in the client-coach relationship, are some of the factors acting as impediments to client success in financial coaching. Of these factors, client transportation issues and the location of coaching sessions

prove to be the most significant barriers for coaching clients (Theodos et al., 2015). This suggest that the typical method for delivering financial coaching sessions is not meeting the physical needs of most financial coaching clients. Theodos et al. (2018) suggested research be done around alternative modes of delivery for financial coaching sessions outside of the traditional inperson method. While not the focus of this study, alternative methods for conducting financial coaching sessions (email, phone, online), will be available to this study's respondents.

**Coaching challenges threat to nonprofit viability**. When coaching clients fail to reach their self-defined financial goals, it affects the nonprofit's ability to remain viable through the receipt of funding. Most of community-based social service nonprofits within the U.S. receive 44% of their total revenue from donor funding (Chen, 2015; Norris-Tirrell, 2014). Donors are looking closely at non-financial results, such as client outcomes, when making donation decisions. This makes client success a key concern for nonprofit leaders (Chen, 2015; McDowell et al., 2013). For social service nonprofits, "providing performance outcomes has become one of the major ways to raise funds and assure donors that their charitable dollars are being used effectively" (Charles & Kim, 2015, p. 867). In a survey of 259 social service nonprofits measuring how they most frequently used outcome data, reporting to funders and obtaining new funding were two uses most often reported by respondents (Lee & Clerkin, 2017). Nonprofits must produce promised outcomes to maintain existing donor funding and to compete for new donor funding opportunities.

**Coaching challenges effect on societal relationships.** When financial coaching clients fail to progress towards financial stability, it negatively impacts the nonprofit's relationship with societal stakeholders. Society in general perceives nonprofits will work to accomplish their stated missions. Nonprofits have an ethical obligation to demonstrate their "economic, and social

impacts in the communities they serve precisely because of their promise to serve the public good" (Jones & Mucha, 2014, p. 1465). When nonprofits fail to positively impact the lives of their underprivileged clients as expected, they risk losing society's trust and appearing illegitimate (Bryce, 2007). Loss of public legitimacy and trust can cost nonprofits valuable community partnerships, funder relationships, and even clients.

**Coaching challenges effect on nonprofit resources.** Additionally, when financial coaching clients fail to produce positive financial behavior changes, it portrays an ineffective use of limited resources held by small, community-based nonprofits (Norris-Tirrell, 2014). These nonprofits possess low organizational capacity and depend heavily on volunteers to serve their clients and facilitate programs. A survey of 313 community-based nonprofit food pantries measured their organizational capacity, which was definitively represented by whether they had to turn clients away because of inability to service them for any reason. Over 50% of respondents reported turning clients away at some point due to lack of staff to service them, running out of food, or encountering individuals outside their community service area. Lack of capacity in community-based nonprofits does not lessen the demand for their services. Even with financial support from funders, most community-based nonprofits are unable to assist all individuals seeking their help (Paynter & Berner, 2014). The nonprofit that devotes scarce resources towards clients that fail to produce positive behavior changes, portrays an ineffective use of financial and human resources.

**Financial coaching and behavior economics.** Behavior change has been established as a component of financial capability, which is critical to helping the poor forward financially (Delgadillo, 2014a; Sherraden et al., 2015; Xiao et al., 2014). Clients of community-based social service nonprofits show a tendency to not follow-through on demonstration of positive behavior

change during financial coaching (Lienhardt, 2017). This failure suggests it is helpful to explore measures that can effectively motivate and engage clients during coaching and positively influence their behaviors. This study explored literature-based behavior economic strategies expected to improve outcomes for financial coaching clients.

#### **Behavioral Economics**

As a theoretical underpinning, the field of behavioral economics offers a promising set of relatively recent factors that could be expected to make a meaningful difference in poverty client financial outcomes if applied. The study attempted to capture the essence of those factors and incorporate them into a financial coaching model. This section explains briefly the nature of the factors and previous findings involved.

**Behavior economics defined.** Behavioral economics as a field of study, combines psychology and economics to analyze and predict behavior resulting from the interactions that occur between consumer behaviors and the economic or financial context in which those behaviors occur (Thaler, 2016). Richard Thaler, an economist who is considered the founder of behavior economics, defined the field as a "mixture of psychology and economics" (p. 1577). In reference to the work of Thaler, The Royal Swedish Academy of Sciences refers to behavior economic as the incorporation of psychologically realistic assumptions into analyses of economic decision-making (Grune-Yanoff, 2017; Guillemette, 2017). Goyens (2018) described behavior economics as a powerful tool that can used in nudging people to make healthy, sustainable and cost-conscious choices. Behavior economics is about the psychology associated with making decisions and exploring the effect those decisions have on a financial context. These definitions of behavior economics address human behavior and decision making as key components. An important part of understanding behavior economics is appreciating why, as well as how the field has evolved over the last three decades.

Neoclassical economic theories of human behavior. Neoclassical theory of economics is based on models of rational behavior of human agents referred to as Homo economicus (Calnitsky & Dupuy-Spencer, 2013; Thaler, 2016). Neoclassical economic theory of financial market equilibrium is based on assumptions of micro-level or representative agent financial behavior in the markets. Those assumptions include the ability of all humans to consistently make rational decisions that optimize their personal utility in each situation. Other assumptions theorize that all humans possess an unbiased belief system and the primary motive for making any choice is self-interest (Calnitsky & Dupuy-Spencer, 2013; Thaler, 2016). Thaler (2016) described an economist that subscribes to the neoclassical economic theory of human behavior as someone who studies "Econs in an abstract economy rather than Humans in the real one" (p. 1578). Thaler (2016) proposed that neoclassical theory does not meet the needs of behavioral economics because they each have very distinct goals: "to characterize optimal behavior and to predict actual behavior" (p. 1577). Behavioral economics seeks to develop a more realistic picture of the human decision-making process as it relates to human behavior in various settings, including health, financial, or work-related (Thaler & Sunstein, 2009a). In the context of dealing with low-income individuals and vulnerable populations such as the homeless, it must also be recognized that economic crisis and lack can affect an individual's ability to prioritize goals and make good financial decisions leading to positive financial behaviors (Dickerson, 2016; Gennetian & Shafir, 2015).

**Past researchers in behavior economics.** Psychologists Daniel Kahneman and Amos Tversky, and economist Vernon Smith, were early pioneers in behavioral economics (Altman,

2004). Both Kahneman and Smith received the 2002 Nobel Prize in Economics for their contributions to the field. Kahneman and Tversky framed the prospect theory. In contrast to neoclassical economic theory, the prospect theory posits that human decisions are not always optimal and human behavior, especially related to risk, can be influenced by the way choices are framed or presented. The theory suggests that people possess a higher sensitivity to potential losses versus potential gains (Levy, 1996).

Kahneman (2011a) employed the use of System 1 and System 2 similar to the Automatic and Reflective systems used by Thaler and Sunstein (2009a) to refer to the brain's dual modes of thinking. System 1 acts quickly, effortlessly, and involuntarily when used by humans to make decisions. Some examples of System 1 use include completing a phrase or answering a simple math equation. System 2 is slow, deliberate, and must be used for activities that require mental effort. Kahneman (2011a) listed two examples where System 2 would be used is the monitoring of our own behavior in a social setting to gauge whether it is considered appropriate and comparing two similar consumer products for value. Humans have a limited amount of attention available to distribute to various activities and sometimes preoccupation with a task can cause us to ignore obvious stimuli in our environment. Kahneman (2011b) offered "we can be blind to the obvious, and we are also blind to our blindness" (p. 24). System 2 is characterized by laziness and therefore people tend to rely heavily on their System 1. This is important to understanding why financial coaching clients who may be preoccupied because of financial crises or busy schedules may tend to make gut financial decisions using their System 1, which may not end up being in their best financial interest. In this case, the use of behavior economic "nudges" promoted by Thaler and Sunstein (2009a) may help to move the client towards a choice that will yield a positive expected outcome.

Thaler is also considered a prominent figure in the development of the field of behavioral economics and referred to by some as the father of the field of study (Barberis, 2018). Thaler was instrumental in integrating his field of economics with the field of psychology, receiving the 2017 Nobel Prize for his work over the last 35 years (Grune-Yanoff, 2017). Thaler (2016) proposed that the growth of behavioral economics since the 1980s cannot accurately be considered as the beginning of a revolutionary way of thinking about economics. It could be argued that this shift in the economic model surrounding individual behavior and decision-making is a return to the thought processes of early twentieth century economist like Irving Fisher and John Keynes. Thaler (2016) based much of his work on the findings of Kahneman and Tversky (1979) and their prospect theory. Levy (1996) supported this theory by offering that people are more responsive to "gains and losses rather than levels of wealth and welfare" (p. 180). In the early 1980s, several economists, including Thaler, began to reject the assumptions that all individuals are rational agents and make decisions based on expected utility as predicted by neoclassical economic models (Thaler, 2016).

As Thaler continued to conduct research on human economic behavior, his findings continued to contradict the predictions of traditional economic theory, especially when it came to theories associated with human risk-taking (Barberis, 2018). Thaler conducted experimental research that explored the values people are willing to assign certain objects to their gains and losses. His experiments produced what is known as the endowment effect. Barberis (2018) offered that the endowment effect is based on Thaler's finding that "the amount people are willing to pay for an object of economic value is much lower than the amount they are willing to accept in order to give the object up" (p. 663). Thaler was able to use the concept of loss aversion as presented in Kahneman and Tversky's (1979) prospect theory to explain the phenomena behind the endowment effect. Loss aversion basically posits that people dislike suffering losses. They hate losing something more than they love gaining something (Thaler & Sunstein, 2009a).

Thaler's most infamous experiment related to the endowment effect was documented in work he co-authored with Kahneman and Knetsch in 1990 (Kahneman, Knetsch, & Thaler, 1990). The experiment involved giving mugs to only half of the experiment participants. Those with mugs were asked to define the price at which they would be willing to give up their mug and those without mugs were asked to define the price they were willing to pay to receive a mug. The findings of the experiment once again supported the fact that human financial choices or behaviors do not always align with neoclassical theories of financial human behavior, especially when it comes to risk. The average amount mug owners were willing to accept to give up their mug was twice as much as non-mug owners were willing to pay to receive a mug. Research on the endowment effect led to the creation of other behavioral-based models centering on riskless and risky choices (Barberis, 2013).

**Dual-processes cognitive theories and human behavior.** Alós-Ferrer and Strack (2013) offered that dual-process theories "can deliver important insights on human behavior in economic contexts" (p. 1). There is a plethora of these theories that are known by different system names: automatic and reflective, controlled and automatic, cold mode and hot mode, myopic and forward-looking, to name a few (Brocas & Carrillo, 2014; Thaler & Sunstein, 2009a). Each theory explains the basis for human behavior based on the brain being made up of two separate systems that approach the thinking process in their own distinct manner. The automatic system is fast and intuitive and can be considered as your gut instinct, while the reflective system is slow and controlled and can be considered your conscious thought process.

Thaler and Sunstein (2009a) offered that there are advantages to both systems. While your gut instinct is usually right, it can also become the source of many errors because of the tendency to rely on it too much. Because the reflective system is slow and requires time to make deductions, it is not advantageous in situations where time is essential. Instead, people tend to use rules of thumb or heuristics to make decisions.

Heuristics. Psychologists Amos Tversky and Daniel Kahneman were instrumental in research conducted on the use of heuristics or rule of thumbs in the human decision-making process (Thaler & Sunstein, 2009a). An example of a heuristic is anchoring. This is a rule of thumb process where you start with an anchor, for example a number, and adjust the number in the direction your thought process tells you is most appropriate in answer to a question asked or an estimate you are asked to make. Your answer is first anchored on information you feel you do know and then adjusted accordingly to arrive at a final answer. The example was given of guessing the population of a city. You might compare that city to one whose population you already know. After determining which city is bigger and thus may have the bigger population, you adjust your answer up or down accordingly. Thaler and Sunstein (2009a) advised people often use the rule-of-thumb method of decision-making because they do not always have time to reflect on the choices being made. This quick method of decision-making is not always reliable.

**Choice architecture.** Choice architecture involves organizing or preparing the setting in which people make decisions. A choice architect is defined as the person who has the responsibility for creating this decision-making environment (Thaler & Sunstein, 2009a). Munscher, Vetter, and Scheuerle (2016) offered that choice architecture focuses on behavior change rather change in attitude or belief. While it is important to allow the individual the freedom to make a choice, Thaler and Sunstein (2009a) advised it is nearly impossible to avoid

influencing those choices in some way, especially when the individual is required to make a choice. The example was given of open enrollment for an organization's medical insurance. Whether the decision is to change medical options or keep the same options as the previous year, employees must make a choice. How the choice architect designs the enrollment process can directly or indirectly affect employee choices and the outcomes of the situation. It may be necessary to nudge or prod the employee to take an action by using reminders, or the choice architect may need to set default options to help those employees who may forget to act during the enrollment period (Thaler & Sunstein, 2009a). The concept of "nudging" is presented as a method for designing any program or initiative where its participants need to make choices or decisions. Nudging is a tool that can be used during choice architecture.

**Nudging.** Research presented by Thaler and Sunstein (2009a) in their book *Nudge: Improving Decisions about Health, Wealth, and Happiness*, offered strategies framed around behavioral economics that are testable for influencing human behavior. The behavioral economic tool of nudging suggests at times people need to be gently pushed or guided towards making an expected choice leading to an expected outcome.

When are nudging strategies most useful? When individuals are not familiar with the outcomes or feedback associated with an option, it may be beneficial to use a nudge. Thaler and Sunstein (2009c) gave the example of an individual taking a long route home each day. If the person never receives feedback on other available options, they may never learn that there is a shorter route home. In the setting of financial coaching, if a client never receives feedback to know there is a better way to meet their financial crises through budgeting and regular saving, they may continue to deal with financial situations in ways that have not worked in the past. In this situation, clients may benefit from a nudge towards saving and budgeting. Another instance

where a nudge might be welcomed is when an individual has difficulty interpreting how choices they are faced with will subsequently affect their life experiences. The example is given of having to choose a mutual fund to include in one's retirement portfolio. The average person, and even some individuals versed in investments, might have difficulty comparing the different types of funds available. Thaler and Sunstein (2009c) offered "when people have a hard time predicting how their choices will end up affecting their lives, they have less to gain by numerous options and perhaps even by choosing for themselves" (p. 76). A coaching client may have always been told that they need to save for retirement, but not having experienced the choice before, and not understanding all the options available, may still not be able to translate how their choice could affect their future life experience. In this case, a nudge in the right direction might be useful and even necessary.

When individuals are busy or preoccupied, they may begin to rely on rules of thumb or heuristics to make decisions instead of taking the time to reflect on a choice. The tendency to over-rely on the automatic system can mean individuals do not always make the best possible decisions. Therefore, Thaler and Sunstein (2009b) suggested it is important to keep this realization in mind when designing settings in which individuals must make choices. Choices should be presented in a manner that nudges individuals to make the ones in their best interest. This study explored how nudges or cues can be utilized to move financial coaching clients toward expected behaviors leading to successful expected program outcomes. The behavior economic cues of priming and framing were tested to determine their influence on financial coaching clients' behaviors connected with becoming banked or saving.

