IMPACT OF MICROFINANCE INSTITUTIONS FOR FEMALE ENTREPRENEURS: EVIDENCE FROM PHILADELPHIA, PENNSYLVANIA

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ABSTRACT

Microfinance encompasses a broad range of financial services targeted at low income individuals seeking to build income and assets. There has been extensive research on the role of microfinance institutions (henceforth "MFIs") in developing countries on poverty reduction, particularly for female clients. In contrast, research on MFIs operating within the United States is more limited. This study seeks to fill this gap in the literature and is one the first to focus on the impact of an MFI on female clients in the US using data from a Philadelphia-based MFI. The study examined the factors affecting outcomes of female entrepreneurs as compared to their male counterparts measured by changes in financial capability, repayment history, household incomes, and sustainability. Although the study does not statistically support the existence of differences between the outcomes for female and male clients of the MFI, the data does indicate positive outcomes for the clients. The business survival rates on average are above national indicators. The personal credit scores for MFI clients reflect improvement subsequent to receiving loans. This study utilized survey instruments and a focus group study to identify barriers to the success of female entrepreneurs. Noted barriers such as lack of access to capital, lack of relevant business knowledge, and sexism provide a foundation for future research study.

Keywords: Microfinance, Entrepreneurship, Poverty Reduction, Social Enterprise, Financial Capability, Female Empowerment

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

INTRODUCTION

Microfinance is a term used to describe an array of financial services, such as loans, savings, insurance, and training provided to individuals living in poverty. The loan and deposit size can be $25 or smaller in the developing world, while within the United States, a loan that is $50,000 or less is considered a microfinance product (SBA, n.d.). Microfinance Institutions (MFI) are the entities, usually nonprofit organizations that provide these financial services through a variety of public and private funders. MFI products are offered in smaller monetary amounts and are extended with nontraditional methods of underwriting and collateralization typically not used by regulated financial institutions.

In this study, I examine whether MFIs operating in the U.S. have a differential impact on male versus female borrowers. I use a unique dataset of loans extended by a Philadelphia-based MFI. There have been numerous case studies related to outcomes for MFI clients throughout the developing world, but studies focusing on MFIs operating within major US metropolitan cities are not as prevalent, and thus conclusions about MFIs' efficacy within the United State are less robust. For example, it could be argued that there are multiple options for individuals seeking financing for a business opportunity in the United States, more so when they reside within a larger metropolitan region. Thus, it is possible that the benefits offered by MFIs are more limited in developed economies compared to developing economies. Further, it is possible that female entrepreneurs operating within major U.S. cities could have different outcomes than their global counterparts. While these are interesting questions, there is minimal research available on

outcomes to MFI lending in the urban context. This study aims to fill this gap in the literature.

MFIs have been the topic of numerous studies within emerging economies such as India, Pakistan and Africa. One of the most prominent practitioners in the field of microfinance is Bangladesh economist, Mohammad Yunus. In 1976, Yunus conducted his own social science experiment by extended his personal money to groups of women entrepreneurs, or "circle groups". The goal was to provide these women with the opportunity to learn how to make money by selling their goods and crafts with the support of a group of peers. With the money they made, the women were able to provide food and educational opportunities for their children (Yunus and Jolis, 2001). Yunus ultimately received a Nobel Peace Prize in 2006 for his contribution to world peace through microentrepreurship (Nobel Peace Prize, n.d.).

In the U.S., microbusinesses make up almost 90% of the nations' businesses and an even larger proportion of small businesses in low-wealth communities (Fairlie et. al, 2015). In 2010, there were approximately 27.9 million small business firms operating in the United States, with 75% of the firms having no employees (SBA, n.d.). Additionally, the potential for microbusiness as an economic force is growing according to the Kauffman Index of Main Street Entrepreneurship, a leading indicator of small business entrepreneurship activity in the US. Small business has the potential to affect the US economy as engines of both wealth-creation and employment-growth (Fairlie et. al, 2015).

More narrowly, in the Philadelphia area, the focus of the study, large disparities exist in the availability of capital for black and Hispanic entrepreneurs residing in low- to moderate- income neighborhoods compared to white entrepreneurs (Mitchel, 2018). A

2012 survey by the National Community Reinvestment Coalition indicated that nearly 71% of business owners in the Philadelphia region were white-owned while the remaining 12.2% included black and Hispanic business owners. This percentage does not reflect the diversity of the Philadelphia region: the population is 21.2% black, but only 2.9% of business surveyed in a Minority Entrepreneurship study were black owned. Similarly, Hispanic business owners make up 7.8% of the population with 2.2% identified as business owners (Mitchel, 2018). This lack of business ownership could be the result of business lending practices by banks. NCRC analyzed all business lending in the Philadelphia region between 2012 and 2016. When this data was summarized and ranked by the neighborhoods of individuals receiving business loans for each year of the study, White and Asian-majority neighborhoods were in the top quartiles of the number of business loans received 63% and 66% of the time, respectively. Black neighborhoods and Hispanic neighborhoods were in the bottom quartile of business loans received 73% and 55% of the time, respectively.

Given the relative importance of a thriving local economy and the role of small business therein, this study examines the impact of a non-traditional pathway for start-up entrepreneurs utilizing microfinance institutions. The impact of MFIs operating in the US can provide insights to policy makers, investors, and researchers focused on achieving success for entrepreneurs.

Data utilized for this study are derived from multiple sources, including surveys, interviews, and loan portfolio details from a microfinance institution operating in Philadelphia, Pennsylvania and the surrounding metropolitan area (Philly MFI). The city of Philadelphia was chosen because of its unique attributes as a major metropolitan city

and its challenges with persistent poverty. Philadelphia has the highest poverty rate (25.3%) among the ten largest U.S. cities (US Census Bureau, n.d.), and the region's largest demographic group living in households with incomes under the poverty level are women between the ages of 25–34. Notably, 48% of all households in Philadelphia have female heads of household (Pew, 2017).

The research is conducted in two phases representing the quantitative and qualitative research methodologies. For the first phase of the study , proprietary data was obtained from the Philly MFI. This data contains information on loan amounts, repayment history, interest rates, gender and age of the borrower.

The second phase of the study utilized data obtained from on-line surveys, interviews and a focus group composed of female entrepreneurs (described in more detail later). The collection of this data was designed to identify barriers to the success of female entrepreneurs both clients and non-clients of the Philly MFI. Additionally, an assessment of non-cognitive skills was administered to the participants of the second phase of the study. This assessment of non-cognitive skills (GRIT scale) was developed by Angela Duckworth (2016) to quantify the tenacity, determination, and willpower of successful individuals.

The results of the study indicate that outcomes (as measured by increases in household income, credit score, and business survivorship over three- to five-year periods following the loan) are positive for MFI clients in general. In contrast to expectations, there appears to be no difference in outcomes for male versus female clients. In supplementary analysis, it was determined that marital status has no effect on the MFI outcomes, however, these results need to be viewed with caution because of the limited

sample size. The multidimensional qualtitative data identifys some of the barriers to success experienced by female entrepreneurs operating in the Philadelphia region.

This research contributes to the body of knowledge of microfinance institutions operating in urban settings and the outcomes experienced by its clients. Further, there is a contribution to the understanding of factors that contribute or limit the success of female entrepreneurs.

Understanding the success factors of early stage business owners will inevitably lead to focused solutions benefitting the local and macro economies. This research will be utilized by academics, policy makers, private foundations and other stakeholders as it will provide insight to the behaviors of entrepreneurs from disadvantaged backgrounds.

Research Motivation

There are two primary factors, personal and academic, motivating this research. First, I worked within the banking industry for more than 20 years as a commercial loan officer. During this time, I had the opportunity to manage loan portfolios of varying sizes, industries, and legal structures. Noticeably absent from the clients I managed were women, minorities, and start-up business owners. These groups have difficulty accessing capital through traditional banks due to personal credit challenges and lack of collateral. After the 2008 Financial Crisis and the ensuing "Great Recession", banks became even more closely scrutinized by federal regulators, and it became even more difficult for small business owners to obtain financing. This was particularly true for women and people of color seeking capital for start-up entities. I noticed that these applicants were declined more often than those that were not included in other demographic groups. At one time, my

commercial lending portfolio exceeded $90 Million and less than 5% of these loan clients were start-up ventures and/or people of color. I began to explore alternative sources of financing so that I could, at a minimum, be a resource for these applicants seeking capital. It was this search, along with reading an excerpt from the book, "The Fortune at the Bottom of the Pyramid" (Prahalad, 2005) that began what has become a passion for understanding the impact of microfinance institutions(MFI). MFIs have been acknowledged to play a role in the alleviation of poverty and in the empowerment of women (Rehman et. al., 2015).

As an academic, I am motivated to research this topic because of the economic disparities experienced by women. Ultimately, I expect this research to contribute to the expansion of microfinance institutions for disadvantaged entrepreneurs requiring access to capital for the creation and sustainability of their business ventures.

CHAPTER 2

LITERATURE REVIEW

Background

The proliferation of microfinance institutions (MFI) as worldwide financial intermediaries is largely attributed to Muhammad Yunus, a Bangladesh economist and founder of the Grameen Bank in the early 1970s (Yunus & Jolis, 2001). Today, there are more than 30 worldwide organizations leading development efforts to advance the lives of poor people through financial inclusion tools. These organizations are collectively referred to as the Consultation Group to Assist the Poor (CGAP) and have been building a body of research indicating that when poor people have better opportunities through financial inclusion to earn money, their lives change through improved education, overall health, food security and access to clean drinking water. According to CGAP, microfinance institutions are key enablers to financial inclusion. (CGAP, n.d.).

Microfinance institutions include entities with a broad spectrum of programming designed to eliminate poverty and create economic development opportunities among low income households, small and medium-sized business, small farmers and others that have been underserved by the traditional banking system (Clark & Keys, 1999). Products utilized by MFIs include, savings, insurance, training and lending for the purpose of improving living conditions through entrepreneurism, job training, or education. Microfinance begin as a grassroots as a movement, and has emerged as a worldwide industry driven by the shared objective of providing financial solutions for small enterprises and by targeting the lowest income individuals. MFI's as they exist today, are examples of a social enterprises,

incorporating a social mission while operating as profitable self-sufficient entities. The construct of microfinance institutions as a social enterprise has created different schools of thought as it relates to expanding MFIs throughout the world. The central themes guiding these schools include the approach towards poverty alleviation, the level of profitability required to achieve self-sufficiency, and measuring the impact of MFIs.

As it relates to poverty alleviation, the microfinance movement has become divided by two approaches as it relates to the most effective way to provide financial services to the poor. Commonly referred to as the microfinance schism, these two approaches are known as the institutionalist approach and the welfarist approach (Morduch, 2000). The institutionalist approach focuses on creating alternative financial institutions designed to serve clients who are either not served or underserved by traditional financial institutions. The emphasis of this approach is on promoting institutions' financial self-sufficiency, as institutionalists aim to minimize the receipt of subsidies for the operations of the institution. Contrary to institutionalists, welfarists emphasize the depth of outreach of MFIs as it relates to the outcomes of individual clients. They view banking and financial services as tools to assist in the alleviation of deep seeded poverty within the communities served. The ultimate goal for the welfarists is self-employment for the economically challenged including the poor and women. This is believed to increase incomes, assets and improve the standard of living for the community (Woller et. al., 1999).

The types of programming offered by MFIs often vacillate between poverty alleviation and economic development. Economic development tends to measure outcomes such as job creation, tax base enhancement, and business growth (typically measured by revenue and number of employees). While poverty alleviation measurements

focus on individual and household income, and the acquisition of a skill set such as training, education. The microfinance industry has traditionally sold itself as both and many programs are uniquely positioned in the center of both paradigms (Von Pischke, 2002).

As a result of the microfinance schism, it has become difficult to establish measurements for success, standards and performance within the industry (Rubin, 2007).

Target Market for MFIs

Microfinance Institutions target the most impoverished residents of the community and in many cases the majority of poor residents are women. Poverty in the United States is commonly defined as falling below the US Department of Health and Human Services annual income guidelines of $24,563 for a family of four for 2016 (HUD, n.d.). In 2016, 40.6 million people lived under the poverty level; of this group, 16.3% (6.6 million) were women (Census, 2018). Although the poor are the intended recipients of MFI programming, there is a tendency to consider the poor as a homogenous group of individuals that, having received the same products and services, will have similar outcomes. In reality, the poor are made up of a diverse population with a wide spectrum of needs. Bennett and Goldberg (1993) stated that there appears to be little to no appreciation for the variety of needs, goals, risk profiles, investment opportunities and barriers facing the world's poorest citizens.

Both in developing countries and established economies, the poor can lack marketable skills and face discrimination, social exclusion, and chronic illness. Many of these individuals would benefit from direct social services such as healthcare, basic skills training, financial literacy, and establishing a support network. Alternatively, MFIs can be

an indispensable source of capital for poor entrepreneurs as a means to establish or expand business ventures. Depending on individual circumstances, social services may or may not be a prerequisite for achievement of economic self-sufficiency for the entrepreneurial poor (Bhatt & Yan Tang, 2001).

Footprint of MFIs

In 2016, the total number of microfinance institutions outside of the US had a combined total of 132 million clients with a loan portfolio of $102 Billion Dollars. Of this group, 84% of clients were women. On a global level, these totals represent a 9.4% increase in the loan portfolio and a 9.6% increase in the number of clients (Microfinance Barometer, 2017). Despite the growth of the worldwide MFI industry, some individuals still lack access to responsible financial services. The World Bank estimates that there are 2.5 billion adults across 180 underdeveloped countries that do not have a bank account, and more than 200 million businesses lack access to credit, resulting in a $5.2 trillion finance gap that could be filled by microfinance institutions (MSMEFineCorp, n.d.).

In the United States, microfinance is used by start-up and early stage businesses owned by low income individuals. The strategy of these MFIs includes both economic development and poverty elimination through savings, insurance, training and lending programming. For those business owners, MFIs are a means of climbing the socioeconomic ladder. The loan funds operated by MFIs provide access to capital for entrepreneurs with limited operating history and limited financial performance (Jones, 2001). FIELD of the Aspen Institute provides a comprehensive census report of the US microfinance industry, known as Microtracker. For FY 2016, there were 72 MFIs reporting having worked directly

with 21,850 businesses resulting in $141,800 Million in outstanding loans. As is true with MFIs in developing countries, 58% of the US based clients reported through Microtracker were women as of FY2016 (Microtracker, 2017).

Types of MFIs

Multiple microfinance lending models have been identified. Some of the more frequently used models include, associations, bank guarantees, community banking, cooperatives, credit unions, the Grameen model, group lending, individual lending, intermediaries, Non-Governmental Organizations (NGOs), Rotating Savings and Credit Associations (ROSCAs), and Small Business, and Village Banking models (Srinivas, n.d.). In this section, I will give a brief overview of these more frequently used models.

Associations are formed by a targeted community for conducting microfinance activities. Associations can be composed of various demographic groups and or industrious segmentation for the purpose of creating a platform to empower the group financially (Srinivas, n.d.).