**Priming.** Priming is a behavioral economic strategy that has been used to prove that when individuals are asked their intentions toward taking a certain action, they can be triggered

to complete that action. In a study demonstrating the powerful effect of questions of intent on human behavior, 40,000 individuals were asked about their intentions to purchase an automobile. The result was a 35% increase in automobile purchases among the sample group within the six months following the measurement of their intent (Morwitz, Johnson, & Schmittlein, 1993). Dholakia and Morwitz (2002) were able to produce similar research results by measuring customer satisfaction versus intent. The study used customer satisfaction surveys to successfully predict the likelihood of future purchases by customers. Thaler and Sunstein (2009b) referred to this as the "mere measurement effect" which suggests "when people are asked what they intend to do, they become more likely to act in accordance with their answers" (p. 70). Bertrand, Karlan, Mullainathan, Shafir, and Zinman (2006) referred to this psychological phenomenon as behavior prediction or the power of suggestion and offer that "people's prediction of their own future behavior, although inaccurate, can affect their subsequent behavior" (p. 15). The behavior economic strategy of priming or mere measurement, has been used successfully in several types of environments, including financial, political, and health-related (Bertrand et al., 2006; Fundenberg, 2006; Levav & Fitzsimons, 2006). Interestingly, Dholakia and Morwitz (2002) offered evidence that any potential behavior change gain from the mere-measurement effect within a financial service environment peaks around six months following survey of the individual's intent. This observation can prove helpful in helping financial coaching clients to set timelines for reaching their stated goals connected to saving and becoming banked.

Cohn and Marechal (2016) further offered that priming involves placing subtle cues within a person's social environment that can then trigger certain mental concepts. The activation of these triggers can influence the person's subsequent behavior. An example of how priming works in this manner can be seen in a study conducted by Berger, Meredith, and Wheeler (2008) that proved environment can affect choices. Respondents were randomly selected to cast their votes in different types of buildings. Those who were primed were assigned to cast their votes in a school building. The controlled study predicted that individuals casting their vote in a school environment versus another type of building, were more likely to vote in favor of an education-related initiative on the ballot. The results showed 63.6% of respondents in the experimental group who voted at a school supported the educational initiative versus 56.3% in the control group who did not vote at a school. Cohn and Marechal (2016) acknowledged one area of concern surrounding the use of priming in research is that "pinning down exactly which mental concept has be activated by a particular prime has proven elusive and challenging, making it difficult to definitively establish the exact cause of a behavioral change" (p. 19). They suggest conducting independent replications of priming research studies using controlled conditions to rule out non-causal factors for behavior change.

**Framing.** Framing is a behavior economic strategy that suggest the way information is offered or phrased to individuals affects their associated choices (Thaler & Sunstein, 2009b). The example is given of an individual suffering from a disease that has the option of having an operation to get better. If the doctor offers that 90 out of 100 patients who have this operation are alive after five years, it may be more comforting than if the doctor states that of the 100 patients that have this operation, 10 are dead after five years. Even though both statements are saying the same thing, the way they are framed can have a different effect on the decision made by an individual as a result. Framing works because individuals do not take the time to let their brain's Reflective System reframe the information to produce a different outcome. Thaler and Sunstein (2009a) suggested that people often make passive decisions by using rule of thumbs stored in their brain's Automatic System that often are not reliable. They further attributed this tendency

to the lifestyle "of busy people trying to cope in a complex world in which they cannot afford to think deeply about every choice they have to make" (p. 48). This implies individuals are nudgeable. Framing is said to be a powerful nudge and should be selected and used with caution.

It can be argued that the use of priming, framing, and other behavioral economic nudges is deceiving an individual into taking a certain action (Thaler & Sustein, 2009b). Consider that the nudge of priming involves the Automatic System of the brain (Brocas & Carrillo, 2014; Thaler & Sustein, 2009a). Latham (2016) offered that the Automaticity Model formed by Bargh (1994) in The four horsemen of automaticity: awareness, efficiency, intention, and control in social cognition, categorized a prime as an external cue placed in an individual's environment that in turn activates an already existing mental representation stored in their memory. If the mental representation activated is at the time motivationally relevant to the individual (e.g., the cue encourages saving and the individual is already motivated to save for a goal such as a home), it will prompt automatic pursuit of the goal or behavior minus the deliberative use of time and cognitive resources needed for pursing a consciously set goal. Thaler and Sunstein (2009a) explained that this more efficient use of time and cognition is what most individuals already utilize with heuristics or rules of thumb in decision-making. Latham (2016) went on to share that the Automaticity Model "states that the pursuit of goals that are primed as well as those that are consciously set follow the same processing stages, predict the same phenomena, and produce the same outcomes" (p. 85). Therefore, it can be reasoned that the use of a nudge such as priming serves to give a person a prod towards what is already a subconscious representation or intention.

## **Program Evaluation and Responsible Leadership**

Responsible leadership is characterized by acting in the best interest of an organization's stakeholders. Waldman and Galvin (2008) suggested an organization's stakeholders can include

customers, community members, employees, volunteers, and board members. The needs and interests of each stakeholder should be taken into consideration when leadership makes organizational decisions. The responsible leader should be concerned with creating value for each stakeholder and efficiently and effectively utilizing organizational funds (Waldman & Galvin, 2008). For the community-based social service nonprofit, creating value for client stakeholders means providing programs that can meet the varied financial and social needs of the poor that they serve (Beverly, 2001; Huang et al., 2016; Jindra & Jindra, 2016). Financial coaching programming holds promise for meeting the varied needs of the poor (Collins et al., 2013; Sherraden et al., 2015; Theodos et al., 2015). The effective use of organizational funds signifies ensuring that existing programs are meeting the outcomes expected by grantors and funders (Chen, 2015; McDowell et al., 2013).

To create stakeholder value, organizational leaders must consistently make decisions surrounding the effectiveness and viability of their organization's programming. They must decide which programs need re-designing, and which may not be meeting client or organizational needs and therefore need to be abandoned. As mentioned, these must be sound decisions as they can affect both internal and external stakeholders of the organization's open system (Harrison & Shirom, 2008). Guerra-Lopez (2008) offered that "effective leaders are capable of making sound decisions based on sound data" (p. 4). Applied research studies can be an avenue for obtaining sound data with which to make informed decisions. Scientific research seeks to find out what works and what does not work. Guerra-Lopez (2008) referred to research as a "systematic process of inquiry, with the purpose of finding, interpreting, and updating facts, events, behaviors, and theories" (p. 14). This research study proposed to evaluate the effectiveness of a traditional financial coaching model versus an experimental coaching model to determine what impact they have on client-follow through in financial coaching. This data will be helpful in allowing the leadership of the Moeville Mission Center (pseudonym). to re-design their existing financial coaching program to promote behavior change in clients in connection with financial goals such as becoming banked and increasing savings. This research will also be helpful to other community-based nonprofits as they strive to implement new financial coaching programs or improve existing ones.

## Conclusion

Benevolence-based assistance fails to move individuals towards self-sufficiency because it lacks a holistic, relational approach needed to help individuals achieve financial capability and change financial behaviors leading to financial wellness (Sherraden et al., 2015). Financial coaching is a means to give the poor financial capability because its structure addresses the knowledge piece, access to financial tools such as credit building products needed to build assets, and helps addresses client specific challenges to moving forward including employment, savings skills, credit, and health issues (Lienhardt, 2017; Maud, 2016; Theodos et al., 2018). Financial coaching programs also face challenges when clients fail to produce the behavior changes that can lead to financial stability. This lack of follow-through can be especially challenging for the small community-based social service nonprofit because client outcomes can affect their viability connected to donor funding (Charles & Kim, 2015; McDowell et al., 2013), stakeholder relationships (Bryce, 2007; Jones & Mucha, 2014), and strain on their organizational resources (Norris-Tirrell, 2014).

In last decade, behavioral economics theories have emerged that study the behavior of clients in a financial setting and what motivates those behaviors. Behavior economic researcher Thaler and Sunstein (2009a) offered behavior economic strategies that can be used to positively

influence behaviors by making gentle nudges or changes to an individual's decision-making environment. Both the prospect theory of human behavior and the many dual-process cognitive theories of decision-making suggest humans do not always make the best decisions, especially related to risks. Humans are prone to use the automatic side of their brain, or their gut instinct in making choices, because it is quicker than their brain's reflective side (Kahneman, 2011b, 2012; Thaler & Sunstein, 2009a). Over reliance on the Automatic System of the brain or System 1 can lead to many errors in decision making which is why individuals also tend to employ "rules of thumb." Making even small changes in the environment or context in which individuals make decisions can be effective in influencing them to change associated behaviors (Thaler & Sunstein, 2009a). Financial coaching seeks to change the financial-related behaviors of the poor to move them towards self-sufficiency (Delgadillo, 2014a, 2015; Delgadillo & Britt, 2015). This study sought to employ behavior economic strategies that include priming and framing to encourage positive behaviors in financial coaching clients associated with becoming banked and increasing saving.

#### **Chapter 3: Research Methods**

The problem addressed in this study identified a lack of financial coaching client followthrough leading to goal completion and behavior change. The problem can be further expressed as a lack of understanding and utilization within the financial coaching community of behavior economic influencers that can promote positive program outcomes. This problem must be addressed because it threatens the viability of community-based nonprofits by impeding the receipt and maintenance of outcome-based program funding (Charles & Kim, 2015; McDowell et al., 2013), by negatively impacting relationships with societal stakeholders (Bryce, 2007; Jones & Mucha, 2014), and by presenting challenges to scare organization resources (Norris-Tirrell, 2014).

The purpose of the study was to determine significant differences among specified measurable outcomes in financial coaching effectiveness between a field experimental group, which received a model that adapts key features of behavioral economic-based coaching, and a control group which utilizes traditional financial coaching features. The research questions sought to find comparative differences of this aggregate model applying the behavioral economic factors on two specific measurable client financial outcomes. Stated again, the research questions and hypotheses for this study were:

**RQ1**: To what extent, if any, will there be a statistically significant difference between increased savings outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?

**Null hypothesis (H**01): The null hypothesis for H1 states there will be no statistically significant difference between increased savings outcomes of financial coaching clients

placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ).

Alternative hypothesis (H<sub>1a</sub>): The alternative hypothesis for H<sub>1</sub> states there will be a statistically significant difference between increased savings outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model  $(\overline{x}_1 \neq \overline{x}_2)$ .

**RQ2**: To what extent, if any, will there be a statistically significant difference between banked status outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?

**Null hypothesis (H02):** The null hypothesis for H2 states there will be no statistically significant difference between banked status outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ). **Alternative hypothesis (H2a):** The alternative hypothesis for H2 states there will be a statistically significant difference between banked status outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in a traditional financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ).

This chapter provides a description of respondents (as part of the organization), procedures and research design, instruments (coaching program ingredients as the independent indicators of the dependent variables), method of data analysis, and a final section to address any ethical considerations, assumptions, limitations, and delimitations of this study. This section concludes with a brief summary of the study's purpose, and elaboration on how the design and research methods that were employed aided in accomplishing the study's purpose.

## **Respondents for the Study**

To best understand the nature of the sample, it was important to outline the organization from which the sample was developed.

**Background of the organization.** The Moeville Mission Center is a community, faithbased nonprofit, serving residents of Moeville Independent School District in Moeville, Texas. Moeville is categorized as a suburban city. The organization employs a staff of 30, but also utilizes and depends on over 500 volunteers to help provide services to over 2000 clients each year. The program staff consists of a Senior Program Director, a financial coaching program manager, a financial coach, and a program assistant. The program manager is trained in financial coaching and allocates 60% of the work week to coaching clients, and 40% to managerial duties. The Senior Program Director and program assistant are also trained in financial coaching and can provide coaching services for clients on an as-needed basis. The Moeville Mission Center's mission focuses on moving clients out of crisis and helping them to become financially stable and self-sufficient. The organization seeks to accomplish their mission by providing services to help clients achieve relational (includes spiritual), financial, and physical health, which looks different for each person.

**Program model.** The Moeville Mission Center's programming is structured around the Working Families Success (WFS) model. This model is being studied and implemented by several community-based nonprofits in the Dallas-Fort Worth (DFW) area under the guidance of Communities Foundation of Texas (CFT; 2016). These nonprofits receive ongoing support as

they work to build capacity around WFS model implementation in their organization. The Moeville Mission Center was chosen to become a WFS cohort member in 2017 and is now one of the 17 non-profits that make up the WFS Network in the DFW area.

The WFS model is structured around programming that bundles three client offerings: employment services, income supports, and financial coaching. Moeville Mission Center income support services can be either monetary or non-monetary in nature, and include free income tax preparation, rental and utility assistance, or food support through the food pantry. Employment services could include assistance with obtaining a GED, a short-term certification, or help with job leads and placement. Financial coaching covers credit building, saving, debt management, access to financial services, asset building, and money management skills. The WFS model is a framework for nonprofits to use in delivering services to their clients. The WFS model promotes an integrated services approach where clients can get their needs within the three categories met in a more supportive manner. The CFT explained that "WFS is built on the concept that nonprofits offering integrated services in an intentional and thoughtful way helps clients overcome barriers and advance economically" (CFT, 2016, para. 2).

**Program recruitment and intake.** Clients seeking services from the Moeville Mission Center can come from several sources: the 211-information service, referrals by family members and friends, the local school district, surrounding faith-based and non-faith community organizations, or community outreach events. At their initial session, each client must complete an intake form that covers their income, expenses, banking status, employment status, and household size. They also have the chance to qualify for free use of our food pantry which is based on income. At this initial session, the coach also works with the client to complete an income and expense budget and to list their desired goals. Because of the amount of information collected during the initial visit, these sessions are typically longer than a regular session, which ranges anywhere from 45 minutes to one hour. While some sessions are conducted by phone, the typical mode utilized by coaches for conducting financial coaching sessions is in-person.

**Target respondent population demographics.** The target audience for Moeville Mission Center's programming are low-to-moderate income Moeville residents whose income falls within 185% of the Federal Poverty Level (FPL) or below. For a family of four (2 adults and 2 children), in 2017 that income level would be \$24,600 or below (HHS, 2017). The demographics for Moeville Mission Center clients across all programs are 90% female, 10% male, 47% Caucasian, 42% African American, 4% Asian and Middle Easterner, 1% American Indian or Alaska Native, and 6% other. Additionally, 30% of clients identify as being of Hispanic origin. The typical client is a single female parent with two or more children. Household income is 150% or below the FPL.

The number of Moeville Mission Center clients participating in financial coaching at any given time fluctuates monthly and is dependent on how many existing coaching clients persist in their monthly sessions and how many new individuals during the month enroll in financial coaching. Typically, that total number is approximately 60 to 100 per month. Thus, the study population included all individuals visiting the Moeville Mission Center for assistance whether monetary or non-monetary within a three-month period, and who would also be eligible to participate in the financial coaching program.

**Sample demographics.** Demographics for the study sample group (Table 1) mirrored existing demographics for the Moeville Mission in several categories. Study sample gender consisted of 53 females and 17 males representing 76% and 24% of the respondents, respectively. Race for the sample group was 41.4% African American (AA), 50% Caucasian,

4.3% Native American, and 1.4% Asian Pacific, with 2.9% electing not to respond to the question. Also, 21.4% of all respondents identified as being of Hispanic origin. Age responses were grouped into ranges. For example: 20 and under; 21-30, 31-40. The average age range for the sample group was 31-40 with a median age range of 41-50.

# Table 1

Variable	N (70)	f	Percent	<b>Cumulative Percent</b>
Gender	Female	53	76%	76%
	Male	17	24%	100%
Race	African American	29	41.4%	41.4%
	White/Caucasian	35	50.0%	91.4%
	Asian	1	1.4%	92.8%
	Native American	3	4.3%	97.1%
	Prefer Not to Say	2	2.9%	100.0%
Hispanic				
Origin	Yes	15	21.4%	21.4%
	No	55	78.6%	100.0%
Education	Less than HS	12	17.1%	17.1%
	HS/GED	24	34.3%	51.4%
	Vocational	8	11.4%	62.9%
	Some College	7	10.0%	72.9%
	Associates	5	7.1%	80.0%
	Bachelors	10	14.3%	94.3%
	Graduate	4	5.7%	100.0%
Session				
Mode	In-Person	27	38.6%	38.6%
	Phone	21	30.0%	68.6%
	In-person + Phone	12	17.1%	85.7%
	Phone + Email	4	5.7%	91.4%
	Skype/FaceTime	0	0.0%	91.4%
	Email	6	8.6%	100.0%

# Study Sample Demographics

*Note*. N = 70.

**Sample size.** A cluster sample with random assignment was applied as the sampling design for this study because the list of all possible Moeville Mission financial coaching clients that could comprise the population was unavailable at the beginning of this study. This is

because not all clients coming to the Moeville Mission Center are candidates for financial coaching. For example, some individuals may request employment services only, while others may be homeless and need to be connected to external resources to meet their housing needs (the Moeville Mission Center currently does not offer a housing program). Therefore, the characteristics of the clients had to be identified first to determine if they were members of the study population. Creswell (2014) noted that cluster sampling is best used when it is not practical or feasible to compile a list of all individuals in the population. In this case, after identification as part of the population, each client was randomly assigned to either the control or experiment groups.

The final sample size for this quantitative research design was 70, which met a minimal size and power requirement. Using a post-trial means analysis revealed the typical power of 80% crossed by an alpha of .05 confidence yielded a need for a sample size of 70. Using the sample proportion differences technique, again with a confidence interval of .05 and an 80% power rule of thumb with Cohen's *d*, the sample size requirement was 64 ("Sample Size Calculator," 2019). **Procedures** 

**Respondent recruitment.** Participants in this research study were recruited from all clients coming into the Moeville Mission Center seeking financial assistance and/or assistance with issues that would fall under financial coaching such as budgeting, improving credit, or paying down debt. This also included individuals who were coming to access the Moeville Mission's food pantry. This did not include individuals coming strictly for employment services such as job leads.

**Respondent compensation.** All study participants were offered compensation in the form of "Mission Market Money" to be distributed at the conclusion of the three-month study.

These are simulated dollars normally given to financial coaching clients as incentive for being on time and attending their scheduled coaching sessions. In the case of this study, participants were awarded \$10 in Mission Money per coaching session attended during the study, up to a total of \$30 in Mission Money. Study participants were able to use the Mission Money to purchase special items in the Moeville Mission Center's food pantry, which included small dollar gift cards, household cleaning products, or similar items. The participant was also able to elect to use the "Mission Market Money" towards extra food shopping visits at the food pantry. If the participant chose to withdraw from the study prior to completion, they still received \$10 in Mission Money for each session they attended prior to withdrawal. The compensation was tied to study participation and not to whether the participant reached their financial goal.

Assignment of clients. Clients visiting the Moeville Mission Center for financial assistance were directed to one of three financial empowerment coaches that have received formal training in financial coaching. The coaches averaged seven years of experience in coaching and case management in a social service environment. Clients typically met with a financial coach to receive assistance in the form of food, utility or rental payment, paying for medically prescribed medications, or assistance with an immediate crisis such as disconnection of utilities. Clients also came to the Center strictly for financial coaching. Clients decided whether they wanted to participate in financial coaching during the initial assistance appointment. Any client data collected by the financial coach during the initial and subsequent meetings was entered into Change Machine, a software licensed by the Financial Clinic (Change Machine, 2019). Change Machine also acts as the Moeville Mission Center's coaching platform as it contains an area for coaches to provide clients with tip sheets covering the categories of personal taxes, credit and debt, savings, goal setting, budgeting, and asset building. The Moeville

Mission Center's Sr. Director of Community Impact uses Change Machine for monthly reporting of clients served, number of client goals reached, number of sessions attended per client, and client assets.

For the purposes of the study, as a client expressed interest in financial coaching during the initial assistance meeting, they were given the opportunity to consent to participation in the research study. Clients were then asked to complete a research study consent form (Appendix I). The coach retrieved the next available financial coaching enrollment packet from the agency's intake staff. The packets were labeled prior to the start of the study with C (control) or E (experimental) and placed in alternate order effectively allowing for random placement of the client in either group 1 or group 2. Each participating client was then administered a pre-survey in the form of the Texas Financial Education Endowment (TFEE) Pre-Survey (Appendix A). Both groups were issued the same TFEE Pre-survey. The TFEE survey is presently used by the Moeville Mission Center and given to all new clients across programs to track intake data on initial visits and as a follow-up to track changes in client behavior and attitude. This TFEE survey was used in the study to addresses an individual's banking and savings status and their attitude towards addressing and improving their financial issues over time. The TFEE pre-survey did not address a client's baseline savings balance.

The Moeville Mission Center's Intake Form was used to record the client's baseline savings balances. Savings baseline study data were collected only for those clients who already had a savings account and whose goal was to increase savings or for those clients whose goal was to open a savings and increase the savings in their new account. The intake forms were marked as either C for control group (Appendix C) or E for experiment group (Appendix B) and distributed according to group assignment. The experiment groups' intake form contained behavior economic nudges gauging client intent to become banked or increase savings. Those nudges were intended to prod the client to be specific about their intentions to save or become banked by asking them to list the amount they intended to save, a date for opening a bank account, and the name of the financial institution where they intend to open an account. This was part of implementing the "mere measurement effect" that Thaler and Sunstein (2009b) suggested nudges an individual to follow through on the intentions they have stated. The experiment group's intake form also contained framing cues that indicated the advantages of saving. Each group was also able to indicate on their respective intake form their preference for mode of conducting the financial coaching session.

**Research study timeline**. The research intervention took place over a three-month period (13 weeks). Clients were expected to meet with a financial coach at least three times during the study period. The coaches attempted to allow a minimum of three weeks and a maximum of 30 days between client coaching sessions.

**Design factors.** This study applied a field quasi-experimental design with random assignment. A between-group analysis method compared an experiment and a control group nested in a pre-survey, post-survey design. Therefore, quantitative data were collected in two phases, using pre-survey and client intake forms before the intervention started and again at the end of the intervention using a post-survey. The pre-survey documented the clients beginning banked status and savings balance for both groups. At the end of the intervention, both the control and experiment groups were administered a post-survey that was identical in nature. The post-survey was used to determine the end-of-study banked status and savings balance for all clients. The results were used to determine what impact, if any, the independent variable

conditions of traditional coaching versus behavioral economics coaching had on the dependent variables of banked status and increased savings.

Overall, Creswell (2014) noted the value of using a random assignment design in that random group assignment serves as a form of control that adds validity to the study and allows the experimenter to demonstrate "whether it is the treatment and not other factors that influence the outcome" (p. 156). Creswell (2014) indicated the impact of surveys in helping to inform how research can "generalize from a sample to a population so that inferences can be made about some characteristic, attitude, or behavior of this population" (p. 157). Therefore, a quantitative research approach utilizing a survey design was the optimal choice for this study because this field experiment sought to demonstrate a program intervention that could be generalized to similar community-based social service nonprofits. The study results can be helpful to implementing or restructuring an outcome-based financial coaching program. Another reason that the chosen design was appropriate for this study is that quantitative research typically focuses on prediction of outcomes or the differences between study groups (Schreiber, 2017). This field study sought to compare the behaviors and outcomes of the control and experiment groups to determine what behavior economic strategies could influence the financial behaviors of financial coaching clients.

The clients in each group worked with their coach in the initial session to create a budget reflecting current expenses and income. The budget was used in helping the client determine how they could reach their financial goals, for example: increasing savings, buying a home, or improving their credit. Most clients chose more than one goal meaning they chose additional goals not directly related to saving or becoming banked (e.g., debt reduction, pursuing education). If this was the case, the additional goals were addressed during coaching as well, but

savings and banking goals were given priority during the first three coaching sessions. The main difference between the traditional coaching model and the experiment coaching model was the amount of effort devoted by a coach to removing any obstacles to clients reaching their savings or banking goals (priming) and the cues (e.g., mere measurement, framing) placed in the coaching environment.

**Experimental group operational procedures.** Clients in the experiment group received traditional financial coaching services, but in addition they received targeted assistance that sought to utilize behavior economic strategies for promoting desired behavior change. It was expected that these behavior economic strategies would assist financial coaching clients in following-through on their savings and banking goals. For example, if the client's goal was to open a savings account, as part of the intervention the coach attempted to removes barriers by providing a list of banking options, including second chance banks. Coaches also offered to help clients become banked online if this was their preference, but the client felt less than proficient going through the online procedures. Thaler and Sunstein (2009b) shared "often we can do more to facilitate good behavior by removing some small obstacle than by trying to shove people in a certain direction" (p. 72). Similar intervention measures were taken for clients in the experiment group whose goals were to increase their savings. Following are detailed operational procedures by session for clients in the experimental coaching model.

*Becoming banked session one*. During session one the client's intentions for becoming banked were measured by priming based questions on the experimental intake form. The coach encouraged the client to work on their goal of becoming bank before they came to their second coaching session. The coach waited until session two to see if the priming cue was successful.

**Becoming banked session two**. During session two, the coach checked to see if the client was successful in becoming banked. If the client reached their goal, the coach documented the milestone in the client's file. To reinforce positive behavior, the coach presented the client with a certificate of goal completion to celebrate the milestone. The coach then proceeded to work with the client on their goal of increasing savings, if applicable. The client received a list of programs or applications that offer incentives for increasing savings. The coach waited until session three to see if the client reached their new goal of increased savings.

If the client was unsuccessful by session two in reaching their goal of becoming banked, the coach made note within the client's file. The coach held the client accountable by reminding them of their goal to become banked. The coach then shared with the client a list of local banks, credit unions, second chance, and online banks. This list provided addresses, contact numbers, websites, features, and enrollment instructions for each as applicable. Local credit unions and banks, and online banking products such as Chime Bank, are examples of options that were included on the banking list. The coach waited until session three to see if this nudge was successful.

*Becoming banked session three*. During session three, the coach checked to see if the client was successful in becoming banked. If the client had reached their goal, the coach documented the milestone in the client's file. To reinforce positive behavior, the coach presented the client with a certificate of goal completion that celebrated the milestone. The coach then proceeded to work with the client on their goal of increasing savings, if applicable. The client received a list of programs or applications that offer incentives for increasing savings. The coach waited until the end of the three-month study to contact the client to determine if they were successful in reaching their new goal of increasing savings.

If the client had not become banked by the third session, the coach once again held the client accountable by reminding them of their banking goal. The coach then offered to assist the client during the session with enrolling in a bank. If this session was being held by email, the coach offered to call or video conference with the client to walk them through the enrollment process. If the client declined this assistance, the coach made a note to check back by phone, email, or text at the conclusion of the study to determine if the client was able to become banked.

*Increasing savings session one*. During session one the client's intentions for increasing their savings balance was measured by priming-based questions on the experimental intake form. The client also set a dollar amount by which they intended to increase their savings (e.g., \$100, \$200, etc.). The client was also exposed to framing nudges on the experiment intake form that suggested savings can prevent the need to access predatory lending products such as payday and car title loans. The coach encouraged the client to work on their goal of increasing their savings before their second coaching session. The coach then waited until session two to see if the priming and framing cues were successful.

*Increasing savings session two*. During session two, the coach checked to see if the client was successful in increasing their savings. If the client was able to reach their savings goal, the coach documented this milestone in the client's file. To reinforce future positive financial behaviors, the coach presented the client with a certificate of goal completion to celebrate the milestone. The coach continued to work with the client on other goals they had set outside of saving. If the client increased their savings but did not reach their savings goal amount, the coach held the client accountable by reminding them of their goal. The coach and client discussed the benefits of savings. The coach then shared with the client a list of at least two applications or products that offer incentives for saving, such as SaverLife. The list provided websites, features,

contact numbers, and detailed enrollment instructions for each product as applicable. The coach offered the client encouragement to continue working towards completion of their goal before their next session. The coach waited until session three to see if the nudge was successful.

If the client was unsuccessful by session two in increasing their savings by any amount (did not reach savings goal), the coach made note within the client's file. The coach held the client accountable by reminding them of their goal. The coach and client discussed the benefits of saving. The coach then shared with the client a list of at least two applications or products that offer incentives for saving, such as SaverLife. The list provided websites, features, contact numbers, and detailed enrollment instructions for each product as applicable. The coach offered the client encouragement to work towards their goal of increasing savings before their next session. The coach waited until the third session to see if this nudge was successful.

*Increasing savings session three*. During session three, the coach checked to see if the client was successful in increasing their savings between sessions. If the client was able to reach their overall savings goal, the coach documented the milestone in the client's file. To reinforce future positive financial behaviors, the coach presented the client with a certificate of goal completion that celebrated the milestone. The coach then continued to work with the client on other goals they had set outside of saving. If the client increased their savings but did not reach their savings goal amount, the coach held the client accountable by reminding them of their goal. The coach discussed with the client any obstacles the client felt could prevent them from reaching the goal and ways to overcome those obstacles. The coach encouraged the client to continue working towards their goal. If the client was not already signed up for one of the savings incentive applications, the coach offered to assist the client with enrollment during this session. If this session was being held by email, the coach offered to call or video conference

with the client to walk them through the enrollment process. If the client declined this assistance, the task was assigned as homework. The coach then made a note to check back with the client by phone, email, or text at the conclusion of the three-month study to determine if they were successful in reaching their goal of increased savings.

If the client was unsuccessful in increasing their savings by any amount between sessions one and three, the coach once again held the client accountable by reminding them of their goal. The coach discussed with the client any obstacles they were experiencing to increasing their savings and what they could do to overcome those obstacles. If the client had not already signed up for one of the savings incentive applications, the coach offered to assist the client with signup during this session. If this session was being held by email, the coach offered to call or video conference with the client to walk them through the enrollment process. If the client declined this assistance, the task was assigned to the client as homework. The coach made a note to check back by phone, email, or text at the conclusion of the study to determine if the client was able to reach their goal of increased savings.

**Control group operational procedures.** The clients in the control group received traditional financial coaching services while working to reach their goals. These traditional coaching services included help with budgeting, or basic information on how to open a bank account. The financial coach did not offer clients in the traditional coaching group any targeted assistance with removing barriers to becoming banked or increasing savings. Following are detailed operational procedures by session for clients in the traditional coaching model.

*Becoming banked session one*. During session one the client's banking status was documented on their control group intake form. The coach assigned to the client as homework

the task of becoming banked. The coach proceeded to work on other client goals during the session as applicable. The coach waited until session two to see if the client was successful.

*Becoming banked session two*. If the client became banked by session two, it was documented in the client file and the coach moved on to the client's savings goal if applicable and employed the same procedure of assigning the goal as homework. If the client was unsuccessful by session two in becoming banked, for homework the coach had the client research banks and credit unions in the area that fit their banking preferences. The coach again assigned the client the task of becoming banked before their next coaching session.

*Becoming banked session three*. If the client became banked by session three, the coach moved to the client's savings goal if applicable and employed the same procedure of assigning the new goal as homework. If a client was unsuccessful by session three in becoming banked, for homework the coach had the client document the steps they would need to take to open a bank account or obtain second chance banking. The coach once again assigned the client the task of becoming banked before their next coaching session. At the conclusion of the study the coach checked back by phone, email, or text to see if the client was successful.