The bank guarantee model features a guarantor obtaining a loan from a commercial banking institution and then using the proceeds from the loan to give smaller loans to MFI clients. In some cases, the guaranteed funds may be used for loan loss recovery or insurance claims. The bank guarantee can be obtained through a donor, governmental agency or internally, using member savings, where applicable (Srinivas, n.d.).

The community banking model is based on a community establishing a financial institution that will engage in extending financial products and services to the individuals

residing within the community. In some cases, community banks are components of a strategic plan for the development of a community of interest (Srinivas, n.d.).

The Credit Union is a member driven financial institution organized by individuals that agree to save money collectively and to extend loans to the same membership for reasonable rates of interest. Each member is required to have a common bond, whether working for the same employer or belonging to the same social group governed by bylaws and operating agreements enacted by its membership (Srinivas, n.d.).

The Grameen model was created by economist and Nobel Peace Prize recipient, Mohammed Yunus from Bangladesh. The model is based on the voluntary formation of groups of 5 individuals (usually women) providing mutual, morally necessary group guarantees in lieu of collateral usually required by traditional banks. Yunus' believes that access to credit is an effective tool for eliminating inequalities that confine the poor to a cycle of poverty (Yunus and Jolis, 2001).

The group model is based on collective responsibility and security afforded by the formation of a group. The group is used for education, collective bargaining, and social peer pressure. In many cases, the group model requires a collective guarantee for each member's individual indebtedness. When a group takes out a loan, each member is jointly liable to repay the loan when a group members defaults on repayment (Srinivas, n.d.).

Some researchers that have expressed concerns with the group lending approach adopted by Grameen Bank, as credit may disempower borrowers and lead to excessive debts and increased tensions at family level (Chan. 2011; Goetz et al. 1996; Hulme & Mosley, 1996; Bateman & Chang, 2012). It is reported that borrowers were forced to eat less to meet loan payments, experienced the indignity of losing their collateralized assets

in default cases, faced a loss of confidence, and slept less due to worrying about paying their next installment (Goetz & Gupta, 1996). Group lending has also been criticized due to its high cost of implementation, replication issues, difficulties in reaching large number of borrowers, and instability, as its programs are often unsustainable due to continuous dependence on subsidies (Bhatt & Tang, 2001; Robinson, 2001; Ledgerwood, 2002; Christen, 2008).

The individual model is a straightforward credit lending model where the loan proceeds are given directly to the borrower. It does not include the formation of groups or peer pressure associated with group lending, but it often includes the social-economic support services such as skill development and education (Srinivas, n.d.)

The Intermediary model features a "go-between" organization between the lender and the borrower. The intermediary institutions provide education and support in order to improve the creditworthiness of the borrower. The educational programs could include mandatory savings or other research focused modules designed to make the borrowers more attractive to the lender. Intermediaries could be lending institutions, NGO (non-governmental organizations), microfinance institutions or commercial banks. Lenders can be government agencies, commercial banks, international donors, private foundations, or other institutions with a desire to invest in microbusinesses (Srinivas, n.d.).

Many MFIs operation in the United States utilize the Intermediary model as they receive loan fund dollars from the federal government by way of the Small Business Administration (SBA, n.d.) and the Department of the Treasury's Community Development Financial Institutions Fund (CDFI, n.d.).

Non-Governmental Organizations (NGOs) have emerged as a key player in the microfinance industry as they have been active in establishing and participating in various programs. They have been instrumental in developing resources and tools for communities and MFIs to monitor the progress and benchmarking of best practices.

Rotating Savings and Credit Associations (ROSCAs) are small groups where each member makes "regular cyclical contributions into a common fund," which is given entirely to one member at the start of each cycle (weekly, monthly or quarterly). Being a self-funded model, the cash flow available to cover debt repayment is assessed by the membership when determining the regular contribution to the group fund (Srinivas, n.d.).

The small business model places the emphasis on small and medium enterprises (SME) for the purpose of generating employment, increasing incomes and providing services to areas that are underserved. A key component of the small business model is access to capital in different forms for different uses. Microcredit has been provided to SME directly or as a part of a larger enterprise development (Srinivas, n.d.).

The village bank model is very similar to the community bank and group models. They typically consist of 25 to 50 low income individuals who are striving to improve their lives through self-employment. The initial loan capital for the village bank may come from an external source, however the operations and governance of the bank are the responsibility of the members (Srinivas, n.d.).

There are multiple lending models utilized as standalone models or combinations of more than one model depending upon the culture of target market and the sources of funding received by the MFI. Nitin Bhatt (1999) articulated that no one model of microfinance can solve the diverse developmental needs of the poor all over the world.

There is room for different kinds of programs, both subsidized and unsubsidized, designed to service the various segments of low-income communities (Bhatt, 1999).

MFIs in the United States

The earliest working concepts of microfinance institutions as self-help credit organizations were formed by the immigrant communities of New York in the late 1800s, and some of the countries' first community development credit unions were developed in the 1930s by African Americans who, facing discrimination from traditional financial institutions, could not access credit. Modern microfinance had its beginnings in the early 1970s with Community Development Financial Institutions (CDFIs) like Shore Bank Corporation of Chicago, IL and the Neighborhood Reinvestment Corporation (now known as Neighborhood Works of America) establishing microfinance institutions assisting low income individuals in becoming self-sufficient. The development of CDFIs would later become a bipartisan initiative to expand this model of self-sufficiency to a greater number of underserved populations within the US (History CDFI, n.d.).

In 1986, the National Community Capital Corporation was established (now known as the Opportunity Finance Network, OFN), which provided leadership in promoting policies to expand microfinance in the United States to what it is today with more than 250 CDFIs members with nearly $22 billion in assets (OFN, n.d.). Following this, the Riegle Community Development and Regulatory Improvement Act of 1991 was signed into law, creating the Community Development Financial Institutions Fund (the "Fund") and the Community Development Advisory Board. The Community Development Financial Institutions Program along with the Bank Enterprise Award Program were among the first

established under this law. Financial and Technical Assistance award grants have been extended to certified community development financial institutions (CDFIs) on a competitive basis each year since inception. More than 80% of the Fund's lending portfolio is targeted to serve low-income families in high poverty communities and underserved populations. Persistent poverty counties such as Philadelphia County in Pennsylvania account for more than 21% of all of the Fund's lending. In addition to providing capital for lending, the Fund provides vital development and financial counseling services to the same underserved populations in an effort to increase access to financial products for homeownership, affordable housing, and business development (CDFI fund, n.d.). Beginning with 196 certified CDFIs at FYE 1996, the Fund has increased to 1,012 certified CDFIs at FYE 2016, extending a total of $3.39 Billion when measured at the end of FY 2015 (CDFI fund, n.d.).

The Small Business Administration (SBA) has been a catalyst for the expansion of the microfinance industry in the United States. The SBA's Microloan program was established in in 1991 to assist women, low income, veteran and minority entrepreneurs and other small businesses in need of financial assistance. The program makes direct loans to Intermediaries that, in turn use the proceeds to make loans to eligible borrowers. The overall mission of the Microloan Program is to integrate financing with training and technical assistance for start-up, newly established, existing and growing small businesses. In 2010, the Small Business Jobs Act was signed into law creating the Intermediary Lending Program designed to extend loans to intermediaries each year for the purpose of providing flexible debt financing to small business owners with limited access to capital. Intermediaries used the ILPP funds to make loans of up to $200,000 (SBA, n.d.).

The microfinance industry in the United States is closely monitored by the Microenterprise Fund for Innovation, Effectiveness, Learning and Dissemination (FIELD), a research and development organization dedicated to the expansion and sustainability of microenterprise development efforts, particularly those aimed at low-income Americans. The Mission of FIELD is to identify, develop, and disseminate best practices, and to broadly educate policy makers, funders and others about microenterprise as an antipoverty intervention (Gerschick, 2002).

FIELD conducted a review of literature on alternative financing for small business that also included information on the demand for microenterprise lending. Data collected from microfinance institutions by Opportunity Finance Network (OFN), between 2008 and 2010 reporting increases in applications during the same period. FIELD and OFN research documents are based on self-reporting data, however, other objective research yields similar results (Gomez & Edgcomb, 2011).

Researchers commissioned by the Federal Reserve Bank of San Francisco documented the contraction in bank small business lending in low-to-moderate income (LMI) communities was greater than non-LMI areas between 2008 and 2010. During the peak of the recession from 2007 to 2009, the number of small business loans from larger banks dropped from $395,000 to $144,000 resulting in approximately $7.6 billion less dollars being disseminated into lower income communities. Few studies have documented recent trends in small business lending and even fewer have focused attention on the implications of the reduction in credit from lower income communities (Laderman and Reid, 2010).

Outcomes of MFI

The outcomes for individual clients of microfinance institutions worldwide can be broadly categorized in four ways, Poverty Reduction, Social Enterprise Development, Empowerment of Women, and Financial Capability.

Poverty Reduction

Poverty and unemployment are recurring characteristics as it relates to the clients of microfinance institutions. Poverty, whether it is within the United States or in the developing world is a complex social construct, however, a review of the literature yields two key components necessary to combat poverty: (1) an increase in household incomes and (2) an increase of personal assets. The results from the literature have been mixed as it relates MFIs and poverty reduction among its clients.

One of the longest running evaluations of microfinance institutions effect on poverty reduction was led by MIT economist Ester Duflo. By the end of her study, only 33% of the households that were observed borrowed money from an MFI. Further, of the 67% that did borrow money, the microloan facilitated the expansion of businesses or, in the case of female entrepreneurs, the establishment of a business. The study did not conclude that the income from operating a small business, fueled by the microloan, provided an increase in household income sufficient enough to escape poverty. In other words, microfinance seemed to play a very small part in the growth of the economies that were evaluated, however it may have an impact in other settings (Duflo et. al., 2015).

In an effort to expand results for a wider geographic area, another study looked at microfinance clients from six different countries. The researchers concluded that the average income of the participants was not any higher for those clients who received

microloans than those who had. Their study did note that there are very modest effects evidenced by an increase in the number of small business and a slight increase in spending pattern changes (Bannerjee, et. al., 2015)

According to a study conducted by Jonathan Morduch and Barbara Haley (2002) on the effects of microfinance on poverty reduction, a disagreement exists on the specific definitions of levels of poverty. They came to a consensus on three main points, which are laid out as follows:

(1) Microfinance is not for everyone. Entrepreneurial skills and ability are necessary to run a successful microenterprise, and not all potential customers are equally able to take on debt. While these points will be true across all strata of poverty, it is assumed that they will have a greater effect on the very poorest.

(2) The sick, mentally ill, destitute who form a minority of those living below the poverty line are typically not good candidates for microfinance. Many researchers agree that this group of people would be better candidates for direct basic assistance.

(3) Microfinance can be effective for a broad group of clients, including those who are living in the bottom half of those below a country's poverty line. These strata, constitute the "poorest" and constitute the group that generally intersects the various definitions of extreme poverty: landless, limited access to basic social services, average per capita income of less than $1 a day, and bottom third of a relative poverty ranking (Murdoch and Haley, 2002).

Karlan and Appel (2011) presented a number of case studies carried out in economically poor countries such as Ghana, India, Kenya, and Bangladesh to examine the

effectiveness of developmental projects including microfinance institutions in an effort to reduce poverty. They ultimately produce a list of seven workable ideas that should be considered as effective tools for fighting poverty including micro-savings. One of the randomized control trials in Kenya found that women that utilized micro-savings accounts were better able to withstand financial setbacks such as illness (Karlan & Appel, 2011).

A US based study of self-employment learning sponsored by the Aspen Institute tracked the progress of 405 individuals operating small businesses between the years of 1991 and 1997. Of the participants, 33% had incomes of less than 150% of the poverty guidelines. The study documented each of these business owners' efforts to improve household incomes and increase assets. The results of the study concluded that 72% of the low income microentrepreneurs experienced an average gain in income of $8,484 over the five year period. For the 53% of the low income business owners that were able to move their families above the poverty line, the microenterprise was found to be a contributing factor. Additionally, the observed microbusinesses experienced a 49% survival rate during the same period (Clark & Keys, 1999).

However, like any tool, there are documented cases of microfinance misuse with severe consequences for individuals, institutions, and governmental entities. One of the more significant crises in microfinance erupted in the Indian state of Andhra Pradesh, a population of 80 million, in October of 2010. The unfortunate convergence of the global economic downturn and the massive personal debt bubble of MFI clients resulted in swift action by the Andhra government. In order to understand the events prior to the 2010 meltdown, it's important to understand the implementation of various tools of social policy such as self-help groups and circle lending in India occurring in the 1990s created the ideal

breeding ground for over indebtedness among poor populations increasingly made dependent upon debt for day-to-day survival (Mader, 2013). As a result, MFIs in India from the late 1990s until 2005 were borrower driven at two levels. First, the legal formation of most microfinance institutions did not legally permit them to collect savings from clients, and therefore most of the focus centered on loan products. Second, equity capital for the loan funds was not readily available in the early years of inception, therefore most of the capital had to be borrowed from larger domestic financial institutions or foreign donors. Beginning in 2004, there were 87 MFIs with a loan portfolio of $249 Million increasing to $463 Million in just one year (Mixmarket, 2008). Andhra Pradesh became a magnet for microfinance start-ups and witnessed a proliferation of loans from private MFIs.

The ability of MFIs to scale up their operations in Andhra Pradesh rested in part upon the institutional infrastructure and cultural of formal credit put into place through the social and development banking schemes of the 1970s and 1980s, alongside the expansion of the self-help group (SHG) model under the auspices of the state in the 1990s and 2000s (Taylor, 2011). This rapid growth of available loan funds generated a lending frenzy by MFIs and by banks to MFIs until the first warning signs of trouble appeared in 2006. A demonstration turned violent when borrowers publicly demanded back the title deeds for their homes that had been seized as collateral. This event caused the government to temporarily close more than 50 MFI offices and ordered an inquiry into allegations of MFIs pushing reportedly up to 200 borrowers into committing suicide due to harassing collection techniques (Hindu, 2010).

The microfinance crisis in Andhra Pradesh provides almost a textbook example of what can go wrong in allowing the proliferation of relatively less regulated MFIs in a boom

that occurs under the benign gaze of the government (Ghosh, 2013). Notably, Nicaragua, Morroco, Bosnia, and Boliva have faced similar negative reports on the effects of microfinance with politicians encouraging support for non-profits in exchange for grassroots political support (Jaabi, 2018).

Social Enterprise

Social Enterprise refers to organizations utilizing models of private enterprise for socially beneficial goals. The aim is to incorporate a social mission through commercial activities. Scholars Bornstein and Davis (2010) define social entrepreneurship as a process by which private citizens build or transform institutions to advance solutions to social problems such as poverty, illness, illiteracy environmental destruction, human rights abuses, in order to make life better for the community as a whole.

Microfinance institutions are one of the most well-known examples of social enterprise, given the focus on problem-solving and innovation to bridge the gaps between public, private, and nonprofit sectors (Jing and Donglin, 2011). As stated earlier, Mohammed Yunus‘ circle lending clubs became the Grameen Bank system, enabling many families to escape dire poverty throughout the world. The Grameen Bank model is an icon for social enterprise by combining both social value as well as economic returns (Grameen, n.d.). The rise of worldwide social entrepreneurship is largely attributed to the lessons from the Grameen Bank.

A growing body of literature highlights some of the ethical considerations of social enterprise as it relates to predatory interest rates and acceptable levels of profitability. Most social entrepreneurs tend to focus on very specific problems or market niches, which can

create discord with economic development efforts. Sud, VanSandt, and Baugous (2015) cite how benefactors of the "One Laptop per Child" program designed to provide $100 laptops to poor children in developing countries were surprised at the resistance they experienced from other corporate competitors and governments officials who viewed the program as a potential threat to the development of their own industrial sector (Sud, VanSandt & Baugous, 2015).

Empowerment of Women

Several studies document outcomes for MFI clients resulting in increased financial empowerment for women. Weber and Ahmad (2014) explored whether MFI influenced empowerment by measuring outcomes of two groups of female clients, new MFI borrowers and more experienced MFI borrowers. Although the results were mixed, it was concluded that microfinance institutions have an impact on the empowerment of female borrowers (Weber and Ahmad, 2014).

Agier and Szafarz (2013) conducted a study with 34,000 loan applications from a Brazilian microfinance institution. Although the study was designed to consider the "glass-ceiling" effect in terms of loans sizes between men and women, the results provide some interesting insight as it relates to women's empowerment. Microfinance institutions offer access to gender-blind credit, creating otherwise non-existent opportunities for female entrepreneurs. However, women are likely to experience barriers as it relates not only to their social and family status, but also their borrowing capacity (Agier and Szafarz, 2013).

The concept of financial empowerment for women can be understood using three paradigms: (i) feminist empowerment, (ii) poverty alleviation, and (iii) financial

sustainability. These three distinct paradigms of economic empowerment can yield increased well-being for women and their families, and wider social and political empowerment can be evaluated as well. A study was conducted in Bangladesh to identify the factors that influence the empowerment of women as microcredit borrowers. Rahman et al. (2009) identified that "age, education levels of women, and levels of income are significant factors that influence empowerment."

Over the past 30 years, microfinance practitioners and policy-makers have gravitated towards the view that targeting women in microcredit programs is the most effective means to deliver wider social benefits. Providing women access to credit, it is argued, strengthens their bargaining position within the household, and women are more likely than men to spend resources in ways that benefit the whole household (de Aghion & Morduch, 2005; Khandker, 2005; Pitt et al., 2006). Indeed, a large body of evidence documents that, controlling for total household resources, increasing resources controlled by female household members has a greater impact on family welfare (Thomas, 1990, 1994; Lundberg et al., 1997; Duflo, 2003).

Yasmine Nader (2008) conducted a study to test the hypothesis "microcredit is positively linked to women's socio-economic well-being in Cairo." She argued that microcredit has become imperative to alleviate poverty and improve families' wellbeing. Her results confirmed that microcredit is strongly linked with children's education, income and assets (Nader, 2008).

The US Small Business Administration, through its Office of Advocacy, produces a survey of Small Business owners every five years. The 2012 report indicates that female business owners continue to play an important role in the American economy, contributing

over $1.4 trillion in sales and 8.4 million jobs. Through the efforts of female business owners, more than $450 billion in salary and wages were paid to American workers. The importance of female entrepreneurs is even more apparent in minority communities, where a larger share of businesses are owned by women compared to nonminority communities (McManus, 2017).

This research study focuses on female entrepreneurs in the United States, more specifically Philadelphia, PA, and their outcomes measured by changes in household incomes, financial capability, and the creation of sustainable business enterprises. The measurement of household incomes will be derived from financial documentation provided by the MFI clients.

Financial Capability

The US Department of Treasury has defined financial capability as the capacity, based on knowledge, skills and access to manage financial resources effectively (US Treasury, n.d.). Women face a disproportionate share of financial insecurity due to six documented external factors: (1) historical racial and sexual discrimination with traditional financial institutions, (2) gender inequities in homeownership, (3) structural gender inequalities within the workforce, (4) lack of access to employer based retirement and savings plans, (5) limited financial capacity to meet basic needs, and (6) gender bias in retirement tools (Baker, Martin-West, Famakinwa, 2015).

One of the cornerstones of financial capability in the US is the personal credit score, which plays a significant role in accessing personal credit, employment opportunities, insurance, mortgages, and business credits. Credit Scoring analytics

commonly referred to as FICO score has become a generally accepted tool of assessing risk by financial institutions. There are three national credit bureaus (Equifax, Experian and TransUnion) competing to capture, update, and store personal credit histories on most consumers. A predictive FICO scoring system resides at each of these credit bureaus from which lenders request FICO scores when evaluating individual credit risk. FICO Scores are calculated using five categories of credit history: payment history (35%), amounts owed (30%), length of credit history (15%), new credit (10%), and credit mix (10%) (FICO,n.d.).

There are differences in credit scores between male and female business owners as reported by both a provider of small business credit, Biz2Credit as well as a provider of analytical credit data, Experian. Biz2Credit compiled data from its loan clients demonstrating the different characteristics of women and men owned businesses. In 2017, the average credit score for women-owned business of 598 was 20 points lower than male-owned companies of 618 (Biz2Credit, n.d.).

Experian's Business Credit report of 2016 concludes women-owned business credit scores averaged 34 compared to men-owned credit scores average of 35. The national average for business credit scores is 62 based on a 100 point scale. Women fell slightly below their male counterparts as it relates to credit scores. Women-owned businesses had personal credit scores averaged 689 as compared to men-owned businesses with personal credit scores of 699 (Experian, n.d.).

The Great Recession (2007–2009) created additional challenges related to financial access for women in the United States, including higher levels of student debt, being primary caregivers for children and grandchildren, and lower incomes when compared to male counterparts. With these challenges, women are limited in their ability

to save for unexpected expenses, investing in homeownership, or establish business equity. For women of color, the effects are even more pronounced: they are less likely to have access to affordable financial products and services, business capital, and resources to save compared to white men and women.

Women face a host of barriers related to wealth accumulation, such as higher amounts of student debt restricting their ability to set aside savings for emergencies, invest in homeownership, businesses or retirement savings (Loya, et. al, 2015). Women of color find themselves in the crosshairs of racial, gender, and wealth gaps. The barriers for women of color are more resonant in that they are more likely sole income earners and heads of households. Furthermore, women of color are more likely to be segregated in low-paying hourly wage jobs with little to no employee benefits. Additionally, the racial and gender discriminatory policies of previous generations (such as "Redlining") continue to impact communities of color today, as these barriers not only actively impeded the accumulation of wealth, but also reduced the transfer of wealth to the next generation (Flynn, 2017).

In recent years, entrepreneurship has been seen as a means to address the racial wealth gap, both because of the apparent relationship between business ownership and wealth, and because of the opportunities that exist for higher levels of wealth and income for people of color. One of the most significant obstacles for closing the wealth gap stems from the fact that not having wealth makes it extremely difficult to establish or expand a business. Individuals with lower wealth levels have less of their own capital to invest in a business and fewer assets to leverage or pledge to access capital from others. Multiple sources conclude that African American and Latino-owned firms are more reliant on owner investment and are less able to access bank financing that their white counterparts. As a

result, firms owned by minority subgroups start with lower levels of financial capital (Klein, 2017). Despite, the challenges with access to capital, the 2012 SBO reports that minority women were able to outpace business ownership percentages when compared to their nonminority counterparts (McManus, 2017).

Theory Development

Scott Shane (2003), who developed a theoretical and practical approach to understanding entrepreneurism, reaches several conclusions about would-be entrepreneurs that bear examining in the next few paragraphs.

First, he states that individuals with low incomes are more likely to become self-employed, however, of those that are self-employed, those that earn higher incomes tend to be the most successful.

Second, he argues that individuals that have been unemployed are more likely to become self-employed than employed individuals. The lower the level of state income support that the unemployed person receives, the more likely they are to become self-employed. The longer an individual has been unemployed, the more likely they are to become self-employed, suggesting that for many individuals, self-employment is an option of last resort.

Third, he argues that individuals who are made redundant are less likely to survive in self-employment than those who quit their jobs to follow a business plan that their previous employer was unwilling to endorse.

Fourth, he states that married individuals with a working spouse are more likely to become self-employed than either single people or married people with a non-working

spouse. Although single individuals have fewer commitments, they lack the ‘‘cushion’’ of a second income. Additionally, they are less likely to own a home that can be used as collateral to obtain a business loan.

Fifth, he states that highly educated individuals are more likely to become self-employed, and are more likely to be successful entrepreneurs. The number of years spent in full-time education is an important factor in success, as well as the acquisition of specific business skills. Time spent in education may be correlated with underlying basic abilities.

Sixth, he states that individuals with business experience (typically in a managerial role in a private firm) are more likely to establish their own businesses and operate them successfully. Their previous work not only allows then to identify opportunities in their employer’s market, but also makes them feel confident that they have the right skills to exploit them.

Seventh, he states that individuals establishing multiple business enterprises over a period of time, “serial entrepreneurs’’ are considered to be at an advantage, particularly if the previous business was sold after reaching a critical size. Establishing a firm affords the opportunity to learn by doing even if the venture has not been successful.

Eighth, he states that serial entrepreneurs are less likely to take up franchises than first-time entrepreneurs, because they do not require the training provided by the franchisor. Shane’s own studies have shown that patents belonging to inventors who previously had more firm-founding patents were more likely to be exploited through firm formation than were patents belonging to other inventor,.

Ninth, he states that parental influences are important, and having a parent who is self-employed, or who has founded a firm, increases the likelihood of becoming an

entrepreneur. It also increases the likelihood of success. Children of entrepreneurs tend to start their businesses with less prior business experience, and at a younger age, than most entrepreneurs, but obtain higher-than-average income from their ventures.

Tenth, he states that age increases the propensity to become an entrepreneur amongst the young, but diminishes the propensity with age: the relationship has an inverted U-shape.

Eleventh, he states that social status increases the propensity to become an entrepreneur as it confers reputation which allows the entrepreneur to access finance, attract able employees, and generally mobilize resources.

Finally, he states that social ties, and embedding within networks, help entrepreneurs to acquire useful information.

The success factors of entrepreneurs has been the topic of many researcher studies and can be broadly divided into two schools of thought: successful entrepreneurs are born with the inherit skills or successful entrepreneurs can acquire the skill set over a period of time. Adopting the disposition that entrepreneurial skills can be acquired, it is important to understand that skillset and how best to disseminate to would be entrepreneurs.

Aulet and Murray (2013) have made distinctions in the types of entrepreneurs they have worked with at the Martin Trust Center for MIT Entrepreneurship. They characterize the entities as either Innovation Driven Enterprises (IDE) or Small and Medium Enterprises (SME). IDEs create global opportunities based on bringing customers new innovations including technology, process, or business models, e.g., Uber, AirBnB, and NetFlix. The entrepreneurs responsible for establishing these entities were able to utilize existing technology to provide a distinctive product for the market (Aulet and Murray, 2013).

Small and Medium Enterprises in the United States are primary drivers for moving people out of unemployment especially for those with relatively low levels of education giving them an opportunity to work independently to utilize their skills. SMEs often employee the founder and spouse and a handful of other workers, providing lower than averages wages and few fringe benefits relative to very large corporations (Aulet and Murray, 2013). SMEs are important to the local and national economy as the Kauffman Foundation has determined that companies less than 5 years old produced two-thirds of the 40 million net new jobs in the American economy between 1980 and 2005 (Strangler and Litan, 2009).

Angela Duckworth has done extensive research on the non-cognitive skills necessary for success in any endeavor. According to Duckworth, the key to outstanding achievement is not necessarily talent alone, but a unique combination of passion and persistence known as "grit". Grit is the factor that drives an individual to pursue a goal until its conclusion regardless of setbacks, barriers and discouragement. As such, she has developed a Grit Scale, in an effort to quantify the granularity of this phenomena. Duckworth established the Character Lab, within the Psychology Department of the University of Pennsylvania, in an effort to further research the factors of highly successful individuals from various occupations and educational levels. This research study utilizes the Grit Scale to evaluate female entrepreneurs' capacity to achieve success.

CHAPTER 3

METHODOLOGY

Conceptual Model and Hypotheses Development

The primary research questions guiding this study are structured to determine the impact of microfinance institutions on female entrepreneurship: Are there factors impacting the success of female entrepreneurs? When compared to male loan clients of the same MFI, do women have different outcomes? To what extent are success factors related to age, education, marital status, and non-cognitive skills (GRIT)?

For the purposes of this study, success is defined as the creation and sustainability of a business entity for five years or greater, satisfactory loan repayment history (all required monthly payments made in 30 days or less of due date), and an increase in household incomes after receiving a loan from an MFI. For clients receiving loans from an MFI, an important measurement of success is the satisfactory repayment of the loan. Agarwal et al., (2016) have argued that women are better than men at repayment of their loans in a timely manner (Agarwal et. al, 2016).

Internationally, many microfinance institutions (MFIs) target women due to historical repayment histories. In a study performed by D'Espallier et. al (2011) used a global dataset of 379 MFIs in seventy-three countries to investigate the characteristics of MFIs that have a gender bias and the impact on loan repayment history. Microfinance advocacy networks and sponsors, as well as bilateral and multilateral development aid agencies, regularly assert that women are good credit risks (D'Espallier et. al., 2011).

One argument as to why women may have better repayment histories than men is that women invest in the types of industries that allow easier repayment such as the service industry. The service industry, in general does not generate accounts receivable so as a result, the conversion to cash cycle is faster than with other industries. Todd (1996) spent years with some of the women in the Grameen villages of Bangladesh, and concluded that women are more conservative or cautious in their investment strategies and therefore have better repayment histories. Agier and Szafarz (2010) found similar results in Brazil. Johnson (2004) highlighted that women's business activities are often within the service industry and thereby imply a quick conversion of sales to cash, which is more adaptable to the regular repayments demanded by most MFIs (Agier and Szafarz, 2010).

Afrane & Adusei (2014) conducted a study of an MFI in Ghana with 740 loan clients. Their conclusions were counter to the widely accepted belief that female clients represent a more acceptable credit risk than male counterparts. The results of the analysis indicate that females are not better than males in loan repayment. Their evidence shows that males are less likely to default on their loans than females. The results of the analysis also indicated that age, loan size, interest rate, loan maturity, and loan cycle are significant predictors of default. Level of educational is found to be an insignificant determinant for the likelihood of loan default (Afrane & Adusei, 2014).

The measurement of timely loan repayment is 30 days or less from the loan payment due date (< 30 days). An unsatisfactory repayment history would be greater than 30 days (30+ days). Bhatt and Thang (2002) have expressed concern that most accounts of loan repayment performance are anecdotal and often paint a confusing picture of the factors that impact satisfactory loan repayment. Their concerns are based on their

investigative study to determine the repayment rates for 4 MFIs within the United States (Bhatt and Thang, 2002).