*Increased savings session one*. During session one the client's savings balance was documented on their control group intake form. The coach assigned the client homework of increasing their savings. The coach then proceeded to work on other goals during the session as applicable. The coach waited until session two to see if the client was successful.

*Increased savings session two*. If the client increased their savings by session two, this was documented in the client file. If the client increased their savings but did not reach the dollar amount of their savings goal, as homework they were to document the benefits of saving and work towards reaching their goal. If the client was unsuccessful by session two in increasing

their savings by any amount, they were given as homework the task of documenting the benefits of saving. They were expected to complete their goal before their next coaching session.

*Increased savings session three*. If the client increased their savings by session three, this was documented in the client file. If the client increased their savings but did not reach the dollar amount of their savings goal, or if the client was unsuccessful since session one in increasing their savings by any amount, as homework they were to document obstacles they were experiencing to saving and how they could overcome them. The coach then assigned the client the task of increasing their savings before their next coaching session. At the conclusion of the study the coach checked back by phone, email, or text to see if the client was successful.

#### **Study Measurements**

Independent variable: Treatment vs. control conditions. The study compared statistically significant differences, if any, in specific financial outcomes for two different financial coaching models: the traditional coaching model that was offered to coaching clients in the control group, and the treatment model that was offered to coaching clients in the experiment group. The traditional model as discussed earlier, contained basic client assistance with financial issues that are related to management of personal finances. The treatment condition of the financial coaching model utilized all components of the traditional coaching model with the added feature of behavioral economic factors considered as nudges. The literature defines nudges as cues placed in the environment that can gently prod an individual toward behavior that yields an expected outcome (Thaler & Sunstein, 2009c).

The treatment coaching model included two types of nudges: priming and framing. Priming is a behavioral economic strategy that suggests the mere measurement of an individual's intent to complete an action, can stimulate that action. Priming further seeks to encourage
behavior change by removing any small obstacles that may be standing in the way of the individual completing an action. Framing presents information in a manner that encourages individuals to make certain decisions or choices leading to specific behaviors. The treatment coaching model built on the notion of nudging through the behavioral economic concept of choice architecture and the dual process cognitive theory. Choice architecture involves the design or organization of the environment where humans make decisions or choices. Nudges are a type of choice architecture (Thaler & Sunstein, 2009c; Theodos et al., 2015; Vyvyan et al., 2014). Finally, the concept of dual-process cognition suggests humans possess two separate and distinct thought process systems of the brain, each with their own weaknesses and strengths. This theory explains that the automatic system is fast and intuitive and can be considered as your gut instinct, while the reflective system is slow and controlled and can be considered your conscious thought process. This information can be used to positively and successfully influence the decision-making process within a financial environment.

If the intervention financial coaching model performs as expected, clients should exhibit significant measurable improvement in financial behaviors as determined through specified outcome indicators. The application of this coaching model in one field experimental condition was compared with outcomes for those clients within a traditional financial coaching program that did not utilize any behavioral economic strategies. Client outcome data in the form of two specific financial outcomes were collected in the study.

**Dependent variables.** The study addressed two dependent variables. They are increased savings and banked status. *Increased savings* denotes the individual's success in improving the balance in their savings account held at a financial banking institution. For the purpose of this study a client's baseline savings balance could start as low as \$0. *Banked status* reveals an

individual's relationship with a banking institution. An unbanked individual does not have a checking or savings account at a federally insured institution. An underbanked individual has a checking or savings account, but not both, and uses non-banking financial products or services such as check cashing services (FDIC, 2017). Also, a savings account obviously asks if the client has a place where cash can be stored securely and with federal protection while interest is earned on the money (Armstrong, 2018).

Data surrounding the change in the dependent variables of increased savings and banked status were documented during the study at each coaching session as applicable to gauge what progress participants from both groups (treatment and control) were making in these financial areas. Collins and O'Rourke (2013) offered that the gathering of additional client financial data outside of scale data adds to scale validity. In this study, financial data documenting respondent baseline savings and banking statuses were collected using the TFEE survey and as comparison data using the Client Intake Form. This was because there could be a question of validity in using the TFEE survey alone as no data were found on its ability to consistently measure the same client results over time. The TFEE also does not address savings baseline balances.

At the end of the three-month study, clients from the control and experiment groups had final data collected that addressed the dependent variables of client banked status, and savings increase. This data were collected by means of the TFEE post-survey. Clients completed the form in its entirety, making any appropriate updates to their banking status, and savings balance. Definitions for the operational dependent variables of banked status and increased savings and their demonstration in the study instruments are presented in Table 2.

# Table 2

Variable Name	Research Questions	Item on Survey/Research Materials
Independent Variable Conditions: Traditional vs. Experimental Coaching Model. (Based on nudges, dual cognitive behavior)	RQ1-RQ2 examine effects of the two coaching models (traditional vs. behavioral) on client savings and banked status RQ1: To what extent, if any, will there be a statistically significant difference between increased savings outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?	Respondents in experimental coaching group receive assistance from financial coach to remove barriers to goals of becoming banked and increasing savings. Respondents in traditional coaching group do not receive assistance with removing barriers to goals of becoming banked and increasing savings.
Dependent Variable 1 Increased Savings	RQ2: To what extent, if any, will there be a statistically significant difference between banked status outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model? RQ1 examines the effects of the two independent variable conditions (Traditional vs. Behavioral Coaching Model) on client savings	Client Intake form Question: If you answered yes to having a savings account, what is your current balance?
	RQ1: To what extent, if any, will there be a statistically significant difference between increased savings outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?	\$0 \$1-\$100 \$101-\$200 \$201-\$300 \$301 +
Dependent	RQ2 examines the effects of the two independent variable	Client Intake form:
Variable 2: Banked	conditions (Traditional vs. Behavioral Coaching Model) on client banked status	Question: Do you have a checking or
Status	RO2: To what extent, if any, will there be a statistically	savings account? Options: Savings account only
	significant difference between banked status outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?	Checking account only Savings and checking Neither

# Definitions of Study Operational Variables

# Methods of Data Analysis

At the end of each day, each coach gathered client intake forms and TFEE surveys completed by members of the control and experiment groups during each initial client appointment. The data from each intake form were entered by the assigned coach into an Excel spreadsheet in preparation for entry into the data analysis software SPSS. The data were also entered in the spreadsheet by group, according to the clients' placement in the experimental or control group. The data included basic demographics: age, race, monthly/yearly income, and gender. Additionally, each coach entered all follow-up session data for their clients.

The accuracy of the data entered into the spreadsheet was checked by the Senior Director of Programs who did not have editing privileges to the spreadsheet to ensure the integrity of the study. The spreadsheet was checked for accuracy and completeness of data according to the client files. Any necessary corrections to the data were made by the associated financial coach.

Data needed to establish a baseline for the dependent variables (becoming banked and increasing savings) were entered in the spreadsheet after each client's first session. For example, the question of whether the client started the study with a savings or checking account was documented as a yes/no answer on the spreadsheet. The client's baseline savings account balance was entered as a number with the lowest available balance as 0. Data for the client's ending bank status and savings balance was gathered by post-survey at the close of the intervention and entered in the spreadsheet.

The data were then downloaded into SPSS where I applied frequencies, percentages, independent sample and paired *t* tests, and Mann-Whitney U to compare mean differences within both the control and experiment groups. In the post-hoc analysis, I applied Chi-Square, Pearson *r*, Stepwise Multiple Regression, and one-way ANOVA.

## **Additional Methodological Concerns**

**Researcher role.** The researcher's role in this study was to help recruit study participants (distribute informational flyers), verify the accuracy of any client study data that was collected and tracked, create intervention materials, and conduct the study's data analysis. To ensure objectivity in the data collection and analysis process, all session client data were collected and

tracked by the three Moeville Mission Center financial coaches. The Senior Program Director acted as a second check and balance to ensure accuracy and completeness of the data. The director only had the ability to verify and not change data. Final study findings and interpretations were also viewed by the executive director to ensure objectivity by the researcher.

**Ethical considerations.** The anonymity and confidentiality of the study participants was achieved by assigning each client a letter and number. For example, control group participants were assigned an ID beginning with C1, C2, and so on. The experiment group participants were assigned an ID beginning with E1, E2, and so on. Potential study participants were given information explaining the study and how the data would be used. Consent to participate in the study was collected from each potential client before collecting data and after receiving ACU Institutional Review Board approval. Clients were informed that they might or might not receive the intervention. Clients were also informed that compensation for participating in the study was not dependent on their achievement of study outcomes but was based strictly upon participation.

Assumptions. An assumption of this study was that an adequate number of clients would accept financial coaching during the intervention period to ensure an acceptable sample size. Another assumption was that all members of both the control and experiment group had the same level of basic financial knowledge regarding saving and becoming banked. Steps to address these assumptions included asking questions on the survey that could help gauge the participant's level of financial knowledge such as their current participation in different types of savings vehicles. Conducting the study for a period of at least three months would help to address the issue of adequate population size.

**Limitations.** The participant selection process for this study was considered a threat to internal validity as some clients came to their initial session already possessing a great degree of

financial capability (as indicated by their pre-survey answers) which predisposed them to successfully reaching their financial goal. Random sampling was important in responding to any selection threat to internal validity.

Mortality was another threat to internal validity of this study as the financial coaching client history within the organization is to drop out during financial coaching for unknown reasons after which the empowerment coach loses contact with the client. A large enough sample to compensate for possible study dropouts was essential in combating the threat of mortality to internal validity.

**Delimitations.** This study did not include client outcomes related to debt reduction, budgeting, or client credit reports. Although these additional outcome areas included additional goals that clients chose to work on, this study was limited to Moeville Mission Center program outcomes for client goals associated with the dependent variables of increased savings or banked status. This study also did not include participants engaged solely in employment coaching.

# **Summary**

The purpose of this field study was to determine whether the use of behavior economic strategies in a comparative analysis environment would prove that cues or nudges have a positive effect on saving and banking behaviors of financial coaching clients. The ability to answer the study research questions could add to the financial coaching body of knowledge associated with client behavior change by offering effective strategies for increasing coaching client engagement and follow-through. Client follow-through is a major challenge for the community-based nonprofit managing a financial coaching program that is dependent on positive client behavior outcomes for program success (Charles & Kim, 2015; Lienhardt, 2017; McDowell et al., 2013).

#### **Chapter 4: Results and Analysis**

The purpose of this study was to determine significant differences among specified measurable outcomes of financial coaching effectiveness comparing a field experimental group (that received a model adapting key features of behavioral economic-based coaching) compared with a control group that utilized traditional financial coaching features. This study further sought to explore if the use of behavioral economic-based coaching could show measurable improvement compared with the control condition regarding increased client follow-through on goals related to financial behavior change. Chapter 4 reports the findings of the study. The theoretical framework for the study was behavior change based on dual-process cognition theory which proposes that humans use an automatic and reflective system within the brain when making decisions. Behavior economics suggests a tendency to over-rely on the automatic system or gut instinct which could lead to less than optimal decisions. This conceptualization suggests an opportunity when designing programming that requires participants to make decisions related to their health or finances, such as financial coaching, in which change agents apply techniques such as nudging of participants towards the most optimal choice.

I performed several statistical analyses including paired *t* tests and correlational analyses to answer the study research questions and hypotheses. Because of the study's small sample size (70), as a further examination of the data, I also used nonparametric testing to compare savings outcomes between the experimental and control groups. Additionally, I performed several *t* tests and one-way ANOVAs to explore post-hoc findings.

# **Research Question 1**

The first research question was: To what extent, if any, will there be a statistically significant difference between increased savings outcomes for financial coaching clients placed

in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model? The following are the null and alternative hypothesis associated with Research Question 1.

**Null hypothesis** (Ho1): The null hypothesis for H1 states there will be no statistically significant difference between increased savings outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ).

Alternative hypothesis (H<sub>1a</sub>): The alternative hypothesis for H<sub>1</sub> states there will be a statistically significant difference between increased savings outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 \neq \overline{x}_2$ ).

**Research question 1 results.** I performed a paired samples *t* test to compare means and test for statistical differences between the two study conditions. The results indicated average savings increase from pretest to posttest for the experiment group was \$122.95 compared to an average savings pretest-posttest increase of \$38.69 for the control groups. These results reveal a statistically significant difference between increased savings outcomes for financial coaching clients in the experimental behavioral economics coaching model when compared to increased savings outcomes for financial coaching clients in the traditional coaching model, t(31) = -3.6, p = .002 (Table 3). In addition, a Mann-Whitney U revealed that savings differences occurred for the control and experimental groups distributions (Table 4). The Mann-Whitney U test was conducted as another perspective to account for small sample size (N = 31 after missing data), for the variable (savings difference). Participants in the experimental condition had a higher savings difference increase with a mean rank of 19.00 compared to a mean rank of 11.85 for the

control condition. That is, clients in the behavioral economics coaching model achieved a larger savings increase when compared to savings increases for clients in the traditional coaching model, U = 63, p = .031. Thus, I found support for Research Question 1. Together the findings from both data analysis tests confirm the alternative hypothesis (H<sub>1a</sub>), ( $\overline{x}_1 \neq \overline{x}_2$ ). Therefore, the null hypothesis (H<sub>01</sub>) is rejected.

# Table 3

Paired t-Test Analysis of Savings I	Increase Between Conditions
-------------------------------------	-----------------------------

Paired Differences								
Condition	п	Variable	M	SD	t	df	p (2-tailed)	
Experiment	18	Savings Begin	-122.944	145.154	-3.593	17	.002	
Condition		Balance- Savings						
		End Balance						
Traditional	13	Savings Begin	38.692	146.358	953	12	.359	
Condition		Balance- Savings						
		End Balance						

Table 4

U Test for Savings Increase Differences

<i>n</i> (31)	U	р
Experimental Condition vs	63.00	.031
Control Condition		

# **Research Question 2**

The second research question was: To what extent, if any, will there be a statistically significant difference between banked status outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?

Null hypothesis (Ho2): The null hypothesis for H2 states there will be no statistically

significant difference between banked status outcomes of financial coaching clients placed in a

traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ).

Alternative hypothesis (H<sub>2a</sub>): The alternative hypothesis for H<sub>2</sub> states there will be a statistically significant difference between banked status outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 \neq \overline{x}_2$ ).

**Research question 2 results.** Since banked status was measured as a nominal variable, I performed a chi-square test to compare outcomes for becoming banked between the behavioral economics coaching model condition and the traditional coaching model condition. The crosstab results showed 39.1% of clients within the experiment group achieved their goal of becoming banked compared with 25% within the control group that achieved the goal (Table 5). These results did not represent statistically significant differences between banked status outcomes for clients in the behavioral economic coaching model when compared to banked status outcomes for clients in the traditional coaching model  $\chi_2(2, n = 47) = 1.079, p > .05$ . I found no support for this dependent measure related to Research Question 2. Therefore, the null is accepted (Ho<sub>2</sub>), ( $\overline{x}_1 = \overline{x}_2$ ) for this measure.

Table 5

Comparison of Goal 1 Achieved using Chi-square Test

Goal 1 Achieved							
Condition	п	No	Yes	$\chi^2$	$d\!f$	р	
Experimental	23	60.9%	39.1%				
Control	24	75.0%	25.0%	1.079	1	.299	

**Comparison of experimental conditions by goal achievement.** However, as another outcome related to banked status, I also examined if goal 2, savings increase, was achieved. I ran a crosstab analysis using Chi-Square to determine if there was any significant difference between

conditions as to whether Goal 2 was achieved (Table 6). The results showed no significant difference between yes for those achieving goal 2 among the experimental group (72.2%) in comparison to yes for those achieving goal 2 among the control group (38.5%). The non-parametric analysis using Chi-Square was not at the .05 level for significance,  $\chi_2(1, n = 31) = 3.533$ , p > .05.