Rahman (2001) and Goetz and Gupta (1996) indicate that women are more easily influenced by peer pressure in credit groups and are more sensitive to the interventions of loan officers. Ameen (2004) states that women have lower opportunity costs than men, and they are therefore more inclined to have more contact with the MFI and credit groups, one outcome of which is a positive impact on repayment. These studies indicate that female clients tend to stay closer to home rather than leaving the home for their business ventures and can therefore be more easily monitored by the MFI. (Rahman, 2001; Goetz & Gupta,1996; Ameed, 2004)

Armendariz and Morduch (2005) report that, in its initial phase, the Grameen Bank included men among its customers. The bank eventually decided to switch to a nearly entirely female clientele due to repayment problems with men (Armendariz and Morduch, 2005). Hossain (1988) reports that in Bangladesh, 81% of women had no repayment problems, compared with 74% of men (Hossain, 1988). Similarly, Khandker et. al. (1995) found that 15.3% of Grameen's male borrowers had repayment problems, compared with only 1.3% of the women (Khandker et. al, 1995). In Bangladesh, Sharma and Zeller (1997) reported that credit groups with higher percentages of women had significantly better repayment rates (Sharma and Zeller, 1997). A study in Malawi by Hulme (1991) reported that 92% of women repaid their loans as agreed, compared with 83% of men (Hulme, 1991). Gibbons and Kasim (1991) found that in Malaysia 95% of women repaid their loans as agreed, compared with 72% of the men (Gibbons and Kasim, 1991). And yet another

study from Guatemala, Kevane and Wydick (2001) reported that female credit groups had better loan repayment records than male groups (Kevane and Wydick, 2001).

Not all arguments favor women as a good credit risk. The fact that women, on average, are poorer than their male peers would seem to indicate that repayments could be more troublesome for them. Phillips and Bhatia-Panthaki (2007) contend that women entrepreneurs tend to be overrepresented in traditional service based industries with lower profits, fewer growth opportunities, and lower barriers to entry creating greater competition, which would suggest that women would have a more difficulty in repaying loans (Phillips and Bhatia-Panthaki, 2007).

Data on the repayment history of loan repayment histories for the subject MFI includes male as well as female clients. The literature review as it relates to the repayment of loans would indicate that there is a difference between male and female repayment histories. As such, we put forth the following hypothesis:

H1: Female Loan Clients have different loan repayment histories than male clients.

Quantitative data relative to *H1* was compiled and analyzed from the Philly MFI. Agarwal et al. investigated the effect of marriage on default rates and determined that the default risk was lower among married borrowers than individual borrowers (Agarwal et. al., 2016). Another study by Wahab et al. (2011) also examined the determinants of loan payment and concluded that the probability of default was influenced by the gender of the borrower. In terms of age, younger entrepreneurs may have more energy, more initiative, and more risk-taking tendencies, and this may lead to greater project success (Wahab et. al, 2011). Older entrepreneurs, however, may have accumulated greater knowledge and

human capital, and may have developed more contacts that enable them to be more successful. So, it is not clear what the effect of age on project success will be. In terms of educational qualifications, it is likely that more qualified individuals will be associated with more successful projects. In terms of marital status and the presence of a support network, I expect that both will result in different success outcomes because both imply a strong network support for the female entrepreneur.

One of the broad categories in the literature review of microfinance includes poverty reduction. The measurement of MFIs impact on poverty reduction for this study would be the evaluation of household incomes before and after the female loan clients have received a loan. Specifically, the following hypothesis is advanced:

H2: Female clients have different household incomes after receiving loans from an MFI when compared to male clients of MFI

A review of the literature leads one to begin to quantify the parameters of success for entrepreneurs. Baron (2004) quantifies three phenomena that proceed entrepreneurial success, "Willingness to Start an Enterprise", "Identifying Opportunities" and "Success of the Enterprise." The willingness to start a business is determined by the pulls and pushes that an individual experiences, such as a push created by negative emotions towards the status quo and or pulls of positive forces that attract a person towards a new path that can include new enterprise formation. Better stated, individuals that are currently unsatisfied with their personal status and are motivated to seek alternatives, could create new enterprises (Baron, 2004). As it relates to micro-entrepreneurs, some of the more common push factors are job dissatisfaction, job loss, unemployment, and low household income. Pull factors include the need for achievement, self-sufficiency, and self-efficacy.

Populations in the lower strata in hierarchical society tend to have low self-efficacy because of high power distance and domination by higher ups. This can be a motivating factor for establishing an enterprise. The ultimate decision to become an entrepreneur is volitional (Kumar, 2007).

Once the decision has been made, the business venture would need to exist for a period of time such that key financial metrics such as sales, gross margins, and net income can be evaluated. The financial stability of the entity would be an integral measurement as it relates to the evaluation of any entrepreneur. The SBA's office of Advocacy has determined that about two-thirds of businesses with employees survive at least 2 years and about half survive at least 5 years. Interestingly, a negative economy has shown little effect on a given businesses survival. Businesses started in expanding economies in 1995 and 2005, those started just before the downturn in 2000, and those started just after the downturn had almost identical survival paths (SBA, 2012)

For the purposes of this study, the financial stability of the business entity will be measured by longevity, more specifically, if the entity has existed for 5 years or greater, it is considered to be sustainable. As such, the following hypothesis is advanced:

H3: Female loan clients of MFI create successful business entities(existing longer than five years) at a different rate than their male counterparts.

Include literature on how age affects outcome (50+ versus under 50)

H4: The age of the entrepreneur has an impact on success

Entrepreneurial characteristics have been researched for many years including the comparative outcomes between females and males. Brush and Hisrich, 1999 indicated that women business owners often lack prior business experiences, especially in managerial

positions and are therefore at a disadvantage in their entrepreneurial pursuits. Additionally, educational levels are often the same for males and females, however, women are less likely to have formal education in business and financial matters (Brush and Hisrich, 1999).

The second phase of this research study analyzes qualitative data, gathered from interviews, surveys and focus group discussions to address the following key questions:

1. What are the barriers to success as perceived by the entrepreneurs?
2. How do factors like the entrepreneur's support network and marital status affect outcomes?
3. What is the impact of the entrepreneurs non-cognitive skills ("GRIT") on outcomes?

Shane (2003) asserts that individuals with low incomes are more likely to become self-employed and as a result can earn higher incomes for their households. Many of the female clients of the MFI earn incomes that are less than the poverty thresholds for their respective census tracts creating an ideal sample population to test this theory. Age, education, experience levels and level of business education training vary for each client and this is believed to be a source of the differences in outcomes for MFI clients. Mentorship is believed to be a contributing factor to the success of an entrepreneur. Based on the demographics of the city of Philadelphia, it is expected that most of the clients will be heads of households, therefore, it may be difficult to determine if a spouse will influence the outcome of the business venture. Semi-structured interviews with female entrepreneur of the Philadelphia MFI will be conducted. The availability and willingness of these clients to participate is unknown, but the goal of these interviews will be to provide a qualitative analysis on the success factors of these entrepreneurs. Each client that participates in the

semi-structured interviews will be provided the GRIT questionnaire and a score will be computed thereafter (Duckworth, 2016). This assessment is designed to evaluate the non-cognitive attributes associated with entrepreneurial success. Figure 1 provides a conceptual construct for the research study.

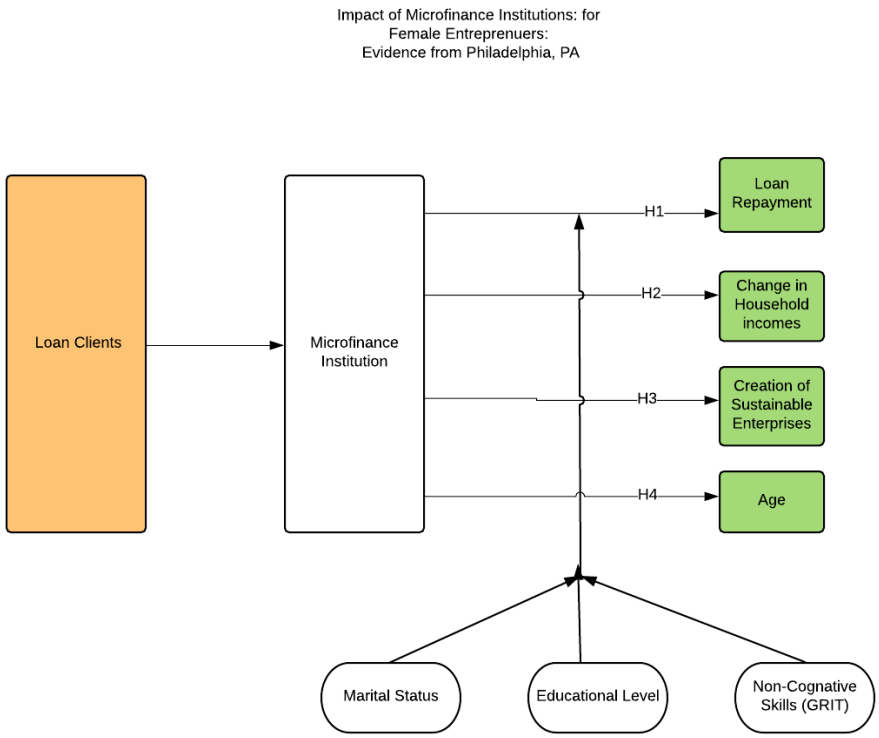

Figure 1. Conceptual Model – Loan Clients of a Microfinance Institution

Research Methodology

The conceptual framework for this study is illustrated in Figure 1. The outcomes as it relates to Philadelphia female entrepreneurs will be examined by quantitative and qualitative methods.

The Protocol for the study and the Consent form were approved by the Internal Review Board (IRB) on May 18, 2018 and can be found in **Appendix A**. This information will be analyzed to measure the impact of the loan and other support received from the Philadelphia MFI. Quantitative data was obtained from a microfinance institution that has

operated in Philadelphia since 1993 (Philly MFI). The Philly MFI maintains a client database detailing gender, loan repayment histories, incomes, ethnicities, and geographical locations. Data utilized for this study will be obtained from the first 18 years of its loan program's operations. H1–H4 will be addressed with this data.

Comparative data will be utilized as applicable from independent research groups such as GEM, the SBA and the FIELD project at the Aspen Institute.

Each year, FIELD requests data from MFIs operating within the United States to provide insight to the impact of the microfinance industry. FIELD provides very detailed surveys that with unique identifiers for existing and new clients of MFIs. Changes in income of the owners, health insurance and other benefits of employees, and changes in jobs supported. The resulting report, Entrepreneur Tracker, is made available to each of the MFI participants (Microtracker, 2017). The Microtracker data will be utilized to compare some of the attributes of client data from the data sample.

CHAPTER 4

RESULTS

Quantitative data for this study was collected from a microfinance institution operating in Philadelphia since 1993. The data from loan client history was analyzed to test Hypothesis 1, 2 , 3 & 4. The Philly MFI promotes social and economic self-sufficiency for economically disadvantaged individuals, primarily women, through self-employment training, savings programs and access to capital. The Philly MFI has its primary geographical targets of the city of Philadelphia and its 5 surrounding counties. 50.6% of the total loan clients in this study reside in the city of Philadelphia with the remaining 49.4% residing in the surrounding five counties. Within the city of Philadelphia, there are 57 different neighborhoods shown in Figure 2.

Figure 2. Philadelphia Neighborhoods (Source: Philadelphia, PA information)

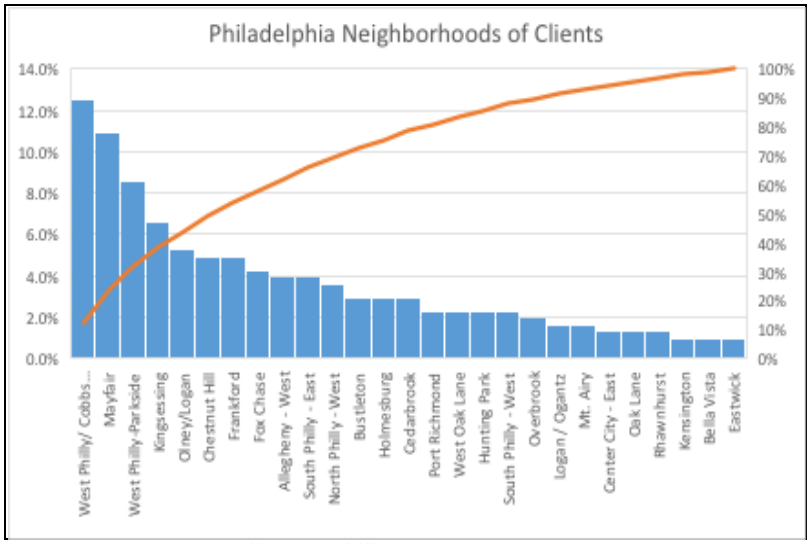

Figure 3. Location of Clients of Philly MFI

The neighborhoods with the largest representation of loan clients include West Philadelphia-Cobbs Creek (12.5%), Mayfair (10.9%) and West Philadelphia - Parkside (8.6%). Based on the corresponding Census Track of these communities they are considered to be Low Citizens residing in these neighborhoods are considered.

Table 1. Demographic data for Client Neighborhoods (Source: Census Data)

Neighborhood	%	Medium Income	Individuals below Poverty	% of H.S diploma or higher
West Philly-Cobbs Creek	12.5%	$ 32,741.00	30.1%	84.5%
Mayfair	10.9%	$ 41,599.00	23.5%	76.6%
West Philly-Parkside	8.6%	$ 26,804.00	35.1%	83.7%

The sample population for this study was provided by a Microfinance Institution operating in Philadelphia, PA (Philly MFI). Its lending program was launched in 1999 and continues to extend loans as small as $150 up to $50,000 to pre-venture and existing business owners in Philadelphia metropolitan area. In most cases the loan amount is restricted to $10,000 for pre-venture business owners. Many of the Philly MFI loan clients are "underbanked" meaning that they do utilize traditional financial institutions beyond a checking or savings account (FDIC, n.d.). Often these clients do not fit the lending profile of traditional financial institutions due to personal credit challenges, weak collateral or a lack of financial recordkeeping. The Philly MFI recognizes that it has a fiduciary responsibility to the community and its stakeholders to ensure that a rigorous underwriting process safeguards its lending practices. In 2012 it began utilizing a standard underwriting system under contract with ACCION of Texas (now known as LiftFund) Microloan Management System (MMS, n.d.) MMS is a sophisticated software program, based on years of historical data

obtained from ACCIONs clients. It is an automated underwriting system designed specifically for the microfinance industry allowing the Philly MFI to provide the same level of underwriting analysis for each applicant.

The demographic composition of the sample population includes African American/African (72%), White (17%), Asian (5%), Latino/Hispanic (4%) and 2.6% represent other ethnic groups. This information is obtained during the intake process due to reporting requirements of funding sources.

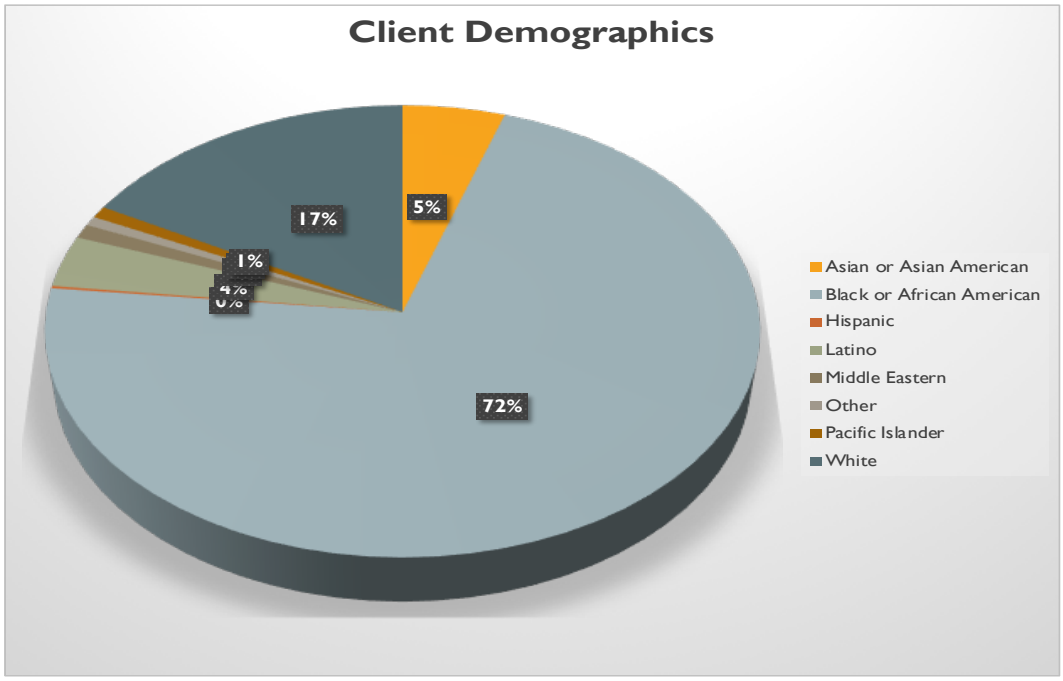

Figure 4. Demographic composition of Philly MFI loan clients

The classification of the industry is based on the NACIS code, the most widely accepted categorization tool in the US (NACIS, n.d.).

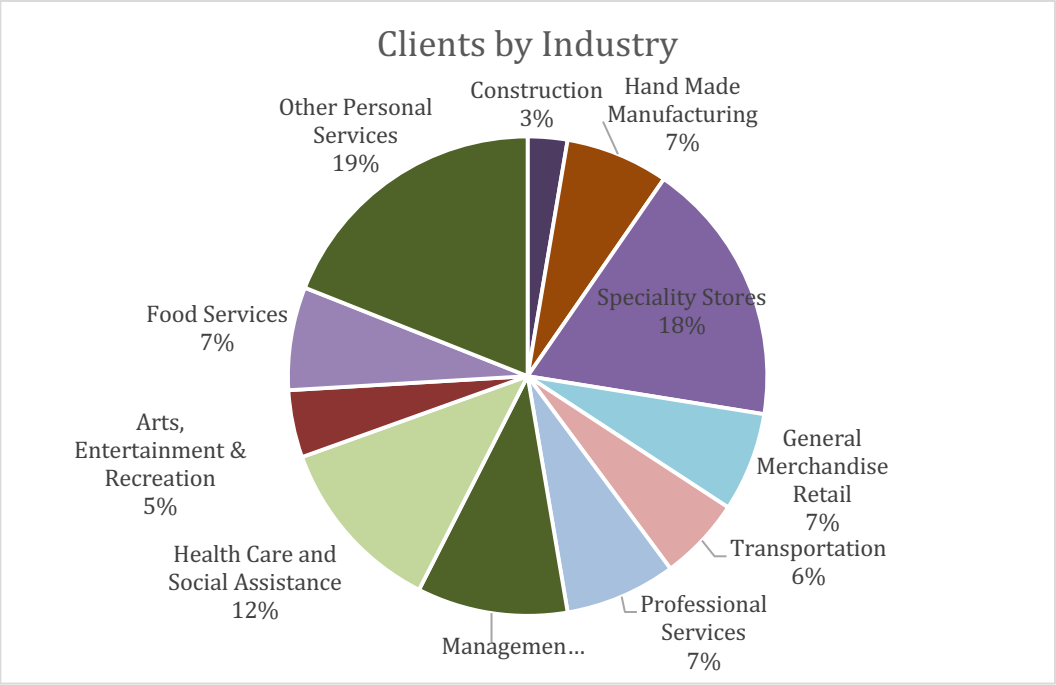

Figure 5. MFI clients by industry

The top three industries represented in the data set include specialty stores (18%), health care and social assistance (12%) and other personal services (19%). The Philly MFI offers programming for New Americans seeking to resettle themselves in the United States. This population represents 23% percent of the data set representing countries across the globe. The New Americans in some cases establish retail stores and sell goods and products from their country of origin. The merchants on Woodland Avenue in southwest Philadelphia are an example of this exchange. The Avenue is lined with independent merchants (largely from West African countries) that sell dried fish, rice, palm oil, and fabric to patrons travelling from as far as Lancaster, PA to purchase these items.

Health Care and social assistance businesses include home health care businesses and counseling services. Personal home health care has become a growing industry of interest to early stage entrepreneurs as a result of the aging population and the lower barriers to

entry. Other personal services include day care centers and after school care providers. This industry is attractive due to flexible hours and low barriers to entry relative to other industries. Figure 5 illustrates the variety of industries representing by the clients included in the study.

Repayment histories of the clients will be the first of outcomes that will be examined for this study. The literature on the topic of repayment of microfinance bends towards the belief that women have better repayment histories than their male counterparts. However, population samples for MFIs operating in the United States are limited. As such, the first hypothesis to be tested involves repayment histories of Philly MFI clients.

H1: Female loan clients have different loan repayment histories than male clients

The empirical analysis performed on data obtained from the Philly MFI included detailed loan histories of each borrower receiving loans between 1999 and 2017 resulting in a total of 598 loans being extended. One data point, a female client was considered an outlier and removed from the statistical analysis. This was due to the unusual circumstances surrounding the extension, the rapid default and charge-off status of the loan. Although 60% of the loan clients were female, the average loan amounts were slightly higher for males than females with the average for males being $4,914.03 and the average for females being $4,207.70.

Table 2. T-Test for Average Loan Amounts, Female and Male Clients

Variable: LoanAmt							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	238	4914	5530.8	358.5	150	35000	
1	358	4207.7	4366.6	230.8	150	37487.4	
Diff (1-2)		706.3	4864.6	406.9			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		4914	4207.8	5620.3	5530.8	5074.5	6077.9
1		4207.7	3753.8	4661.6	4366.6	4068.5	4712.3
Diff (1-2)	**Pooled**	706.3	-92.7349	1505.4	4864.6	4603.1	5158
Diff (1-2)	**Satterthwaite**	706.3	-131.7	1544.4			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	594	1.74	0.0831			
Satterthwaite	Unequal	425.6	1.66	0.0983			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	237	357	1.6	<.0001			

The Philly MFI loan program extends loans to business owners for up to $50,000. For loan applicants desiring to obtain business purpose loans and are not eligible due to personal credit challenges, the loan product referred to a “credit builder” ($1,000 or less) can be extended for a period of one year. The credit builder is designed to improve the credit score of the borrower through positive repayment history over the 12 months. It is expected that this product, along with business training and financial education will prepare the client for a loan for the purpose of establishing or expanding a business entity.

Credit Scores measured before any loan is extended as a part of the due diligence of the underwriting process. Credit scores have become such a key component of having access to credit that it is incorporated within this study. The measurement of credit scores before becoming a client of the Philly MFI and at subsequent points in time in the future are detailed within Tables 3, 4, and 5.

Consistent repayment of all obligations is the primary driving factor for personal credit (FICO, n.d.). The Philly MFI reports the repayment history of each loan client to the national credit repositories through a nonprofit organization, Credit Builders Alliance(CBA). CBA is an innovative non-profit social enterprise dedicated to building the capacity of a diverse network of hundreds of nonprofit members that assist low-to-moderate income households and small businesses build strong personal credit and other financial assets. Many of the membership of CBA includes Community Development Financial Institutions. Each member of CBA has the ability to access credit scores of potential clients as well as the ability to report the repayment histories of its borrowers (Credit Builders Alliance, n.d.).

H1 is an assertion that male and female repayment histories are different. Prior to the repayment history, the personal credit histories are a consideration and in some cases a prediction of future repayment performance. Credit scores are obtained prior to the extension of each loan, however, subsequent credit scores are not retrieved on each loan client. Secondary and tertiary scores are accessed for clients that apply for subsequent loans at some point after the initial loan. The number of clients with primary credit scores totals 62, clients with secondary credit scores total 58 and 9 clients have a tertiary credit score. This is due to these clients having multiple loan applications with the Philly MFI. The loan application is the prerequisite for obtaining an official credit score. Tables 3, 4 and 5 provide an analysis of the means of each population.

Table 3. T-Test : Average Credit Scores, Year 1

Variable: Credit_Score_1							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	24	462.7	247.5	50.5234	0	688	
1	38	416.8	278.4	45.1591	0	763	
Diff (1-2)		45.9452	267	69.6082			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		462.7	358.2	567.2	247.5	192.4	347.2
1		416.8	325.3	508.3	278.4	227	360.2
Diff (1-2)	**Pooled**	45.9452	-93.2919	185.2	267	226.6	325
Diff (1-2)	**Satterthwaite**	45.9452	-89.955	181.8			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	60	0.66	0.5117			
Satterthwaite	Unequal	53.288	0.68	0.5007			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	37	23	1.26	0.5585			

Table 4. T-Test : Average Credit Scores, Year 2

Variable: Credit_Score_2							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	22	621.1	64.9837	13.8546	491	748	
1	36	611.5	61.1857	10.1976	464	732	
Diff (1-2)		9.6086	62.6369	16.9505			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		621.1	592.3	649.9	64.9837	49.9953	92.866
1		611.5	590.8	632.2	61.1857	49.6266	79.8129
Diff (1-2)	**Pooled**	9.6086	-24.3473	43.5645	62.6369	52.8815	76.8396
Diff (1-2)	**Satterthwaite**	9.6086	-25.0976	44.3148			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	56	0.57	0.5731			
Satterthwaite	Unequal	42.443	0.56	0.5794			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	21	35	1.13	0.7339			

Table 5. T-Test : Average Credit Scores, Year 3

Variable: Credit_Score_3							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	5	613.6	78.4685	35.0922	501	719	
1	4	588	23.4805	11.7402	554	608	
Diff (1-2)		25.6	61.276	41.1052			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		613.6	516.2	711	78.4685	47.0131	225.5
1		588	550.6	625.4	23.4805	13.3015	87.5481
Diff (1-2)	**Pooled**	25.6	-71.5983	122.8	61.276	40.5141	124.7
Diff (1-2)	**Satterthwaite**	25.6	-70.3256	121.5			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	7	0.62	0.5532			
Satterthwaite	Unequal	4.8643	0.69	0.5207			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	4	3	11.17	0.076			

After the closing date of the loan, the client is required to begin making monthly payments toward repayment. The criterion used to determine satisfactory repayment history is based on loan payments being received on the due date or up to 30 days thereafter. If a loan payment is received 30 days after the due date, the subject loan is considered to be "past due" and for the purposes of this research, classified as an unsatisfactory repayment history. This classification is based on the entire term of the loan. For example, a loan client received a loan for 24 months and the loan was repaid as agreed for the first 10 months. If during month 11, the loan client makes the monthly payment 31 days after the due date, the loan repayment history is classified as unsatisfactory.

Table 6. T-Test for Repayment History of Female and Male Clients

Variable: UnsatRepay_Binary							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	238	0.5378	0.4996	0.0324	0	1	
1	358	0.5559	0.4976	0.0263	0	1	
Diff (1-2)		-0.0181	0.4984	0.0417			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		0.5378	0.474	0.6016	0.4996	0.4584	0.549
1		0.5559	0.5041	0.6076	0.4976	0.4636	0.537
Diff (1-2)	**Pooled**	-0.0181	-0.0999	0.0638	0.4984	0.4716	0.5284
Diff (1-2)	**Satterthwaite**	-0.0181	-0.1	0.0639			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	594	-0.43	0.6651			
Satterthwaite	Unequal	506.41	-0.43	0.6654			

For loans that are 30 days or more "past due", the MFI makes every effort to determine how best to provide technical assistance to the loan client in an effort to provide the best opportunity to get back on track. This can include, but is not limited to, creating a modified repayment plan. The Philly MFI utilizes timely collection efforts in order to maintain a satisfactory Portfolio at Risk percentage, one of the key ratios examined by funders and stakeholders. When all efforts have not been successful in achieving a satisfactory repayment of the loan, the loan must be “charged off” of the loan portfolio as uncollectable debt. These uncollectible debts are then turned over to a collections attorney to exercise all of the rights provided under the loan and collateral documentation.

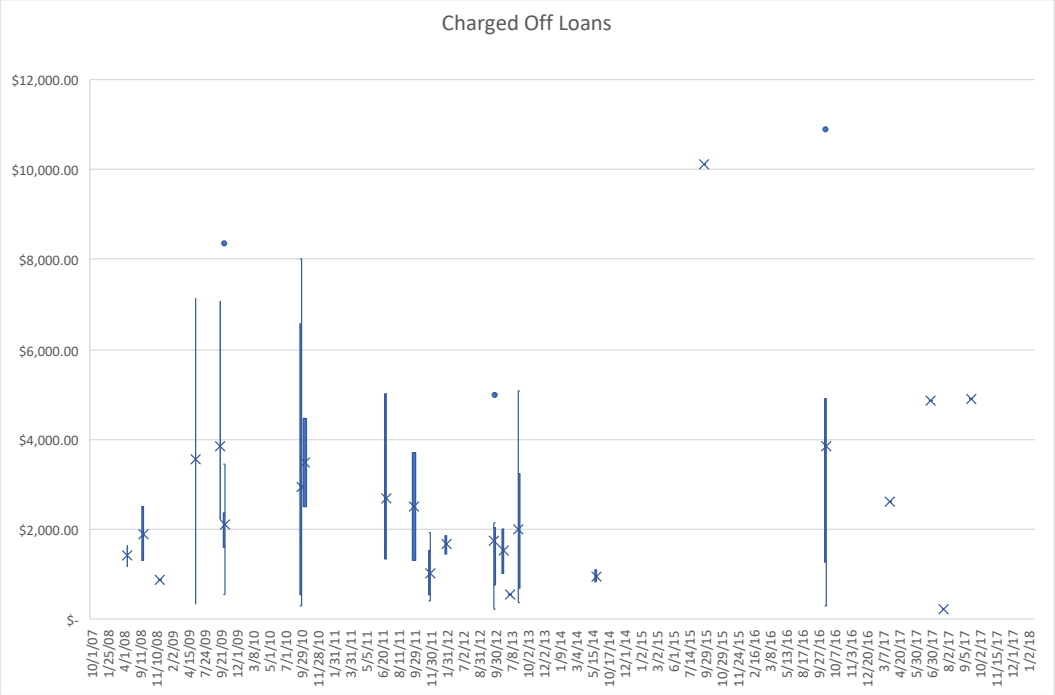

Figure 6. History of Charge-Offs

The total of $261,292.94 in loan volume was charged off, representing 9.75% of all the loans that were extended during the observation period. One female client, after receiving a loan, immediately took the loan proceeds and collateral and left the country to whereabouts unknown. The balance of $18,765.55 was the largest charge-off in the Philly MFI's history. Given the unusual circumstances surrounding this charge-off, it should be considered an outlier and is not included for statistical comparisons between male and female clients. A total of 54% of all of the Philly MFIs' charge-offs occurred between 2008 and 2011, the years most impacted by the Great Economic Recession.