# Table 6

Comparison of Goal 2 Achievement using Chi-Square Test

Goal 1 Achieved							
Condition n No Yes	χ2	df	р				
Experimental 18 27.8% 72.2%							
Control 13 61.5% 38.5%	3.533	1	.060				

*Note*. With *n* sizes of 18 and 13, the power ratio is on 48%.

#### **Post-Hoc Analysis**

**Gender differences.** I conducted an independent samples *t* test to determine if there was a significant difference in variable means by gender (Table 7). The variables tested by gender were savings difference, total attendance, and income. I found no statistically significant difference among any of the variables: savings difference, t(29) = -1.891, p = .069; total attendance, t(68) = .188, p = .852; and income, t(68) = -1.128, p = .263. I conducted a separate analysis using chi-square to determine if there was a significant difference in means by gender for the nominal variables: Goal 1 achieved (Table 8) and Goal 2 achieved (Table 9). I found no statistically significant difference between gender and the dependent variables of Goal 1 achieved  $\chi_2(2, n = 47) = .015$ , p > .05, or Goal 2 achieved  $\chi_2(2, n = 31) = .663$ , p > .05. The results suggest gender did not have a significant effect on any of the variables tested with a note to examine gender differences in future research.

## Table 7

Ind	epend	'ent t	Test	Resul	ts foi	r Gend	ler l	by V	'ariał	bles
								~		

Variable	Gender	М		df	t	р
Savings Difference	Female	61.3333	Equal variances assumed	29	-1.891	.069
	Male	177.7143				
Total Attendance	Female	2.5660	Equal variances assumed	68	.188	.852
	Male	2.5294				
Income	Female	2.6038	Equal variances assumed	68	1.128	.263
	Male	2.1176				

*Note*. Percentages are within gender group.

### Table 8

Comparison of Goal 1 Achieved by Gender using Chi-square Test

Condition	п	No	Yes	$\chi^2$	df	р		
Male	12	66.7%	33.3%	.015	1	.903		
Female	35	68.6%	31.4%					
Note Demonstrates are within condent around								

*Note*. Percentages are within gender group.

# Table 9

Comparison of Goal 2 Achieved by Gender using Chi-square Test

Condition	п	No	Yes	$\chi^2$	df	р	
Male	7	28.6%	71.4%	.663	1	.415	
Female	24	45.8%	54.2%				

Note. Percentages are within gender group.

**Comparison of modes.** I ran a one-way ANOVA comparing means of the independent

variable of Mode of financial coaching session with the dependent variable of Savings Difference (Table 10). The results showed there was no significant difference between means by mode of coaching for the variable of savings difference F(3, 31) = 1.040, p > .05. I also conducted a chi-square to determine the relationship between mode of financial coaching session and the dependent variables of Goal 1 achieved (Table 11) and Goal 2 achieved (Table 12). I found no statistically significant difference between mode and the dependent variables of Goal 1 Achieved  $\chi_2(3, n = 47) = 5.597$ , p > .05, or Goal 2 Achieved  $\chi_2(3, n = 31) = 4.794$ , p > .05. The results suggest mode of financial coaching session did not have a significant effect on any of the

variables tested.

Table 10

One Way ANOVA of Modes with Variables

Variable	Mode	М	$d\!f$	F	р
Savings Difference	In-person only	136.857	3	1.040	.391
	Phone only	110.507			
	Email only	86.603			
	Combination	149.311			
	Online only	0.000			
N . D 1. 1 .	(21)				

*Note*. Results are between groups, n (31).

# Table 11

Comparison of Modes for Goal 1 Achieved using Chi-Square Test

Mode	Ν	No	Yes	$\chi^2$	df	р	
In-person only	19	52.6%	47.4%	.663	3	.133	
Phone only	14	85.7%	14.3%				
Email only	3	100.0%	0.0%				
Online only	0	0.0%	0.0%				
Combination	11	63.6%	36.4%				
17 data -		1 (15)					

*Note.* \*Percentages are within mode, n (47).

**Correlational analysis with savings end balance.** I utilized a Pearson's Correlation to determine if there was a relationship between the dependent variable of savings ending balance and the independent variables of total attendance at coaching sessions, income, and age (Table 13). The correlation between total attendance and savings end balance was significant r(31) = .041, p < .05, meaning as attendance went up, savings end balance increased.

There was not a significant positive correlation between savings ending balance and age r(31) = -.502, p > .05, or between savings ending balance and income r(31) = .375, p > .05.

## Table 12

Mode	п	No	Yes	$\chi^2$	df	р
In-person only	14	28.6%	71.4%	4.794	3	.187
Phone only	7	28.6%	71.4%			
Email only	3	66.7%	33.3%			
Online only	0	0.0%	0.0%			
Combination	7	71.4%	28.6%			

*Note.* \*Percentages are within mode, n (31)

# Table 13

Pearson r Correlation Analysis of Savings End Balance by Variable

	Total Attendance	Age	Income	
Savings End Balance	.041*	502	.375	
M . * . 05 21				

*Note.* \**p* <.05, *n*=31

I also ran a Backward Stepwise Regression method to explore potential combinations of variables to predict ending savings balance. Finding no significant collinearity, four interval variables were predictors (age, education, incomes, attendance) with savings ending balance as the dependent variable. The resulting multiple correlation of .585 and multiple correlation squared of 34.2% is significant with total attendance and age, F(1, 29) = 8.187, p = .0008, while education and income failed to show significance in the regression model. Tables 14 and 15 reveal these results. The beta weights indicated ordering with age presenting a higher beta than the next significant predictor attendance. Age is negatively correlated (confirmed in a simple bivariate correlation) such that as clients age, savings balances are lower (Table 13). The results were confirmed by a Forward Selection regression method.

## Table 14

Change Statistics									
Adjusted R2 Sig F									
Model	R	$R_2$	$R_2$	Change	F Change	dfl	df2	Change	
1	.469a	.220	.193	.220	8.187	1	29	.000	
2	.585b	.342	.295	.122	5.181	1	28	.003	
3	.589c	.347	.274	002	.067	1	26	.798	
4	.590d	.348	.248	005	.198	4	26	.660	

Regression	of I	Interval	Independ	lent V	<i>ariables</i>	with 3	Savings	End	Balance
	~, -								

a. Predictors: (Constant), Age

b. Predictors: (Constant), Age, Total Attendance

c. Predictors: (Constant), Total Attendance, Age, Income

d. Predictors: (Constant), Total Attendance, Age, Income, Education

Note: The regression above assumes a constant. If a constant were assumed to be 0 (no constant), the same regression procedure yields an R = .766 and  $R_2$  of .586 with beta weights of the two significant predicators total attendance (Beta 1.603), age (Beta -1.014). Here attendance has greater weight.

# Table 15

		Unstandardized	Standardized		
		Coefficients	Coefficients		
Model	Variable	В	β	t	р
1	(Constant)	85.134		.546	.589
	Age	-5.161	452	-2.754	.011
	Education	-3.557	042	259	.798
	Income	7.380	.069	.425	.674
	Attendance	98.977	.345	2.142	.042

# Coefficient Table of Regression Model

*Note.* Dependent variable: Savings End Balance with predictors indicated above. Beta Weights of each Independent Variable (using constant).

## **Summary**

I found several noteworthy results in the study. First, I found that the experimental condition of behavior economic financial coaching (BEFC) model was effective in pretest to posttest comparisons of savings outcomes. Thus, the study indicated that the use of the BEFC model produces statistically significant client saving outcomes compared to the traditional financial coaching (TFC) model. I found it interesting that the outcome of Goal 1 achievement for becoming banked was not realized for either study condition, but, at least as a trend (p = .06),

there was a significant relationship to the outcome of Goal 2 achievement for increasing savings by the BEFC condition.

Finally, post-hoc analysis revealed several interesting results as well. I first tried to determine if there was any statistically significant difference between means for coaching session attendance, income level, or savings increase when it came to gender. My findings indicated there was no significant difference for any of the three variables tested using gender as the factor. I also found there was no significant difference in means for savings difference, or goal 1 or 2 achievement when it came to mode of financial coaching session. While I did not find a correlation between savings ending balance and age or savings ending balance and income, I did find a significant correlation between total attendance and savings ending balance. Attendance proved to be a meaningful aspect of the saving outcome. Basically, the demographic and modality factors tested age, gender, income level, and mode of coaching session, and had no meaningful impact on the study outcomes of becoming banked and increasing savings.

Overall, the study results led me to create a Behavior Economics (BE) based financial coaching model which is outlined in Chapter 5. Clearly, a conclusion from the results is that differential models when compared have a meaningful effect. What are those differences in substance and content, why do they work, and how can we apply those findings in future applications related to the design or redesign of a coaching program focusing on similar financial outcomes? Chapter 5 next turns to a summary of the study and answering the theoretical and conceptual implications of the study.

#### **Chapter 5: Discussion and Conclusions**

This chapter begins with a summary of the study, including an overview of the problem and research questions answered. It also presents a review of the methodology undertaken, and of the study results presented in Chapter 4. The chapter then offers a conceptual financial coaching model based on the behavior economic strategies used to produce the study results. This model can be used by community-based nonprofits seeking to implement or refine their financial coaching offering to obtain tested outcomes around increased savings and similar nudgeable goals. Next, the chapter provides a discussion of the findings as they relate to the literature, prior research, and the field of financial coaching and behavioral economics today. Finally, it concludes with a discussion of the study's implications for financial coaching practitioners, and recommendations for future research.

# **Summary of the Study**

**Overview of the problem**. This dissertation started with a summary and examination of benevolence-based programming and assistance offered by private and public organizations to support low-income households. I argued that any positive effects of this type of client assistance have been limited because it fails to address the full needs of the poor which encompass various physical, financial, and social requirements. Thus, a more comprehensive method for moving these individuals forward towards long-term stability was practical. I also argued that financial coaching could be an intervention capable of transforming the financial outlook for low-income individuals.

A challenge experienced by financial coaching practitioners is a lack of client followthrough during the coaching process, which means clients fail to reach their financial goals leading to organizational failure to meet program outcomes. Failure to address this challenge can affect viability of community-based social service nonprofits, especially smaller ones, who may rely on client outcomes to satisfy donor expectations and justify engagement of the larger community in their mission. As a result, behavior economic strategies that have been shown to positively influence client behavior change needed to be explored and tested in a financial coaching environment. In my dissertation, I sought to contribute to a better understanding of how the behavior economic concept of nudging as a component of choice architecture could contribute to successful coaching client outcomes, especially those related to increased savings and becoming banked. These two outcomes were chosen versus other outcomes such as credit building or debt reduction, because the latter two typically require a longer time frame than three months for clients to begin to demonstrate positive behaviors.

**Purpose statement**. The purpose of this study was to determine if behavioral economic strategies would affect a coaching client's financial behavior outcomes as they relate to saving and banking goals. To test this approach, an experimental coaching model was created utilizing the behavior economic concept of nudging. Nudges are gentle prods toward choices that will lead to expected outcomes. Priming (asking individuals to state their intent to complete an action) and framing (presenting information in a way that affects an individual's choice) were two nudges employed by the intervention coaching model. Savings increase and banked status outcomes for this model were compared to outcomes for a traditional coaching model to see if there would be any differential significance in outcomes for either group. To answer these questions, two research questions and hypothesis were created.

**Research questions**. The research questions addressed in the study were:

RQ1: To what extent, if any, will there be a statistically significant difference between increased savings outcomes for financial coaching clients placed in a traditional financial

coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?

**Null hypothesis (H**<sub>01</sub>): The null hypothesis for H<sub>1</sub> states there will be no statistically significant difference between increased savings outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ).

Alternative hypothesis (H<sub>1a</sub>): The alternative hypothesis for H<sub>1</sub> states there will be a statistically significant difference between increased savings outcomes of financial coaching clients placed in a traditional.

**RQ2:** To what extent, if any, will there be a statistically significant difference between banked status outcomes for financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model?

**Null hypothesis (H**<sub>02</sub>): The null hypothesis for H<sub>2</sub> states there will be no statistically significant difference between banked status outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in an experimental behavioral economic financial coaching model ( $\overline{x}_1 = \overline{x}_2$ ). **Alternative hypothesis (H**<sub>2a</sub>): The alternative hypothesis for H<sub>2</sub> states there will be a statistically significant difference between banked status outcomes of financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in a traditional financial coaching model and those financial coaching clients placed in a traditional financial coaching model and those financial coaching model ( $\overline{x}_1 \neq \overline{x}_2$ ).

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**Review of the methodology.** The study's design was a quantitative field experiment that utilized random assignment of respondents. Because respondents entered the study at different time intervals, cluster sampling had to be done before the randomization process could take place. As clients were identified as part of the sampling population and consented to participate in the study, they were randomized into either the traditional coaching model (condition group) or the behavior economic coaching model (experiment group). All study respondents were asked to complete a pre-survey and intake form as part of their initial coaching session. The pre-surveys for both groups were identical and was used to collect demographic data and the client's general assessment of their financial condition. The intake forms were a means to record baseline savings and banking statuses according to client goal preference, income, and any additional demographic information not collected in the pre-survey. The intake forms differed only in the addition of framing and priming cues for the behavior economic coaching group.

The priming cue included on the intake form for the experimental coaching group consisted of questions meant to measure the individual's intent to become banked and/or increase their savings. Respondents were asked to indicate if either of these areas was their goal. They then had to indicate a date and amount for completing their savings or banking goal, and even state what financial institution they were planning to utilize. This was a crucial part of the study because it captured the "mere measurement" effect intended to nudge an individual toward the behavior intentions they have stated (Thaler & Sunstein, 2009a). The only framing cues were included on the intake of the experiment group. Contributing to a savings account was framed as a method to avoid the need for predatory payday lending products. Framing was limited in usage in the study as Thaler and Sunstein (2009a) cautioned it is a powerful influencer that should be used judiciously. Because of time constraints, only two of the many behavior economic strategies was utilized in the study. Incorporating defaults as nudges would potentially require redesigning the client intake form. Chapter 2 discussed loss aversion as a nudge centering on choices related to risk. This nudge did not seem appropriate to use in the study's limited context of increasing savings and becoming banked. These are strategies that can be explored in future research connected to financial coaching and behavior change.

As mentioned in Chapter 3, at each session with a client in the experiment group, the client was reminded of their stated goal if they were unsuccessful up to that point. If the client did not come to session two or session three, the coach was obviously not able to administer the nudge in the form of a list of savings apps and/or banking options, nor where they able to offer hands-on assistance with account enrollment. As will be discussed later, attendance had a correlation to savings outcomes. Each financial coach documented data in a spreadsheet from initial client sessions and all subsequent sessions. Final data were uploaded by the researcher into SPSS.

#### **Analysis of Data Results**

The results of the study were discussed in detail in Chapter 4. In addition to utilizing data results to answer the two research questions regarding savings and banked status outcomes, I found three additional findings that were of interest. These included the potential effects of certain demographic factors on attendance, income, and savings outcomes, the relationship between mode of coaching chosen and the ability of coaching clients to reach the study goals, and the correlation between attendance at coaching sessions, age, and the attendee's ending savings balance. The findings show a significant negative correlation with age and ending savings balance, and a significant correlation between attendance at savings ending balance.