Table 7. T-Test for Charge-Offs totals between female and male clients

Variable: AmtChargedOff							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	50	2153.8	1823.5	257.9	249	8354.6	
1	66	2327.3	2120.5	261	249.9	10890.5	
Diff (1-2)		-173.5	1998.2	374.6			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		2153.8	1635.6	2672	1823.5	1523.2	2272.3
1		2327.3	1806	2848.6	2120.5	1810.3	2559.8
Diff (1-2)	**Pooled**	-173.5	-915.7	568.7	1998.2	1769.1	2296.1
Diff (1-2)	**Satterthwaite**	-173.5	-900.5	553.5			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	114	-0.46	0.6442			
Satterthwaite	Unequal	112.12	-0.47	0.6372			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	65	49	1.35	0.2711			

To compare the sample means of the male and female clients credit scores, repayment histories and charge off histories, the t-test performed against the null hypothesis (H_0, there is no difference between the two populations).

The results for testing H1 are summarized in Table 8. Based on the analysis, there is no statistical difference between the two populations, and therefore the null hypothesis cannot be rejected.

Table 8. Summary of T-Tests for H1

H_0 : Repayment Histories of Male and Female Clients are the Same		
Variable	**p-value**	**H1 test**
Credit Scores- yr. 1	0.5117	Not supported
Credit Scores- yr. 2	0.5731	Not supported
Credit Scores- yr. 3	0.5532	Not supported
Repayment	0.6651	Not supported
Charge-Offs	0.6442	Not supported

Two of the paradigms associated with reducing poverty include increasing assets and income. MFIs often measure the changes in client income to document impact to funders and potential clients. The household incomes (HHI) for this study are derived from the adjusted gross incomes reflected on personal income tax returns submitted as a part of the loan approval process. The objective of this research study is to compare outcomes such as changes in the household incomes of male and female clients. The resulting hypothesis is stated as follows:

H2: Female clients have different household incomes after receiving loans from an MFI when compared to male clients of MFI.

Table 9. T-Test for Household Incomes – Year 1

Variable: HHI1							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	126	41330.3	23027.7	2051.5	6000	110000	
1	186	39379.5	29588.8	2169.6	38	258841	
Diff (1-2)		1950.8	27134.7	3130.8			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		41330.3	37270.2	45390.4	23027.7	20492.7	26284
1		39379.5	35099.2	43659.7	29588.8	26856.5	32944.9
Diff (1-2)	**Pooled**	1950.8	-4209.6	8111.2	27134.7	25156.6	29453.1
Diff (1-2)	**Satterthwaite**	1950.8	-3924.8	7826.4			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	310	0.62	0.5337			
Satterthwaite	Unequal	304.02	0.65	0.514			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	185	125	1.65	0.0028			

Table 10. T-Test for Household Incomes – Year 2

Variable: HHI2							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	7	34801.9	27731	10481.3	5595	72744	
1	8	38511.3	13880.6	4907.5	10202	53519	
Diff (1-2)		-3709.4	21416.7	11084.2			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		34801.9	9154.9	60448.8	27731	17869.7	61065.6
1		38511.3	26906.8	50115.7	13880.6	9177.5	28250.7
Diff (1-2)	**Pooled**	-3709.4	-27655.3	20236.5	21416.7	15526.1	34503.2
Diff (1-2)	**Satterthwaite**	-3709.4	-30093.6	22674.9			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	13	-0.33	0.7432			
Satterthwaite	Unequal	8.5662	-0.32	0.7563			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	6	7	3.99	0.0927			

Table 11. T-Test for Household Incomes – Year 3

Variable: HHI3							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	4	26343.8	19455.5	9727.7	12001	55043	
1	8	35367.4	17385.5	6146.7	422	56287	
Diff (1-2)		-9023.6	18031.5	11042			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		26343.8	-4614.3	57301.8	19455.5	11021.3	72540.7
1		35367.4	20832.7	49902	17385.5	11494.9	35384.3
Diff (1-2)	**Pooled**	-9023.6	-33626.7	15579.5	18031.5	12598.9	31644.1
Diff (1-2)	**Satterthwaite**	-9023.6	-37815.1	19767.8			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	10	-0.82	0.4328			
Satterthwaite	Unequal	5.4982	-0.78	0.4654			
Equality of Variances							
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	3	7	1.25	0.7228			

Based on the analysis of H2, there is no statistical difference between the two populations, and therefore the null hypothesis cannot be rejected.

The concept of financial empowerment includes financial sustainability that can be the result of establishing business entities. The factors that contribute to the establishment and sustainability of a business enterprises are important to examine and replicate. Small and medium enterprises, particularly those established in the United States are responsible for moving individuals from unemployment, underemployment to steady incomes. As such, it is important to understand the role of microfinance institutions and business survival rates. As such, H3 will test for differences in survival rates between male and female entrepreneurs.

H3: Female loan clients of MFI create successful business entities (existing longer than five years) at a different rate than their male counterparts.

Table 12. T-Test Average time in business, Female and Male Clients

Variable: Years_in_Business							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	122	10.2541	4.6702	0.4228	1	21	
1	235	9.983	6.3562	0.4146	1	42	
Diff (1-2)		0.2711	5.8365	0.6513			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		10.2541	9.417	11.0912	4.6702	4.1486	5.343
1		9.983	9.1661	10.7999	6.3562	5.8288	6.9894
Diff (1-2)	**Pooled**	0.2711	-1.0098	1.552	5.8365	5.437	6.2999
Diff (1-2)	**Satterthwaite**	0.2711	-0.894	1.4363			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	355	0.42	0.6775			
Satterthwaite	Unequal	314.99	0.46	0.6474			
	Equality of Variances						
Method	**Num DF**	**Den DF**	**F Value**	**Pr > F**			
Folded F	234	121	1.85	0.0002			

The results for testing H3 are summarized in Table 12. Based on the analysis, there is no statistical difference between the two populations, and therefore the null hypothesis cannot be rejected.

There are entrepreneurial theories that suggest that the age of an entrepreneur will have an impact on the outcomes of the business venture. Further it is believed that younger entrepreneurs obtain higher than average incomes when compared to older entrepreneurs (Shane, 2003). The data from the Philly MFI includes multiple demographic information such as the birthdate(age) of the applicant providing an opportunity to test H4.

H4: The age of the entrepreneur has an impact on the H1, H2 and H3**.**

The ages of the female entrepreneurs range from 23 – 72 while the range for the males are from 22 – 69 based on the time of the loan funding.

Table 13. Descriptive Data with Ages of Entrepreneurs

	Age Category					
	21-30	**31-40**	**41-50**	**51-60**	**61-70**	**71-80**
Males:						
Observations	18	54	26	7		
Total Loan Amount	$93,000.00	$ 160,700.00	$ 105,300.00	14,000		
Total Charged Off	$16,283.00	$ 31,103.00	$ 10,624.00	$ 5,157.00		
Unsatisfory Repayment	50%	26%	46%	71%		
Average HHI- 1	29158	$ 37,489.00	$ 50,530.00	n.d		
Average HHI-2	n.d.	65,854	n.d	n.d		
Average Credit Score-1	n.d.	582	n.d	n.d		
Average Credit Score-2	n.d.	638	n.d	n.d		
Years in Business	10.3	9.33	8.5	n.d		
Females:						
Observations	18	55	46	27	5	1
Total Loan Amount	$ 50,000.00	$ 215,400.00	$ 165,675.00	$ 188,871.00	$ 26,434.00	$ 2,500.00
Total Charged Off	$ 15,014.00	$ 39,854.00	$ 22,867.00	$ 34,144.00	n.d	$ 2,348.00
Unsatisfory Repayment	56%	38%	30%	48%	40%	100%
Average HHI- 1	$ 43,168.00	$ 45,343.00	$ 40,700.00	$ 14,716.00	$ 54,796.00	n.d
Average HHI-2	n.d	n.d	n.d	n.d	n.d	n.d
Average Credit Score-1	521	n.d.				
Average Credit Score-2	597	n.d.				
Avg.Years in Business	n.d.	12.33	14.5	12	n.d	n.d

The ages reflected in Table 13 were recorded as of the time of the loan closing. For the two largest age categories, “31-40” and “41-50” share differences for years in business. For both age categories, females have a higher average number of years in business by 3 and 6 years , respectively.

Table 14. T-Test, Average Age, Female and Male Clients

Variable: Age							
Female	**N**	**Mean**	**Std Dev**	**Std Err**	**Minimum**	**Maximum**	
0	99	40.9293	12.1783	1.224	22	99	
1	150	42.04	9.4754	0.7737	23	72	
Diff (1-2)		-1.1107	10.6304	1.3765			
Female	**Method**	**Mean**	**95% CL Mean**		**Std Dev**	**95% CL Std Dev**	
0		40.9293	38.5004	43.3582	12.1783	10.686	14.1589
1		42.04	40.5112	43.5688	9.4754	8.5109	10.6885
Diff (1-2)	**Pooled**	-1.1107	-3.8219	1.6005	10.6304	9.7699	11.6584
Diff (1-2)	**Satterthwaite**	-1.1107	-3.9686	1.7472			
Method	**Variances**	**DF**	**t Value**	**Pr > |t|**			
Pooled	Equal	247	-0.81	0.4205			
Satterthwaite	Unequal	173.72	-0.77	0.4441			

The results for testing H4 are summarized in Table 14. Based on the analysis, there is no statistical difference between the two populations, and therefore the null hypothesis cannot be rejected.

Although, the testing of H1–H4 do not yield statistically significant difference in the population of female versus male clients, there are changes that occurred that were common to the entire sample of the population that are worth noting. Tables 15 and 16 reflect descriptive variables that better indicate the impact of the Philly MFI.

Table 15. Male Descriptives for MFI variables

Male					
Variable	**N**	**Mean**	**Median**	**Minimum**	**Maximum**
Age	99	40.93	40	22	67
LoanAmt	238	$ 4,914.03	$ 2,500.00	$ 150.00	$ 35,000.00
AmtChargedOff	50	$ 2,153.81	$ 1,591.45	$ 249.00	$ 8,354.62
CloseCY	238	2011.69	2012	1999	2017
IntRate	226	0.0833022	0.0725	0	0.1333
Termmo	226	26.4303097	24	6	60
HHI1	126	$ 41,330.28	$ 34,700.00	$ 6,000.00	$ 110,000.00
HHI2	7	$ 34,801.86	$ 24,570.00	$ 5,595.00	$ 72,744.00
HHI3	4	$ 26,343.75	$ 19,165.50	$ 12,001.00	$ 55,043.00
Credit_Score_1	24	463	568.5	0	688
Credit_Score_2	22	621	627	491	748
Credit_Score_3	5	614	612	501	719
Years_in_Business	122	10.25	10	1	21

Table 16. Female Descriptives for MFI variables

Female					
Variable	**N**	**Mean**	**Median**	**Minimum**	**Maximum**
Age	150	42.04	41	23	72
BizStartDate	235	17737.89	17342	6210	21005
LoanAmt	358	$ 4,207.71	$ 2,500.00	$ 150.00	$ 37,487.42
AmtChargedOff	66	$ 2,327.31	$ 1,684.99	$ 249.94	$ 10,890.47
CloseCY	358	2011.70	2013	2003	2017
IntRate	330	0.0859136	0.08	0	0.1333
Termmo	329	25.56	24	6	60
HHI1	186	$ 39,379.48	$32,000.00	$ 38.00	$258,841.00
HHI2	8	$ 38,511.25	$40,130.00	$10,202.00	$ 53,519.00
HHI3	8	$ 35,367.38	$35,219.50	$ 422.00	$ 56,287.00
Credit_Score_1	38	417	539	0	763
Credit_Score_2	36	612	614	464	732
Credit_Score_3	4	588	595	554	608
Years_in_Business	235	9.98	11	1	42

When comparing the two descriptive tables, the mean credit scores of men increases by 158 points between year 1 to year 2. Likewise, the mean Credit Scores for women increased by 195 points between year 1 and year 2. Household incomes for men

decreased by $6,528 between year 1 and year 2, while the Household incomes for women decreased by $868 for the same period. Additionally, the sustainability of the enterprises appears to be above the benchmark of 5 years as evidenced by the average years in business for males of 9.98 and 10.25 for females.

Business survival rates since inception are detailed in Tables 15 and 16. To highlight the impact of the business after receiving the business loan from the MFI, a comparison between the male and female was performed and is presented in Table 17.

Table 17: Male vs Female Clients Years in Business Post Loan

Variable: Years_in_Business_since_loandate

Female	N	Mean	Std Dev	Std Err	Minimum	Maximum
0	36	4.2778	3.9901	0.6650	1.0000	19.0000
1	47	3.5745	3.7110	0.5413	1.0000	14.0000
Diff (1-2)		0.7033	3.8341	0.8492		

Female	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
0		4.2778	2.9277	5.6278	3.9901	3.2363	5.2048
1		3.5745	2.4849	4.6641	3.7110	3.0837	4.6610
Diff (1-2)	**Pooled**	0.7033	-0.9863	2.3929	3.8341	3.3237	4.5310
Diff (1-2)	**Satterthwaite**	0.7033	-1.0058	2.4124			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	81	0.83	0.4100
Satterthwaite	Unequal	72.521	0.82	0.4148

Equality of Variances

Method	Num DF	Den DF	F Value	Pr > F
Folded F	35	46	1.16	0.6383

The T-test in Table 17 does not reflect a statistical difference between male and female clients, however, this information maintained over a period of time could prove to be helpful to the MFI to demonstrate impact.

There are additional components to the success of entrepreneur that cannot be fully explained with quantitative data alone. The second phase of this research study utilized various modality to identify some of the qualitative factors attributed to entrepreneur outcomes. The research questions guiding this phase of the study include:

1. What are the barriers to success as perceived by the entrepreneurs?
2. How do factors like the entrepreneur's support network and marital status affect outcomes?
3. What is the impact of the entrepreneur's non-cognitive skills ("GRIT") on outcomes?

To address these research questions, surveys were administered, interviews, and a focused group discussion. The results of the focus group discussion included female entrepreneurs that own businesses in Philadelphia. These women completed the written survey found in Appendix B.

Table 18 : Summary of Qualitative Data

Literature Framework	Foundational Theory	Dimensions of Barriers *	Data from Focus Group & Interviews
Poverty Reduction	Clark, P., & Keys, A. (1999). Microenterprise and the Poor: Findings from the Self-Employment Learning Project, a 5 year Study of Microenterprise. *The Aspen Institute*.	Lack of Capital	"I did not qualify for debt it was very discouraging but at the same time if you are a person that has a goal in mind you figure out where to get the money from."(Entrepreneur J)
	Khandker, S. R. (2005). Microfinance and Poverty: Evidence Using Panel Data from Bangladesh. *The World Bank Economic Review*. *19*(2), 263-286.		"My first business I was fortunate enough to find a private investor."(Entrepreneur S)
	Murdoch, J., & Haley, B. (2002). Analysis of the Effects of Microfinance on Poverty Reduction. *NYU Wagner Working Paper*. *1014*.		"You know it's hard to even get funding because they want two years of something."(Entrepreneur L)
	Zaman, H. (1999). Assessing the Impact of Micro-credit on Poverty and Vulnerability in Bangladesh. *Policy Research Working Papers*.		"Traditional institutions categorized my loan as 'high risk' and would not make a business loan available." (Interview # 903)
Empowerment of Women	Economic Development and Cultural Change, vol. 54, no. 4, 2006, pp. 791–831.,	Family Support	"my relationship it didn't work out." (Entrepreneur L)
	Empowerment: A Case Study of Akhuwat, Pakistan. *A Research Journal of South Asian Studies*, *30* (1), 93-111.		"being a mother, my son was actually my inspiration to do it sooner than later." (Entrepreneur S)
	Pitt, M., Khandker, S., & Cartwright, J. (2006). Empowering Women with Micro Finance: Evidence from Bangladesh. *Economic Development and Cultural Change*, *54*(4), 791-831		"it is a wonderful investment but there are major sacrifices" (Entrepreneur S)
	Weber, O., & Ahmad, A. (2014). Empowerment Through Microfinance: The Relation Between Loan Cycle and Level of Empowerment. *World Development*, *62*, 75-87.		"if you don't come from a family that there is any form of entrepreneurship going on, you feel so isolated and alone because no one understands what you're doing and why you're making this sacrifice" (Entrepreneur J)
	McCullah, Heather. *Closing the Women's Wealth Gap* . 2017. Accessed 8 Jan. 2019.		"No one gave me the support that I needed in my business." (Entrepreneur S)
	Women and Families." *Https://lassp.brandeis.edu/Pdfs/2015/Tipping.pdf*. Institute for Assets and Social Policy, Nov. 2015, www.brandeis.edu/facultyguide/person.html?		"A lot of what I did came from operating from fear of failure, fear of people saying you can't make it happen." (Entrepreneur L)
		Ageism	"I think it was my age. I didn't really have anyone that held hold my hand through it." (Entrepreneur L)
			"some of the roadblocks that I experienced was the lack of knowledge and resources and also my age because when I did start I was very young"(Entrepreneur L)
		Sexism	"And as a woman there is a very low glass ceiling if you are the type of person that really wants to continue to elevate." (Entrepreneur J)
			"because of my decision to be an entrepreneur has something to do with my marriage, you know, not working just not. Whereas if the shoe was on the other foot we would still be happily married" (Entrepreneur S)
		Racism	was a challenge from both potential employees and potential patrons" (Interview #905)
		Knowledge of Industry	"I had to do a lot of my own research" (Entrepreneur L)
			"we waste a lot of money that we could be spending more on the growth of the business." (Entrepreneurs L)
			"I had to do a lot of self-study." (Interview #235)
			"I went into the industry knowing that I was going to be an entrepreneur and I strategically put myself in places that I wanted to emulate my business out there" (Entrepreneur S)
			"The individuals that I reached out to that were already day care operators were not very helpful." (Interview #235)
			"Part of the resources for me weren't just financing. It is finding people that could get you in a position to start your own business." (Entrepreneur J)
			*** Dimensions of Barriers are derived from the transcript of the focus group discussion and interviews***

The first survey (Survey I) was administered to business owners who primarily operate in the Philadelphia region. Skip Logic was utilized to filter those that had not received a business loan, as well as a geographic identifier (zip code). Those business owners that did not receive a business loan were not permitted to complete survey, and therefore 36 responses were not received for each of the survey questions that relate to demographics and GRIT score. The results from Survey I are presented in Table 18.

Table 19. Qualtrics Survey I Results

Respondents	36
Female	23
Male	11
N.D.	2
Philadelphia Area Zip Codes	33
Other Zip Codes	3
Age:	
Mean	45
Range	22-71
Marital Status:	
Married	5
Never Married	5
Widowed	1
Separated	1
Divorced	1
Educational Levels:	
≤ High School Diploma	4
2 Yr. Associates Degree	1
Bachelor of Science Degree	5
Masters Degree	4
Doctorate Degree	1
Time in Business:	
Mean	7.7 years
Range	0-13 years
GRIT Scores:	
Mean	3.87
Range	2.8 – 4.8
Barriers:	
	Lack of Capital, Racism, Sexism, Lack of Relevant Information; Lack of Guidance

Survey I does not yield conclusive data as it relates to the repayment history of loans or changes in household incomes. Repayment history was not available for the participants of the survey. Only two of the respondents indicated that their household incomes increased beyond the category that existed before the business loan was extended. As it relates to

the creation of sustainable enterprises, the Survey I indicates an average tenure in business of 7.7 years.

Survey II was a scaled down version of Survey I and was administered only to the original loan clients of the Philly MFI for whom email data was available.

Both surveys were administered using Qualtrics and the goal was to understand qualitative factors that affecting the outcomes for the entrepreneurs. The questions asked in both surveys are detailed in Appendix B. Survey II had a very poor response rate, with only 4 of the clients responding. Surveys are utilized frequently by the Philly MFI to gather information on programming and the lack of responsiveness could be the result of survey fatigue. Consequently, meaningful inferences could not be determined.

Survey Output data from Qualtrics can be found in Appendix C. Additionally, female entrepreneurs were interviewed utilizing the survey questions in Appendix B to provide additional qualitative data on the barriers they experience in operating their business ventures. The barriers highlighted during these one on one interviews are summarized in Table 17.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Limitations of Study

The results of this research study indicate some limitations for drawing transferable conclusions. First, the sample size of the dataset is a limitation. The loan portfolio of data included for analyzing H1–H4 was taken from only one MFI located in the city of Philadelphia. Results could differ based on the location of the MFI and the size of the loan portfolio. The same holds true for the qualitative data gathered from interviews, surveys focus group discussions.

Second, a control group was not utilized for this study. As a result, there is no way to compare the outcomes of MFI entrepreneurs to non-MFI entrepreneurs or pre-venture entrepreneurs. Respondents to the surveys in this study represent a limited sample of entrepreneurs from various geographies and experiences.

Research Contribution

Microfinance institutions have engaged with impoverished citizens in communities throughout the world in an effort to provide tools of self-sufficiency and empowerment. This has been particularly beneficial for women, who often face challenges when accessing capital as entrepreneurs. The impact of MFIs has been researched extensively in emerging economies, however the same does not hold true for MFIs operating within the United States. Women and people of color represent groups that do not have the same resources

to obtain capital for establishing or expanding business entities as other majority groups. MFI's operating in the US have an opportunity to expand operations to these targeted populations being underserved by traditional financial institutions. This study contributes to the body of literature on the impact of US based microfinance institutions for disadvantaged entrepreneurs, particularly women.

Conclusion and Recommendations

The impact of microfinance institutions (MFI) has been an area of great interest for many years for both researchers and practitioners. The expansive literature review lends itself to a multi-dimensional impact of MFIs in the areas of poverty reduction, social economics, empowerment for women and financial capability.

Developing economies throughout the world have utilized MFIs to reduce the poverty levels of its most vulnerable citizens. The most prominent example encompassing all four dimensions of MFIs is the Grameen Bank, founded by Mohammed Yunus. What began as a social enterprise experiment in 1976 has now become a worldwide tool of empowerment, financial stability, and poverty reduction primarily for women (Grameen, n.d.). Today, microfinance institutions, outside the US, include 132 million clients with a loan portfolio of $102 Billion Dollars (Microfinance Barometer, 2017).

Researchers have spent the last four decades engaging in empirical studies to determine how MFIs can operate efficiently while reaching more low income individuals. Within the US, persistent poverty continues to be a complex social ill that has perplexed economists, elected officials, financiers and academics. Philadelphia, PA is one city that has been consecutively ranked among the highest in poverty rates of the ten largest U.S.

cities. This statistic, while grim, makes the city an ideal geographical focus for this research study (US Census Bureau, n.d.).

Although there is no one solution for such a complicated social construct as persistent poverty, entrepreneurism can be a pathway to improved financial capability. According to the 2012 report of Small Business owners, female business owners play an important role in the US economy, contributing over $1.4 trillion in sales and 8.4 million jobs. The importance of female entrepreneurs is even more integral in communities of color with a larger share of businesses tend to be owned by women when compared to other communities (McManus, 2017). MFIs operating in the US provide support for the creation and expansion of such disadvantaged entrepreneurs, often women, who reside in low to moderate income communities and experience significant challenges in accessing capital.

The purpose of the research was to determine if there are differences in outcomes for female entrepreneurs when compared to male entrepreneurs. The comparison of the means for each samples testing H1-H4 reflect no statistical difference, however, the data does suggest there are improvements to individual financial capability in the form of personal credit scores and business survival rates of the Philly MFI clients. Research questions relating to the second phase of the study included: identifying the barriers to the success of entrepreneurs, understanding the effect of marital status and a support network, and the impact of an entrepreneur's GRIT on outcomes. Data gathered from surveys, interviews, and focus groups identified barriers such as the lack of capital, lack of family support, ageism, sexism, racism, and lack of knowledge of the industry. These identified barriers represent an opportunity for future research. The non-cognitive skills measured with the GRIT scale was not conclusive for this study due to the limited sample size.

The study is limited by the size of the sample population and its inclusion of only one MFI, survey respondents and interviews. As a result, transferrable conclusions cannot be derived from this study alone. Future studies should incorporate data from a broader representative of MFIs in the region and the US.

Based on the research conducted herein, I recommend that programs offered by MFIs be expanded to include cohort support for female business owners. The qualitative data collected from this study makes reference to the isolation and lack of information experienced by the female entrepreneurs while establishing a business venture. The Grameen model of circle group lending creates a nurturing environment for participants to learn and be accountable to each other (Grameen, n.d.). Women tend to thrive in environments that are safe and supportive, and adopting this model of cohort business owners meeting on a regular basis for the purpose of sharing knowledge and most importantly, the acknowledgement of challenges and successes of each. Cohorts could be assigned as a part of the MFIs intake process based on the industry and geographical location of the business. In a cohort setting, the demographic data and detailed financial information such as credit scores, net income, job creation and longevity can be documented in detail. With documented trends and other information, MFIs will have the opportunity to focus its programming on specific areas of concern for the business owners and preventing common pitfalls. MFIs should incorporate this cohort model with incentives to encourage participation such as free workshops, fee reduction of loan closing costs, and legal services. Data obtained from this method of programming will facilitate additional opportunities for future research.

REFERENCES CITED

Agier, I., & Szafarz, A. (2013). Microfinance and Gender: Is There a Glass Ceiling in Loan Size? *Word Development, 42*, 165-181. doi:10.2139/ssrn.1573872

Appel, J., & Karlan, D. (2011). *More than good intentions: How a new economics is helping to solve global poverty*. Penguin.

Armendariz de Aghion, B., & Morduch, J. (2005). *The Economics of Microfinance*. Cambridge, MA: MIT Press.

Aulet, W., & Murray, F. E. (2013). A Tale of Two Entrepreneurs: Understanding Differences in the Types of Entrepreneurship in the Economy. *SSRN Electronic Journal*. doi:10.2139/ssrn.2259740

Baker, A. C., Martin-West, S., & Famakinwa, F. (2015). *On Shaky Ground, Stabilizing the Financial Security of Single Women* [Scholarly project]. In *Www.womenswealthgap.org*.

Banerjee, A., Karlan, D., & Zinman, J. (2015). Six Randomized Evaluations of Microcredit: Introduction and Further Steps. *American Economic Journal: Applied Economics, 7*(1), 1-21. doi:10.1257/app.20140287

Baron, R. A. (2004). The cognitive perspective: A valuable tool for answering entrepreneurships basic "why" questions. *Journal of Business Venturing, 19*(2), 221-239.

Battilana, J., & Dorado, S. (2010). Building Sustainable Hybrid Organizations: The Case of Commercial Microfinance Organizations. *Academy of Management Journal, 53*(6), 1419-1440. doi:10.5465/amj.2010.57318391

Bennett, L., & Goldberg, M. (1993). Providing enterprise development and financial services to women. *World Bank Technical Papers*. doi:10.1596/0-8213-2682-1

Bhatt, N., & Tang, S. (2001). Delivering Microfinance in Developing Countries: Controversies and Policy Perspectives. *Policy Studies Journal, 29*(2), 319-333. doi:10.1111/j.1541-0072.2001.tb02095.x

Bhatt, N., & Tang, S. (2002). Determinants of Repayment in Microcredit: Evidence from Programs in the United States. *International Journal of Urban and Regional Research, 26*(2), 360-376. doi:10.1111/1468-2427.00384

Biz2Credit. (n.d.). Credit Scores of Women Business Owners -According to 2017 Biz2Credit Study. Retrieved from https://www.biz2credit.com/research-reports/women-owned-business-study-2017

Brush, C., & Hisrich, R. D. (1999). Women-Owned Businesses: Why do They Matter? *Are Small Firms Important? Their Role and Impact,* 111-127. doi:10.1007/978-1-4615-5173-7_7

Census Data. (2010, October 05). Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

Clark, P., & Keys, A. (1999). Microenterprise and the Poor: Findings from the Self-Employment Learning Project, a 5 year Study of Microenterprise. *The Aspen Institute*.