Research Question 1 asked if there would be substantial differences between the savings outcome for clients placed in a behavioral economics financial coaching model compared to the same outcome for clients placed in a traditional-based financial coaching model. Findings from this study show that the use of priming and framing factors placed as cues in the environment were clearly effective in producing positive and measurable outcomes related to increased savings. The findings confirm that a behavior economic financial coaching program can be an effective tool for organizations needing to deliver client outcome-based programming.

The findings echo literature reviewed from Chapter 2 which emphasized the benefits of financial coaching and the need to build financial capability when working with low-income clients if they are to succeed long-term financially (Huang et al., 2016). Providing coaching clients with access to financial products and services such as savings accounts, is considered by Baker and De la Rosa (2015) as a major component of financial capability. I further showed in Chapter 2 how financial coaching can make those needed connections to financial products for coaching clients wanting to build assets, like emergency savings (Rothwell et al., 2016).

The literature presented in Chapter 2 establishes the need and potential benefit of financial coaching for helping low-income individuals become financially capable. While there is prior research to show that financial coaching can have a positive effect on client financial behaviors (NeighborWorks, 2013; Theodos et al., 2018), the literature also revealed a common challenge for coaching practitioners and organizations offering coaching programs. Lack of coaching client follow-through on stated goals was a major challenge for practicing financial coaches (Lienhardt, 2017). The results of this study show that behavior economic nudges can keep clients on track towards completion of their savings goals. These outcomes are also vital to community-based nonprofits offering financial coaching programming.

Research Question 2 sought to determine if behavior economic strategies applied to a coaching program could be a stronger influencer on the banked status behaviors of coaching clients, than a traditional coaching program that did not utilize the same behavior strategies. While the percentage of clients who became banked within the behavior economic experiment group (39.1%) was greater than those in the traditional coaching group (25%), the difference between the two groups was not significant.

In Chapter 2, the literature indicated that access to financial products and services such as savings accounts is critical to the facilitation of financial behavior changes leading to financial capability (Baker & De La Rosa, 2015; Von Stumm et al., 2013). It follows that clients need to become banked before they can utilize a savings product to reach their savings goal. As an extension of banking status, the ability to start or increase savings is also necessary to secure longer term assets such as a home (Baker & De La Rosa, 2015; Von Stumm et al., 2013). The study findings showed a trend (.06) towards achievement of the goal of increasing savings.

The post-hoc study results reported in Chapter 4 sought to determine any additional correlations, relationships, or differences between study demographics and client outcomes associated with banked status and increased savings. Some of these demographic factors include gender, income level, and age. The literature argues that savings is an important aspect for individuals trying to gain assets as it allows for accumulating wealth. My study, similar to other research found insufficient support for savings habits by gender, although the previous research study mentioned was limited to college age students (Zamora-Lobato, Garcia-Santillan, & Ramos-Hernandez, 2018). Additional research shows when it comes to achieving banked status among low-income families, there was no significant relationship by gender (Klawitter & Fletschner, 2011). These prior research findings align with the findings in this study.

Additional study results also explored the relationship that mode of coaching session had, if any, on achievement of the two research study goals (banked status and increased savings). Chapter 2 discussed transportation as an obstacle to attendance at financial coaching sessions (Theodos et al., 2015). Therefore, this study offered respondents alternative modes for coaching sessions, including email and Skype or Facetime. Interestingly, most respondents preferred to attend coaching sessions in-person (38.6%), followed by telephone (30%). This aligns with data provided on financial coaches across the U.S., with 95% in 2016 indicating in-person as their most commonly utilized coaching method, followed by the method of telephone (Lienhardt, 2017). That percentage rose to 97% of coaches in 2019 (Lienhardt, 2017). The results of the study could suggest that in-spite of transportation challenges with attending coaching sessions, clients prefer the personal contact afforded by an in-person method. The literature does suggest that web-based financial coaching could allow for scaling the service to individuals with disabilities and younger adults (Lienhardt, 2017).

Lastly, the post-hoc results tried to determine if there was any correlation between a client's ending savings balance and their age, income level, and coaching attendance. The study did not find any correlation between income level and a coaching client's ending savings balance. The study did, however, find a significant correlation for age and savings end balance. This correlation was negative meaning as age increased, savings end balance decreased. The coaches offered that the younger respondents were more motivated to save because they were working towards a broader range of goals than older clients. The study also found a significant correlation for total attendance at coaching sessions and savings ending balance. Adding to that correlation, 92% in the BE coaching model who reached their savings goal attended three out of the three sessions required as part of the study (n=13). Also, 94% of those reaching their savings

goal, regardless of the condition, attended three out of the three sessions required during the study (n = 18).

#### **Conceptual and Theoretical Frameworks**

Theoretical reasons from previous research applied to and aligned with these results are still in a somewhat formative phase from earlier studies. This study demonstrated the positive effects that can be gained by prodding individuals toward expected financial behaviors that lead to expected financial outcomes. The literature presented speaks in depth to various Behavior Economic tools such as priming, loss aversion and defaults, available for influencing positive behavior change in a financial context. The similarities and differences between the literature and this study are discussed below.

One of the similarities between this study and the literature on financial coaching, was recognition of the need to integrate aspects of technology into the coaching process to possibly enhance client engagement and follow-through in coaching. The literature suggests that increasing the use of web-based coaching could lead to better take-up rates (Lienhardt, 2017, 2019). Web-based coaching and assistance with accessing and using savings apps were offered during this study. Interestingly, none of the study respondents chose to use an online mode (Face Time or Skype) to conduct their coaching sessions

In Chapter 2, I presented research from organizations showing similar efforts to explore the capability of financial coaching to move clients towards positive financial behaviors, including saving and banking (NeighborWorks, 2013; Theodos et al., 2018). This study differs in that behavior economic strategies were utilized to keep clients focused and moving towards their goals. The prior studies were also conducted over a more extensive timeframe, five months to two years, while this study was conducted over a three-month period. The NeighborWorks' study was also an evaluation of 30 coaching programs which included 4,200 clients. This study was conducted within a small community-based social service nonprofit serving on average 100 new and existing coaching clients per month. The sample size for this study was also small in comparison with 70 respondents. Results from the NeighborWorks' study showed 48% increased their savings. In this study, 72% of clients in the BE model increased their savings over the three-month period.

The overall results of this study reinforce the literature on the use of nudges in effectively helping financial coaching clients reach their savings goals. The benefits of priming clients by eliciting their intentions toward behavior change is also confirmed within the study results. Individuals are more likely to engage in a behavior if their intentions to do so are solicited ahead of time (Sunstein, 2014). The implication of the study results for future theory and research are covered next.

Although the literature suggests that effects of the measurement of intentions nudge wears off in six months, setting smart goals with clients appears a critical action, especially related to becoming banked and/or savings. In that sense, a theoretical frame should encourage financial coaches to work with clients to limit the timeframe of their goals to six months or less.

This study clearly demonstrates that the utilization of behavior economic nudges, particularly, priming and framing cues, can produce significant savings outcomes for financial coaching program participants. This study contributes to the body of knowledge surrounding financial coaching program design and coaching client engagement.

As a big picture of theory and conceptualization, the results from the program structure in this study point toward fundamental motivational type approaches. One is a behavioral economic paradigm centered on adult learning theory illustrated by motivational tools of nudging (priming, and minimal framing). While incentives for attendance at coaching sessions were given to respondents as part of the study, they do not explain the difference in savings outcomes for the two conditions. Participants in either group were given the same attendance incentives regardless of whether they met any of the study goals. The study does show there was a correlation between attendance and savings ending balance (as attendance increased, savings end balance increased). In this sense there is a link between incentives, attendance, and savings end balances.

As a further explanation for this correlation between attendance and savings goal achievement, increased attendance offered increased opportunities for application of behavior economic nudges during the coaching session. This would also present additional opportunities for coaches to work to remove any obstacles preventing achievement of the client's goal. This suggests attendance is important to savings goal achievement and that incentives may need to be built into a coaching program to encourage consistent attendance.

The present study also points to a positive reinforcement through client-centered relationships, particularly emerging from data favoring interpersonal coaching as the preferred coaching connection. For instance, assisting with goal setting, active listening, working within client needs, and the like surfaced from visits between clients and coaches. One coach who participated in this study commented

A lot of my clients preferred meeting in-person because they looked at it as time away from work, home, and any issues they might be dealing with there. The more we met, we began to build a relationship and they began to share more information about themselves with me.

This underscores what has been mentioned numerous times as being the relational aspect of financial coaching. The coaching relationship is supportive in nature and considered to be a significant factor in positive client results (Delgadillo, 2014b; Delgadillo & Britt, 2013). The trust developed between coach and client allows for interpersonal exchanges that take place

during coaching sessions. These exchanges can be in the form of feedback on the client's progress towards their goal and holding clients accountable when they fail to follow agreed upon steps for following-through.

In other words, the findings suggest a potential system of connections involving factors related to client follow-through and financial coaching goal attainment. The literature on financial coaching acknowledges that it is a personalized form of adult learning. While each client's situation is unique and financial capability looks different for each one (Cox, 2015; Jindra & Jindra, 2016), there are certain entry points within the coaching structure that lend towards optimal introduction of behavior economic strategies or nudges, that the study shown can positively influence client outcomes. These entry points include processes and/or goals common to financial coaching clients (opening a bank account, intake process). Utilization of behavior economic strategies would need to start during the choice architecture process with the design of any client intake documents or coaching program marketing materials.

Ideally, intake documents in a BE Financial Coaching Model would be designed with language that measures a client's intentions to follow through on their financial goals, including increasing savings, becoming banked, or similar goals (Appendix B). Traditionally during the coaching intake process, clients are asked to document their present financial status. Goals are usually defined during this initial meeting. Occasionally goal setting is done in subsequent sessions. It is during these meetings that clients should receive and complete any materials containing environmental ques (priming and framing) meant to measure their intentions to complete their goal (ex: become banked, increase savings). Therefore, the model depicted is an integrated one that allows strategies from the behavior economic coaching model to be inserted or overlaid onto the traditional financial coaching model. Functions of the traditional model are derived from general coaching processes found in the literature and the researcher's experiences. Nudge entry points for the BE model are based on literature covered on Dual Process Cognitive Theory, choice architecture, nudging, and study results for BE model savings increase outcomes.

To apply these conceptual elements in a systemic model, leads me to propose a future model in Figure 1.



Figure 1. Integrated behavior economic financial coaching model.

# Limitations and Suggestions for Future Action and Research

Financial coaching is continuing to grow as a field and as an intervention to helping low-

income individuals move toward economic stability and self-sufficiency. In a 2016 financial coaching census conducted by Assets Funders Network, there were 453 social service organizations in 48 states with at least 2,265 practicing financial coaches. *Prosperity Now,* another nonprofit leader in the work for financial equity, estimates the number of financial coaches in 2019 to be even higher taking into consideration others who do similar work under a different title (Haroon, 2019). Along with this growth, the field of financial coaching continues to face many challenges.

Financial coaching is still an unregulated field and experiences lack of standardization, not only in terms of coach training and certification criteria, but also in financial coaching program design, implementation, and evaluation procedures. Also, lack of client engagement and follow-through in coaching continues to be a common thread mentioned in both the 2016 and 2019 coaching census reports (Lienhardt, 2017, 2019).

Utilizing behavior economic nudges as a framework, this study tested strategies for improving program outcomes, and client engagement and follow-through. While not intentional, the strategies addressed some additional concerns from coaching practitioners not directly covered within this study's problem of practice (use of technology in coaching, lack of standardization in the field). These additional concerns, as well as insights that emerged from the study's findings, are discussed as implications for action.

There are several implications for action discussed that can be beneficial to communitybased nonprofits serving a low-income coaching population. The first area requiring action from the financial coaching sector is standardization of practices related to the field. In the 2019 Financial Coaching Census, Lienhardt (2019) reported "funders have chosen lack of standardization in the field as one of the most pressing challenges" (p. 6). When helping clients work towards a financial goal, such as saving or becoming banked, it may be more effective for coaches to take a standardized approach consisting of sequenced steps for each session dependent on the client's goal and their progress towards that goal.

As an example, within the study, if the client was attending their initial session, certain information was gathered (intentions to complete goal) and specific marketing materials were used (framing and/or framing cues). Client intentions to increase saving, become banked, or any goal that is conducive to short-term deadlines, can be measured on client intake documents. The conceptual behavior economic coaching model presented in the study findings (Table 14) can serve as a foundation for implementing these uniform steps. The model takes traditional financial coaching processes, such as client goal selection, and incorporates behavior economic cues to standardize steps that can be used to motivate clients toward goal completion. Cues interleaved into the model, such as goal reminders, also serve to reinforce client accountability for goal completion and behavior change.

The need for standardization extends beyond the client aspect of coaching and includes the need for standardized and industry recognized training for financial coaches (Collins et al., 2013; Delgadillo et al., 2016). Financial coaches are not required to obtain a certification to practice. This means anyone can practice in the field, regardless of experience or capability. Even within the same agency there may be broad variations in financial coaching technique and capacity level. Standardization would open the way for consistent measurement of coaching outcomes within and across organizations and contribute to a cohesive client experience.

Effective financial coaching requires a broad skill set which includes a general knowledge of adult learning theory, and the ability to motivate clients. Since financial coaching is strengths-based, coaches must possess the ability to enhance client motivation and build client

self-efficacy (Collins & O'Rourke, 2012). Financial coaching is a form of self-directed adult learning that takes place informally during sessions, yet coaches receive no formal training in adult learning or behavioral theories (Collins & O'Rourke, 2012; Cox, 2015; Delgadillo et al., 2016). Coaches could benefit from training that teaches methods for supporting adult learning within the coaching process. It is important that coaches possess the ability to build rapport and trust with individuals so that their clients are open to sharing their challenges and goals. The coach must also be flexible in their approach to coaching and willing to adapt any industry best practices for leading clients towards positive outcomes.

There is also the implication from the study that regular attendance at coaching sessions matter when it comes to coaching clients reaching their financial goals. Choice architects should build into their coaching programs, incentives to encourage attendance at coaching sessions. These incentives do not always have to be monetary in nature. For this study, respondents were offered additional visits to shop at the organization's food market.

Lastly, the integration of technology into the coaching environment has been cited as a way to increase accessibility to coaching services and a way to scale coaching (Lienhardt, 2019). This study offered clients alternative modes for attending financial coaching sessions to address possible transportation issues and time constraints (e.g., Skype, FaceTime). Of the 70 respondents, zero chose to have their coaching sessions conducted using technology. The study found other ways to incorporate technology by offering respondents in the experiment group just-in-time information on savings and banking apps and assistance as needed with online enrollment. As part of behavioral economics priming, technology was used in the study to remove obstacles to reaching savings goals since transportation was cited as a barrier to client follow-through in coaching. To better utilize the opportunities technology can offer coaching

clients and financial coaches, more time should be given to coaches vetting appropriate banking and savings apps to pass on to their coaching clients. These implications for action can be beneficial to the small, community-based nonprofit, whose viability is closely connected to client outcomes. They should also be helpful to any organization designing a new financial coaching program or evaluating an existing one. The strategies offered can also be implemented in a standalone or integrated coaching model.

**Recommendations for future research.** This study could be improved upon by conducting it over a longer period, preferably six months, since the literature suggests this is the optimal time frame for taking advantage of the effects of priming and the mere measurement effect (Thaler & Sunstein, 2009c). Future research could also benefit from controlling for factors such as coach experience level, or client financial knowledge coming into study. Future research should also expand upon the use of technology in giving "electronic" nudges. How can the use of apps and other digital platforms be used to prod clients toward behavior change? The use of reminders has been suggested as an effective nudge (Thaler & Sunstein, 2009c). What mode of reminder (email, text, etc.) is most effective as a nudge, and what is the best interval for dispensing this type of nudge?

# **Summary and Conclusion**

Community-based social service nonprofits are moving towards program offerings that are more relational in nature and that require positive behavior change if participants are to advance financially. The intent of financial coaching programming is to move participants toward financial capability and the opportunity for long-term stability. The steps toward financial stability cannot be completed overnight. Within financial coaching it requires that coaches are willing to work with their clients to build long-term relationships. Trust is an important factor within this relationship as it allows for coaches to hold clients accountable to their goals. Even with a strong coaching relationship and accountability measures, coaching clients may need an extra prod to follow-through in coaching as they work towards financial stability.

By using nudges, namely priming, the behavior economic coaching model was successful in helping clients increase savings and trend toward achievement of savings goals. Priming was used to measure the clients' intentions to become banked or increase savings in an attempt to influence them to complete these behaviors. To accentuate the positive effect of priming, the coaches needed to go beyond measuring the client's intentions because even intentions can be inhibited by the smallest of factors (Thaler & Sunstein, 2009b). By supplying the clients with lists of potential savings apps or the closet banks, it removed what could be considered small obstacles, such as finding the time or resources to gather this information on their own. Likewise, offering to help clients enroll in savings apps or apply for bank accounts can remove obstacles to reaching their goal. Priming suggests that even these small cues can positively influence an individual's behavior.

Framing was used to influence the savings decisions of respondents in the behavior economic coaching model. Saving was presented as the solution for not having to access predatory payday lenders. This study demonstrated that the use of these behavior economics nudges within a financial coaching program could lead to client-follow through and goal attainment. The realization of positive client outcomes allows the social service organization to fulfill their mission and fulfill obligations to funders and society in general.

This study has inspired a need to be more thoughtful and intentional when designing programs that require financial decision making on the part of participants. Realizing the day-today context in which many low-income financial coaching clients operate, it is more of a responsibility than a choice, to prod them towards the most optimal decision leading to the most optimal financial outcome.

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Participant Name:		Instructor Name:	
Workthop Topic:		Date:	
BEFORE TH	E PRESENTATION, PLE	ASE FILL OUT TH	E FOLLOWING:
1. Gender: 2. Size of	3. Race:	4. Marital Status:	5. Monthly Income:
Famile household:     Main	African Amarican	Cohabitating	□ Less than \$600
	C Asian	Diverced	□ \$600 - \$1,199
6. Method(1) for receiving income*:	U Lindao	Separated	□ \$1,200 - \$1,799 □ \$1,800 - \$2,399
Construction Descraid	C Other:	□ Single	S2,400 - \$3,000
deposit) debit card		Widewed	□ \$3,000+
7. Employment Status:	8. Source(:) of income you'v	e received in the last	9. Have you consulted a financial
<ul> <li>Employed Full-time</li> </ul>	year*:		professional about*:
Employed Part-time     Samonal Job	<ul> <li>Borrowing from family m</li> <li>Dension Pro-</li> </ul>	ambers francis	Debt counseling
Student	<ul> <li>Salary, wages, contract with</li> </ul>	ngu:	Insurance of any type     Sector of investing
Unamployed	□ Self-employed		Taking out a mortgage or loan
Li Obar:	<ul> <li>Social Security Benefits</li> <li>Withdraw from Retirement</li> </ul>	et Plan	□ Tax planning
10. Highest level of education:	11. Financial Service(s)/ Pra-	ctice(:) you currently	12. Current Financial Situation(1)*:
Less than High School	utilize*:		<ul> <li>Bankruptcy</li> </ul>
High School Diploma GED	Borrowing from others C	J Pre-paid Debit Cards	Foreclosure     Key Control
Technical/Trade School	Charling Account	J Natirement Fund	High Credit Cited Debt     High Medical Bill Debt
Associate Degree	Credit Cards E	J Savings Account	Homeless
Declasion Degree	Payday/Title Loans	Uther investment finds	Low Credit Score
Doctoral Degree	<ul> <li>Personal budget, spending</li> </ul>	plan or financial plan	Student Loans
* May select more than on	e anower		
Please answer the following questions:         13. Do you regularly set suide or save money for fature use, such as emergencies or financial goals?       No       Sometimes         14. Do you currently utilize a personal budget, speading plan, or financial plan?       No       Sometimes         15. In the last month, did you experience a late penalty fee on a bill or loan?       No       Sometimes         16. In the last two months, did you experience a late penalty fee on a bill or loan?       No       No         17. In the last two months, has your checking account been overdrawn?       No       Sometimes         18. It am comfortable with my current financial situation.       No       Sometimes         19. If seel confident that I can meet my normal emorphy livings expenses without borrowing.       No       Sometimes         20. Lownlife to adaption is a forecast all empresence that cost a \$750       No       Sometimes			
AFTER THI	S PRESENTATION/COL	RSE/COUNSELING	SESSION:
21. With "1" being the least confident a	nd "5" being the most comfident,	how confident are you in y	our ability to achieve a financial goal you
in the process.		3 04 05	
22. Are you more likely to take any of t	as following action(s)? Select all	that apply.	F 3.1.
Open a came account     Check your credit score     Budget/track expenses	<ul> <li>Open a retreased find</li> <li>Start Saving/Open a savings</li> <li>Other:</li> </ul>	account Attend	z ceox i other financial education courses/services
lease include any additional comments	balow:		
-			

## Appendix A: Financial Education Endowment (TFEE) Pre-Survey-English

FITST FUBITIVE	Last Name		DOB	
Physical Address	City	State	Zip Code	
Primary Contact Phone Numb	er Secondary C	antact.Phone Num	ber	
Email Address				
How did you hear about us? [ Outreach Program D P	Friend/Family internet lyer/Poster Other, please spe	Community Base	c Organization	
What is your ethnicity? 🔲 H	lispanic Origin 🛄 Not of Hispanic	c Origin 🔲 Prefer	not to answer	
Which of the following apply 1 Domestic violence survivor Homeless Person with	te you" Formerly incarcerated V a disability Convicted of a Feb	/eteran Active I lony IN/A	Military	
What is the total number of p How many adults (18 yrs & o)	eaple living in your household, ind der) Now many children	cluding yourself? 17 yrs old & your	nger]	
What is your current living site Rent/Lease: Private Housin Uving w/Famity, Friends re	uation? xg	Icom 🔲 Oan/Put Constiting Be	rchasing Hameless ayond intended Use Ha	Other
Which income supports da yo TANF SSDI SSI Unemployment Veters	u currently receive? ]ss Retifement	pensation Chi Other	ld Support	
Who is your employer?	if unemployed,	last date of employ	yment//_	
What is your US citizenship sti Citizen Permanent Res	atus?  Resident Alien (F1/ Student)	Undocumented	d Res Prefer Not to A	nu wer
	DebtCredit Budgeting	Housing	nployment 🖂 Taxes 🗆	Cther
What brought you in today? [	* Medicare Medicald 🗆	Private Insurance	🗆 Veterans Benefits 🗌	No
What brought you in today? [ Do you have health insurance			al with a financial emera	ency?
What brought you in today? Do you have health insurance How confident are you that yo Not at all confident 50	au could come up with money with mewnat confidentvery confid	hin a month to der Jent	a with a tenantial conces	
What brought you in today? [ Do you have health insurance How confident are you that yo ] Not at all confident _ 50	au could come up with money with mewnat confident 🗌 very confid	hin a month to der Sent		- 11-1

# Appendix B: Moeville Mission Center Client Intake Form-English (Exp. Group)

(Type nere;		
		E
	What is Your Goal?	
Dan yes sen hans Ears yes	and and a set of the s	rest of the goal
The	can help you reach your goal with free fina	ncial coaching to:
	Buint or repair your credit score	
	Pay down datat	
	Provide and the second se	
	Create a las plan	
	<ul> <li>Create a realistic budget that works just for you?</li> </ul>	
Which method for conclure	would work best for you! Te Dis-person Dismui Dite	ephone
Do you have a bank account	* Checking any Earlings any Checking and Ser	nga 🔲 huimur
If you don't have a serings?	checking, when do you plan to open one? I plan to open a ch Bimonths 2 months 5 membr	ecting/sevings account in:
Where do you plan to open Would you use an online oa	your account" (name of bank) Do you need 2nd Chance banking	gaptiona? Yes No
Tif you answered yes to her	ing a savings account, what is your current beance"	
\$0 \$1.5130	\$201-\$100	1300 +
Manual units dis units and the in-	many of the last main of the set of the set of	
\$50 \$100	\$150 \$200 \$230 \$230 \$200	Other S
I pan to use my savings for	Home/Auto purchase Vacabon Emergencies	Other
Do you have an automatic o No 🔲 tes if yes how mut	eposition electronic trensfer set up to put money twey for n n so you save per pay period 1 5 or%	Aure use" (exemple: 401K) 🗖
ooudou	Prevent the Need for a High-interest P	ayday or Title Loan
-00\$	Contribute to your Savings ,	Accountil
Louis		1
	the second se	

	Lest Name	****	DOB / /	
Physical Address	City	State	Zip Code	
Primery Contact Phone Number	Secondary	y Contoct Phane Nun	nber	
Haw did you hear about us? []   Dutreach Program [] [Piy	Friend/Family Dinternet ar/Föster 1 Other, please s	Community Bas specify	o Diganication	
What is your ethnicity? 🛄 His	panic Origin 🛄 Not of Hispe	nic Origin 🗔 Prefe	not to answer	
Which of the following apply to Domestic violence survivor ( Homeless Differson with a	you? ∐Rormeny incerceneted ⊂ ciscolity ⊂ Convicted of e	Veteran Active	Mitary	
What is the total number of per Now many adults (18 yrs & olde	ple living in your household, s) How many child	including yourself? ren (17 yrs old & you	nger)	
What is your ourrent living situa I Rent/Lease: Private Housing Uiving w/Family, Friends rent	ition? Public Housing - Rene Milee - Temp Housing/shell	a Room ( Own/Pu ter ( Cohabiting B	rshesing 🗀 Homeless eyong intended Use 🔂 Q	ther
Which income supports do you TANE ISSON SSINTS	currently receive? IS Retirement [1] Worker's C I Benefits [1] SNAF[2] Hous	ompensation : 10n ing 🗌 Other	ка Зиррога	
		The state of second	yment//	
Who is your employer?	If unemploye	g, sust anot of empic		
Who is your employer? What is your LIS citizenship state	If unemploye Is sident Alien (F1/ Studen	g, kast dabe of empio	d ResPrefer Not to Art	SWET
Who is your employer? What is your LIS citizenship state Citizen Permanent Res What brought you in today?	If unemploye Is esident Alien (P1/ Studen DebtCreditBucgstif	p, east date of empto t) I undecourrente 15 I Housing I E	d Res Prefer Not to An mployment Taxes	swer ] Other
Who is your employer? What is your LIS citizenship stat Citizen Permanent Res What brought you in today? Do you have health insurance?	If unemploye Is esident Alien (P1/ Studen Debt Credit C Sugesit Medicare C Medicari C	g, tast alloe of emplo t)Uneocumente tg Housing E Private Insurance	d Res Prefer Not to An maloyment Taxes	swer ] Other ] No
Who is your employer? What is your LIS citizenship stab Citizen Permanent Res What brought you in today? Do you have health insurance? How confident are you that you Not at all confident C Som	If unemploye Resident Alien (F1/ Studen Debt Credit Suggesid Medicare Medicari C could come up with money v ewnet confident Overy tor	g, tast date of empto t) Uncocumente ty I Housing I E Private Insurance arithm a month to de infident	d Res Prefer Net to An maloyment Taxes Veterans Benefits al with a financial omerge	swer   Other   No ncy!
Who is your employer? What is your LS citizenship stat Citizen Permanent Res What brought you in today? Do you have health insurance? How confident are you that you Not at all confident Som	If unemploye Resident Alien (F1/ Studen Debt Credit Suggest Medicare Medicari C could come up with money v ewnet confident Overy tor	g, tast alloe of emplo t) Uneccurrente tg Housing E Private Insurance within a month to de thident	d Res Prefer Net to An maloyment Taxes Veterans Benefits al with a financial omerge	swer   Other   No ncy†

# Appendix C: Moeville Mission Center Client Intake Form-English (Control Group)

			What is (	our Goal?		
			M.	0	5	<b>?</b> Tous M in Une goal
the Artoin	Cella Some Die d	can h	wip you reach	your goal with	free financial coach	ing to:
		Build or re	ран увог стелій	HODI'E		
	1	Pay doen	acat			
		Fight for the	ioncial oneorgen our Lavines	oes.		
		Create a ta	Az alkan			
	2	Create a re	svistic budget th	at works just for	hem,	
	od for coarding w	ALL MARKED	and the second			
Which the b			Invoeton	E maris	Tereshone	
Saype	C FaceTime	· •				
which meth Saype Which days Worday	Fiscetine and time frames friday fam-3 30;	eore best for	iyeut (Coaching untay kam sispin	anias er sta Diferenti	ty i Four or test) ( ip~ ip~	
Nnich meth Saype Which days Worday Do you have	Facetine and time frames friday Sam-3:30; c chacking/saving	eors best for in Est	nyeut (Casching unzey bern szipm – Checking only	Sections are usual Thursday	sy 1 hour or less) - Fam-Fam Checking and Sering	ç; 🗌 Yeither
Which meth Saype Which days Wonday No you Nevi H you have	Facetine and time frames o friday Iam-3 30; c chacking/saving a savings account	work best for im 25th s account* [ t, arhot in par	ryau* (Coaching unzay Sam-12pm Checking only or current balan	Deverge only	ty 1 hour or sess) ( fp= fp=	ç 🗌 Yeither
which meth Saype Which days Morday Do you have No you have	Facetime and time frames friday Sam-3-3-35 c chacking/saving a savings account to you pain to incr	work best for im O Set paccount* ( t, orhot is por ebte your los	ryau* (Cosching unzay Barn 12pm Checking only or current balan	Sections are usual Thursday Carvergs only at the cart & need	sy 1 hour or less) ( fp=-fp= Checking and Serin) Hs*	5 🗌 4sither



		LUCCATIO	Post-Survey	
Participant Name: Workthop Topic:		Instructor Name: Date:		
BEFORE THE	PRESENTATION, PLE	ASE FILL OUT THE	FOLLOWING:	
Gender:     Famile     Male     Male     Direct deposit     Cash     Check (to     Direct deposit	3. Race: African American Asian Latino White Other:	4. Marital Status: Cohabitating Diverced Married Separated Single Wideward	5. Monthly Income: Less than \$600 \$600 - \$1,199 \$1,200 - \$1,799 \$1,300 - \$2,399 \$2,400 - \$3,000 \$3,000 +	
aspositi     ason card       7. Employment Status:	Source(s) of income you've year*:     Borrowing from family me     Pension Plan     Salary, wages, contract we     Self-employed     Social Security Benefits     Withdraw from Ratirement	e received in the last ambers/friends gas t Plan	9. Have you consulted a financial professional about*: Debt counseling Insurance of any type Savings or investing Taking out a mortgage or loan Tax planning	
10. Highest level of education: Less than High School High School Diploma/GED Technical/Trade School Associate Degree Bachelor Degree Master's Degree Doctoral Degree	11. Financial Service(:)/ Pracutilize*:     Borrowing from others     Checking Account     Credit Cards     Payday/Title Loans     Parsonal budget, spending	tice(s) you currently Pre-paid Debit Cards Retirement Fund Savings Account Other investment funds plan or financial plan	12. Current Financial Situation(s)*: Bankruptcy Foreclosure High Credit Card Debt High Medical Bill Debt Homeless Low Credit Score New Home Purchase Student Leans	
May select more than one answer      May select more than one answer      Masse answer the following questions:      13. Do you regularly set aside or save money for fiture use, such as emergencies or financial goals?     No     Sometimes     Yes      14. Do you currently utilize a personal budget, spending plan, or financial plan?     No     Sometimes     Yes      15. In the last month, did you spend less money than you made or received?     No     Yes      16. In the last two months, did you experience a late/penalty fee on a bill or loan?     No     Yes      17. In the last two months, has your checking account been overdrawn?     No     Sometimes     Yes      19. I feel confident that I can meet my normal monthly livings expenses without borrowing.     No     Sometimes     Yes      Ye				
21. With "1" being the least confident at	at "5" being the most confident.	how confident are you in yo	our ability to achieve a financial goal you	
set for yourself? 22. Are you more likely to take any of th Open a bank account O Check your credit score O Budget/track expenses O	1 2 3     is following action(s)? Select all     Open a retirement find     Start Saving/Open a savings :     Other:	a a a b a b a b a b a b a b a b a b a b	debt other financial education courses/services	
What is your current savings account ba	lance?			

## Appendix D: Financial Education Endowment (TFEE) Post-Survey-English

		45 FINANCIAL	EDUCATIO	PRE-SURVEY
Nombre del parti	icipsate:		Nombre del instructor:	
Tems del taller:		1	Fecha:	
ANTES DE LA PRESENTACIÓN, POR FAVOR LLENE LO SIGUIENTE:				
1. Género: Generatino Masculino 6. Manera(s) de l Depósito directo Cheque (a depositor)	2. Tamaño del hogar:  recibir ingreso*:     En efectivo     Tarjeta de debito     prepazo	3. Raza: Afroamericano Asiatico Latino Blanco Oro:	4. Estado civil: Colabitando Diverciado Casado Separado Soluzo Vindo	5. Ingreso mensual: Manos que \$600 \$600 - \$1,199 \$1,200 - \$1,799 \$1,800 - \$2,399 \$2,400 - \$3,000 Mas que \$3,000
7. Extado de emp Empleado de Empleado de Trabajo temp Estudiante Desempleado Otro:	pleo: tiempo completo medio tiempo oral	S. Fuente(z) de ingreso que el año patado:     Prostamo de familiares/n     Plan de pensiones     Salario, soldada, salario e     Trabajo autonomo     Benefícios del Seguro Se     Retiraro del plan de jubil	usted ha recibido en migos del contrato xial hción	9. Usted ha consultado con un profesional financiero sobre*: Su denda El seguro de cualquier tipo Ahorar o investir Soliciter una hipoteca o un prestamo Planificación tributaria
10. Nivel de educ Manos que la La escuela tecni Titulo de soci Licenciatura Masetria Doctorado	ración: escuela socundaria cundaria/GED ca/vocacional ciado	11. Servicios(1) Practica(1) : una actualmente*:     Prestar de otros     Cuanta de cheques     Tarjeta de crédito     Préstamo de     utulo idas de pago     Presupuesto, plan de gest	financieras que usted Tarjeta de debito prepago Fondo de jubilación Cuenta de aborros Otros fundos de invertir tos, o plan financiero	12. Siruación(et) financieros actuales*: La bancarrota Deuda alta de tarjeta de credito Deuda alta de facturas medicales Sin hogar Calificación crediticia baja Compra de casa meiva Préstemos estudiantiles
* Se Per favor contexts 1 13. ¿Usted regular 14. ¿Usted actuals 15. En el ultimo m 16. En los ultimos 17. En los ultimos 18. Estroy comodo 19. Me tiento seg 20. Serta capaz de	puede seleccionar mas de as signientes preguntas: mente aborre dinero para mente un un presupuesto, se, justed gasto manos d dos meses, jus cuenta de con mi situación financia ro que puedo pagar mis j encargarme de una emer	e una respuesta unos faturos, como emergencia plan de gastos, o plan financia inero que gano o recibió? o un cargo recargo de una cuesta o cheques ha estado en descubia en hoy en da. gancia financiera que cuesta «S	as o metas financieras? 20 personal? 28 o un préstamo? 280? 29 sto? 29 stata un pedir dinero p 2730.	No Aveces S No Aveces S No S No S No S No S No S No Aveces S No Aveces S No Aveces S

# Appendix E: Financial Education Endowment (TFEE) Pre-Survey-Spanish

Revised: 3/7/2018

TEXAS FINANCIAL EDUCATION ENDOWMENT Pre-Survey
DESPUES DE ESTA PRESENTACIÓN/CURSO/SESIÓN DE ASESORAMIENTO:
21. Si "1" es la menos confianza y "5" es la más confianza, ¿cuánto confianza tiene usted en su capaz de lograr una meta financiera que usted establece para si mismo?
1       2       3       4       5         22. ¿Es más probable que tomarás algún(os) de los acciones siguientes? Indica todos que aplican.       Abrir una cuenta bancaria       Abrir un fundo de jubilación       Pagar deudas         1       Ver su calificación de crédito       Empenar o abrir una cuenta de aborrar       Asistir a otros servicios/cursos de educación
Prevaponer/controlar gastos     Otro:
Por favor incluya algunos otros comentarios aqui:
Revised: 3/7/2018

Contract of General P	Apellido		Feche De Nacimiento
Direction actual	Ciudad	estado	Codico de Area
Numero de contacto Direccion de Email	Numero secu	ndario	
Como supo de nosotros? 🗔 A Programa 🛄 Piyer/Post	migo/Familia 🔲 Internet 🔲 er 🔲 Otro, porfavor especifiq	Organisacion con	nmanitaria
Cual es su Origen? 🔲 Hispan Cual de estos usted aplica? 🗌 Violencia Domestica 🛄 Fo 🗌 Sin Hagar 🔲 Persona con 4	o Origen 🔲 No Hispana Origer Irmalmente encarsesado 🔲 Ve desabilidad 🔲 Convicto de feic	n 🗔 Prefiese no eterans 🗔 Activo onis 🔲 N/A	convestar o Militar
Cuantos viven en su casa, inclui Cuantos Adultos (18 & mas)	liendio usted? Cuentos ninos (17 edad	& menos}	
Cuel es su forma donde vive? Renta/ Asistencia publi Vive con Família o amigos [	ca — Renta un cuarto — Pro _ vive lugar temporal — no se	opetario de casa [ we 🗌 otro	🗋 Na tiene Hogar
Que clase de alluda tiene en est TANF SSDI SSI Desempleo Beneficios V Para quien trabaja? Cubi es su status ?	tas momentos?  SS Retiro    Compensation d /eteranos    Swap    Asisten    si no trabaja, ultima	e trabajo — Mar cia de renta — O o día de trabajo_	iutencion De los Hijos 1970 //
Ciudadano L] Permanente contestar	Res 🛄 Resident Aien (F1/ esti	uctiante) L_1sin c	locumentos Res 🛄 Prefiere na
Que lo trajo hoy a las oficinas?	Deuda Ocreato O Pres	приезко 🗔 нод	ar 🗆 Trabajo 🗆 Taxes 🖂
Tiene oseguransa medica? 🗔	Medicare 🗆Medicaid 🗆 as	eguransa privada	🔲 Beneficios veteranos 🗔
		and a second sector of an	

THE R. LEWIS CO., LANSING MICH.

and the second second

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Appendix F: Moeville Mission Center Client Intake Form (Exp. Group)-Spanish

E
Cual es su Meta?
General Example       Above pers fulcility:       Fragment to program approx       General example of Cardinals       Fragment to program approx       Fragment to program approx
Arregter tu credito,     Pagor deutos     Creses tus altornos     Creses tus altornos     Creses tus altornos     Crese un plan para tus tanes
<ul> <li>Crear un prosupuesto Que trabaje para ti:</li> <li>Cual metodo de conching financiera trabajaria mejor para ti:</li> <li>Skype Complitadoria en persona Corree electronica : texetono</li> <li>Tiene ustati una cuenta de chelles o aherros: 2006 chelle Colo ahorros : Chelle y enorros : Niuno</li> </ul>
Si no tiene cuenta de cheber a de ahorros, cuando pionsa abrir una? De aquí en Planso abrir una an: 4 meses 8 meses
Si tiene cuenta de Ahorras,cual as su balande? S0\$1-\$100\$10.1-\$200\$201-\$200\$200+
Cuanto pianearia: subir el lablance de cuenta de bhorrac en 3 meses? \$50_\$100_\$150_\$200_\$260_\$308_Otra
Mi pien es shorrer pare, compre de mi Casa/AuloVecesionesEntergencieOtro Tiene usted un deposito: o Transfer que Automaticamente retira pare su caenta de ahorros para el futuro? [como 401b] NoSi Si si tiene cuante par pariodo? \$o_%
Poudou Loons Loons

### Appendix G: Moeville Mission Center Client Intake Form (Control Group)-Spanish

Primer Nombre	Apellido	Feche De Nacimiento
Direction actual	Ciudad	estado Codico de Area
Numero de contacto	Numero secur	ndario
Direccion de Email		
Cama supo de nosotros¥ 🔲 Ar Programa 🛄 Fiyer/Poste	nigo/femilia 🔲 Internet 🔲 O r 🔲 Otro, porfevor especifique	Irgenisecion communitaria
Cual es su Origen? — Hispano Cual de estos usted aplica? — Violencis Domestics — For — Sin Hogar — Persona con di	Origen 🔲 No Hispano Origen malmente encarse ado 🗌 Vete Esabilidad 🗌 Convicto de feloni	erano Activo Miktar
Cuantos viven en su casa, inclui Cuantos Aduttos (18 & mas)	endo usted? Cuantos ninos (17 edad a	ā menos)
Cual es su forma donde vive? Renta/ Asistencia public Vive con Familia o amigos	a — Renta un cuarto — Prope Ivive lugar temporal — no save	etario ce casa 🗔 No tiene Hoger e 🗔 otro
Que clase de alluda tiene en est 	os momentos? S Retira Compensasian de tr teranos Snap Asistencia	rebejo Manutencion De los Hijos 4 de renta Dotro
Fara quien trebaja?	si no brebeje, ultimo	dia de trabajo//
Cuel es su stetus P Ciudadano Permanente 3 contestar	tes 🛄 Resident Alien (F1/ estud	liante sin documentos Res Prefiere no
Que ia trajo hoy a las oficinas? [	Deuda Cresito Presu	puesto 🔄 Hogar 🔤 7rabajo 🔄 Takes 🔤 Otro
Tiene as eguransa medica? 🔲	Medicare -Medicaid - aseg	uransa privada 🗌 Beneficios veteranos 🔲 No
Que tan comfidente esta usted i No tan confidente 🔲 poco	te que si tiene uns emergencis o confidente 🗔 Niuy confidente	este mez usted pueda pagar por eña?

Appendix G: MansfieldMoeville Mission Center Client Intake Form (Control Group)-Spanish



	AS FINANCIAI	L EDUCATIO	ON ENDOWMENT Post-Survey
Nombre del participante:		Nombre del instructor	
Tems del taller:		Fechs:	
ANTES DE LA	PRESENTACIÓN, PO	R FAVOR LLENE	LO SIGUIENTE:
1. Genero: 2. Tamaño del hogar:	3. Raza:	4. Estado civil:	5. Ingreso mensual:
6. Manera(1) de recibir ingreso*:	Asiatico	Diverciado	□ \$600 - \$1,199 □ \$1,200 - \$1,799
Depósito D En etectivo directo     Cheque (n D Ingein de débito Accourter) DISCARDO	Blanco     Otro:	Separado     Soltaro     Vindo	□ \$1,800 - \$2,399 □ \$2,400 - \$3,000 □ Mas que \$3,000
7. Estado de empleo:   Empleado de tiampo completo Empleado de medio tiempo Trabajo temporal Estadiante Desempleado Otro:	5. Fuente(1) de ingreso qui el año patado: Prestemo de familiares Plan de pensiones Salario, soldada, salario Trabajo autonemo Beneficios del Seguro S Restiraro del plan de jub	e usted ha recibido en amigos o del contrato Social ilacian	9. Usted ha consultado con un profesional financiero sobre*: Su deuda El seguro de cualquier tipo Ahomar o investir Solicitar una hipoteca o un prestamo Planificación tributaria
10. Nivel de educación: Manos que la escuela secundaria La escuela secundaria GED Escuela tecnica/vocacional Título de asociado Licenciatura Masetria Doctorado	11. Servicios(s) Practica(s) wa actualmente*:     Prestar de otros     Casota de casos     Tarjeta de credito     Prestamo de     tralo/día de pago     Presupuesto, plan de ga	financieras que usted Tarjeta de déhito propago Fondo de jubilación Cuenta de aborros Otros fundos de invertir stos, o plan financiero	12. Situación(et) financieros actuales*:     La bancarrota     La ejecución hipótecaria     Denda alta de tarjeta de crédito     Denda alta de tarjeta de crédito     Denda alta de tacturas medicales     Sun hogar     Calificación crediticia baja     Compra de casa mierta     Préstamos estudiantiles
* Se puede seleccionar más de Por favor conteste las signifentes pregnatas: 13. ¿Usted regularmente ahorre dinero para 14. ¿Usted actualmente usa un presupuesto 15. En el último mes, ¿usted gasto menos d 16. En los ultimos dos meses, ¿usted recibi 17. En los ultimos dos meses, ¿us cuenta de 18. Estoy cómodo con mi situación financia 19. Me sianto seguro que puedo pagar mis 20. Seria capaz de encargarme de una emer	e una respuesta susos futuros, como emergeno , plan de gastos, o plan funanc inero que gnato o recibió? o un cargo recargo de una cue e cheques ha estado en descub en hoy en da. gastos mensuales normales de gencia financiera que cuesta -	cias o metas financieras? iero personal? ata o un prestamo? ierto? e la vida sin pedir dinero p -\$750.	restado.

# Appendix H: Financial Education Endowment (TFEE) Post-Survey-Spanish



### TEXAS FINANCIAL EDUCATION ENDOWMENT Post-Survey

### DESPUES DE ESTA PRESENTACIÓN/CURSO/SESIÓN DE ASESORAMIENTO:

21. Si "1" es la menos confianza y "5" es la más confianza, ¿cuanto confianza tiene usted en su capaz de lograr una meta financiera que usted establece para si mismo?

22. ¿Es más probable que tomarás algún(os) de los acciones signientes? Indica todos que aplican.								
	Abrir una cuenta bancaria		Abrir un fundo (	de jubil:	scións.			Pagar deudas
	Ver su calificación de crédito		Empenar o abriz	TIMA CTU	ente de al	ACCUMULT NO.		Asistir a otros servácios/cursos de educación
	Presupener/controlar gastes		Otro:					financiera
Cual es la cantidad en un cuenta de aborros?								

Para mejorar muestro servicio de servicio de Finansas puede compartir que programa le mejor ayudo para cumplir su meta,por ejemplo,ayuda con recursos,ablar con un personal de finansas, y cual fue una practica que menos utilizo y por que?

Revised: 3/7/2018

#### Appendix I: IRB Approval Letter



(IRB# 19-056 ) is exempt from review under Federal Policy for the Protection of Human Subjects.

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, Ph.D. Director of Research and Sponsored Programs