Closing the Women's Wealth Gap. (n.d.). Retrieved from https://womenswealthgap.org/

Consultative Group to Assist the Poor. (n.d.). Retrieved from http://www.cgap.org/

Credit Builders Alliance. (n.d.). Retrieved from https://www.creditbuildersalliance.org/history

Julie A. Geschick. (2002). *Credit Evaluation Grids for Microlenders: A Tool for Enhancing Scale and Efficiency* [Brochure]. Washington, DC: Author.
Microenterprise Fund for Innovation, Effectiveness, Learning and Dissemination (FIELD)
Daniel Isenberg. (n.d.). Retrieved from http://www.babson.edu/academics/executive-education/expanding-entrepreneurship/babson-entrepreneurship-ecosystem-platform/daniel-isenberg/
Duckworth, A. (2016). *GRIT: The Power of Passion and Perseverance*. Scribner.
Duflo, E. (2003). Grandmothers and Granddaughters: Old Age Pension and Intra-household Allocation in South Africa. *World Development Economic Review, 17*, 1-25. doi:10.3386/w8061
Duflo, E., Banerjee, A., Glennerster, R., & Kinnan, C. (2015). The Miracle of Microfinance? Evidence from a Randomized Evaluation. *American Economic Journal: Applied Economics, 7*, 22-53.
D'Espallier, B., Guérin, I., & Mersland, R. (2011). Women and Repayment in Microfinance: A Global Analysis. *World Development, 39*(5), 758-772. doi:10.1016/j.worlddev.2010.10.008
Eight Microfinance Lending Models. (n.d.). Retrieved from https://www.scribd.com/document/97437025/8-Microfinance-Lending-Models
Experian. (n.d.). Small-business analysis shows gender differences in credit management. Retrieved from https://www.businesscreditfacts.com/pdp.aspx?pg=genderanalysis&lsv=www
Fairlie, R. W., Morilix, A., Russell, J., & Reedy, E. J. (n.d.). *2015 Kauffman Index of Main Street Entrepreneurship - National Trends* [Scholarly project].
Ewing Marion Kaufmann Foundation
FDIC Glossary. (n.d.). Retrieved from https://economicinclusion.gov/glossary.html
FICO. (n.d.). What's in my FICO® Scores. Retrieved from https://www.myfico.com/credit-education/whats-in-your-credit-score
FIELD. (n.d.). Retrieved from https://www.aspeninstitute.org/programs/field/
Flynn, A., Holmberg, S., Warren, D., & Wong, F. (2017, May 11). Rewrite the Racial Rules: Building an Inclusive American Economy. Retrieved from http://rooseveltinstitute.org/rewrite-racial-rules-building-inclusive-american-economy/
Garson, J. (1996). Microfinance and Anti-Poverty Strategies. A Donor Perspective. UNCDF. *UNCDF*.
GDRC | The Global Development Research Center. (n.d.). Retrieved from http://gdrc.org/
Ghosh, J. (2013). Microfinance and the challenge of financial inclusion for development. *Cambridge Journal of Economics, 37*(6), 1203-1219. doi:10.1093/cje/bet042
Global Entrepreneurship Monitor. (n.d.). Retrieved from https://www.gemconsortium.org/report
Gomez, L., & Edgcomb, E. (2011, March). *A Newly Crowded Marketplace: How For-profit Lenders Are Serving Microenterpreneurs* [Scholarly project].
FIELD at the Aspen Institute
Grameen Bank. (n.d.). Retrieved from http://www.grameen-bank.net/
History of CDFIs. (n.d.). Retrieved from https://www.minneapolisfed.org/community/cdfi-resources/history-of-cdfis

Hsu, D. K., Wiklund, J., & Cotton, R. D. (2017). Success, Failure, and Entrepreneurial Reentry: An Experimental Assessment of the Veracity of Self-Efficacy and Prospect Theory. *Entrepreneurship Theory and Practice, 41*(11), 19.

Jing, P., & Donglin, L. (2011). Microfinance in Yanchi, Ningxia: The Social Enterprise Perspective. *The China Nonprofit Review, 3*(2), 251-259. doi:10.1163/187651411x615833

Jones, C. B., Jr. (2001). *Micro-Venture Finance Strategies*.

Jones, J. A., & Donmoyer, R. (n.d.). Multiple meanings of social entrepreneurship and social enterprise and their implications for the nonprofit field. *Journal of Nonprofit Education & Leadership*. Retrieved 2015.

Kangogo, D., & Ithinji, G. (2013). *The Influence of Social Capital Dimensions on Household Participation in Micro-credit Groups and Loan Repayment Performance in Uasin Gishu County, Kenya*. Retrieved December 23, 2018, from https://search-proquest-com.libproxy.temple.edu/docview/1699266719?accountid=14270.

Karlan, D., & Appel, J. (2011). *More than good intentions: How a new economics is helping to solve global poverty*. New York: Dutton.

Khandker, S. R. (2005). Microfinance and Poverty: Evidence Using Panel Data from Bangladesh. *The World Bank Economic Review, 19*(2), 263-286. doi:10.1093/wber/lhi008

Khandker, S. (2008). Beatriz Armendariz de Aghion and Jonathan Morduch. The Economics of Microfinance. Cambridge, MA: MIT Press, 2005. Pp. 346. $45.00 (cloth). *Economic Development and Cultural Change, 56*(2), 484-490. doi:10.1086/523604

Klein, J. A. (2017, January). *Bridging the Divide, How Business Ownership Can Help Close the Racial Wealth Gap* [Scholarly project].

Kumar, M. (2007). *Academy of Entrepreneurship Journal, 13*.

Laderman, E., & Reid, C. (2010). *The Community Reinvestment Act and Small Business Lending in Low-and-Moderate Income Areas during the Financial Crisis* (United States of America, Federal Reserve Bank, San Francisco). San Francisco.

Loya, R., Mann, A., Boguslaw, J., & Shapiro, T. (2015, November). Tipping the Scale: How Assets Shape Economic Wellbeing for Women and Families. Retrieved from http://www.brandeis.edu/facultyguide/person.html?emplid=618c696e80b167f775d26cef40323f5cb830910c

Lundberg, S. J., Pollak, R. A., & Wales, T. J. (1997). Do Husbands and Wives Pool Their Resources? Evidence from the United Kingdom Child Benefit. *The Journal of Human Resources, 32*(3), 463-480. doi:10.2307/146179

Mader, P. (2013). Rise and Fall of Microfinance in India: The Andhra Pradesh Crisis in Perspective. *Strategic Change, 22*(1-2), 47-66.

McCullah, H. (2017). *Closing the Women's Wealth Gap* [Scholarly project]. Retrieved January 8, 2019.

McManus, M. (2017). *Survey of Business Owners* (United States of America, Small Business Administration, Office of Economic Research of the Office of Advocacy). Washington, DC.

Mezias, S., & Fakhreddin, M. (2015). Building boundary capabilities at the base of the pyramid. *Journal of Entrepreneurship and Public Policy, 4*(1), 111-133. doi:10.1108/jepp-02-2013-0007
Microfinance Barometer 2017: Global trends of the sector... (2017). Retrieved from https://group.bnpparibas/en/news/microfinance-barometer-2017-global-trends-sector
MicroTracker (a project of FILED at the Aspen Institute). (2017). *Aspen Institute, 10*(May), 1-10.
Mitchel, B. (2018, October 02). Minority entrepreneurship in Philadelphia. Retrieved from https://ncrc.org/minority-entrepreneurship-in-philadelphia/
MMS. (n.d.). Retrieved from https://www.liftfund.com/mms/about/
Morduch, J. (2000). The Microfinance Schism. *World Development, 28*(4), 617-629. doi:10.1016/s0305-750x(99)00151-5
Murdoch, J., & Haley, B. (2002). Analysis of the Effects of Microfinance on Poverty Reduction. *NYU Wagner Working Paper, 1014*.
Nader, Y. F. (2008). Microcredit and the socio-economic wellbeing of women and their families in Cairo. *The Journal of Socio-Economics, 37*(2), 644-656.
NAICS Codes. (n.d.). Retrieved from https://www.naics.com/business-lists/counts-by-naics-code/#countsByNAICS
News and Updates. (n.d.). Retrieved from http://www.themix.org/mixmarket
Nobel Peace Prize. (n.d.). Retrieved from https://www.nobelprize.org/nobel_prizes/peace/
Opportunity Finance Network. (n.d.). Retrieved from https://ofn.org/about
Pew Research Center. (2018, April 30). Retrieved from http://www.pewresearch.org/
Philadelphia 2018: The State of the City. (n.d.). Retrieved from https://www.pewtrusts.org/en/research-and-analysis/reports/2018/04/philadelphia-2018-the-state-of-the-city
Philadelphia's Poverty Rates Explained in Five Charts. (n.d.). Retrieved November 15, 2017, from http://www.pewtrusts.org/en/research-and-analysis/analysis/2017/11/15/philadelphias-poverty-rates-explained-in-five-charts
Pitt, M., Khandker, S., & Cartwright, J. (2006). Empowering Women with Micro Finance: Evidence from Bangladesh. *Economic Development and Cultural Change, 54*(4), 791-831. doi:10.1086/503580
Population of Poverty USA. (n.d.). Retrieved from https://povertyusa.org/facts
Prahalad, C. K. (2005). *The Fortune at the Bottom of the Pyramid*. Wharton School Publishing.
Rehman, H., Moazzam, A., & Ansari, N. (2015). Role of Microfinance Institutions in Women Empowerment: A Case Study of Akhuwat, Pakistan. *A Research Journal of South Asian Studies, 30*(1), 93-111.
Roodman, D. M. (2012). *Due diligence an impertinent inquiry into microfinance*. Washington (D.C.): Center For Global Development.
Rubin, J. S. (2007). *Financing low-income communities: Models, obstacles, and future directions*. New York, NY: Russell Sage Foundation.
Shane, S. A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Cheltenham: Elgar.

Small Business Administration. (n.d.). Retrieved April 4, 2017, from https://www.sba.gov/
Small Business Administration, Office of Advocacy. (2012). *Small Business Facts*.
Srinivas, H. (n.d.). GDRC | The Global Development Research Center. Retrieved from https://www.gdrc.org/
Stangler, D., & Litan, R. E. (2009). Where Will the Jobs Come from? *SSRN Electronic Journal*. doi:10.2139/ssrn.1580139
Sud, M., Vansandt, C. V., & Baugous, A. (2015). Identity Rights: A Structural Void in Inclusive Growth. *Journal of Business Ethics, 132*(3), 589-601. doi:10.1007/s10551-014-2359-5
Summary Snapshot Report. (2018, November). Retrieved from http://www.cdfifund.gov/
Taylor, M. (2011). 'Freedom from Poverty is Not for Free': Rural Development and the Microfinance Crisis in Andhra Pradesh, India. *Journal of Agrarian Change, 11*(4), 484-504. doi:10.1111/j.1471-0366.2011.00330.x
Thomas, D. (1990). Intra-Household Resource Allocation: An Inferential Approach. *The Journal of Human Resources, 25*(4), 635-664. doi:10.2307/145670
Thomas, D. (1994). Like Father, like Son; Like Mother, like Daughter: Parental Resources and Child Height. *The Journal of Human Resources, 29*(4), 950-988. doi:10.2307/146131
U.S. Census Bureau QuickFacts: Philadelphia County, Pennsylvania. (n.d.). Retrieved from https://www.census.gov/quickfacts/fact/table/philadelphiacountypennsylvania/IPE120216#viewtop
U.S. Department of the Treasury. (n.d.). Retrieved from https://www.treasury.gov/resource-center/financial-education/
US Census Bureau. (2018, August 28). Census Data. Retrieved from https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-people.html
Von Pischke, J. D., Carr, J. H., & Tong, Z. Y. (2002). *Replicating microfinance in the United States*. Woodrow Wilson Center Press.
Current Foundations of Microfinance Best Practices in Developing Countries
Wahab, S. A., Mamun, A. A., Malarvizhi, C. A., & Mariapun, S. (2011). Examining the Critical Factors Affecting the Repayment of Microcredit Schemes in Amanah Ikhtiar Malaysia (AIM) in Malaysia. *International Business Research, 4*(2). doi:10.5539/ibr.v4n2p93
Weber, O., & Ahmad, A. (2014). Empowerment Through Microfinance: The Relation Between Loan Cycle and Level of Empowerment. *World Development, 62*, 75-87. doi:10.1016/j.worlddev.2014.05.012
Woller, G. M., Dunford, C., & Woodworth, W. (1999). Where to microfinance? *International Journal of Economic Development, 1*(1).
Yunus, M., & Jolis, A. (2001). *Banker to the poor: The autobiography of Muhammad Yunus, founder of the Grameen Bank*. New York: Oxford University Press.
Zaman, H. (1999). Assessing the Impact of Micro-credit on Poverty and Vulnerability in Bangladesh. *Policy Research Working Papers*. doi:10.1596/1813-9450-2145

APPENDICES

APPENDIX A

IRB APPROVAL

TEMPLE UNIVERSITY
Office of the Vice President for Research

Research Integrity & Compliance
Student Faculty Center
3340 N. Broad Street, Suite 304
Philadelphia PA 19140

Institutional Review Board
Phone: (215) 707-3390
Fax: (215) 707-9100
e-mail: irb@temple.edu

Certification of Approval for a Project Involving Human Subjects

Date: 18-May-2018

Protocol Number:	25040
PI:	NAVEEN, LALITHA
Review Type:	EXEMPT
Approved On:	18-May-2018
Approved From:	
Approved To:	
Committee:	A1
School/College:	BUSINESS SCHOOL (1500)
Department:	FSBM:FINANCE (15060)
Sponsor:	NO EXTERNAL SPONSOR
Project Title:	The Impact of Microfinance on Female Entrepreneurs: Evidence from Philadelphia, PA

The IRB approved the protocol 25040.

If the study was approved under expedited or full board review, the approval period can be found above. Otherwise, the study was deemed exempt and does not have an IRB approval period.

If applicable to your study, you can access your IRB-approved, stamped consent document or consent script through ERA. **Open the Attachments tab and open the stamped documents by clicking the Latest link next to each document**. The stamped documents are labeled as such. Copies of the IRB approved stamped consent document or consent script must be used in obtaining consent.

Before an approval period ends, you must submit the Continuing Review form via the ERA module. Please note that though an item is submitted in ERA, it is not received in the IRB office until the principal investigator approves it. Consequently, please submit the Continuing Review form via the ERA module at least 60 days, and preferably 90 days, before the study's expiration date.

Note that all applicable Institutional approvals must also be secured before study implementation. These approvals include, but are not limited to, Medical Radiation Committee ("MRC"); Radiation Safety Committee ("RSC"); Institutional Biosafety Committee ("IBC"); and Temple University Survey Coordinating Committee ("TUSCC"). Please visit these Committees' websites for further information.

Finally, in conducting this research, you are obligated to submit the following:

- **Amendment requests - all changes to the study must be approved by the IRB prior to the implementation of the changes unless necessary to eliminate apparent immediate hazards to subjects**

APPENDIX B

SEMI-STRUCTURED INTERVIEW/SURVEY QUESTIONS

The Impact of Microfinance Institution on Female Entrepreneurs- Evidence from Philadelphia, PA

Assessment of H2: Change in Household Incomes

What is your zip code (business or personal address)?

Have you received a Micro Loan ($50,000 or less) for a business purpose?

What is your gender? (Male or Female)

How much money did you borrow?
Answer Choice: (Numerical value)

What type of organization did you receive your loan from?
Answer Choice (Bank, Non-Banking Institution, Non-Profit Organization)

Was this loan for a new business or an established business?

What is your Age?
Answer Choices (20-29), (30-39), (40-49), (50-59),(60-69), (70+)

What is the highest Education Level you completed?
Answer Choices: (H.S. or Equivalent, Some College, College Graduate, Graduate School)

What is your race or ethnic group?
Answer Choices: (White, Black, Hispanic, Asian, Mixed Heritage)

What is your Marital Status?
Answer Choices: (Married, Unmarried, Separated)

How many individuals are members of your household?
Answer Choice: (Number greater or equal to 1)

What was your income before you received a loan?
Answer Choices (<$10,000),($10,001 - $20,000), ($20,001 – $32,000) ($32,001 -$42,000), ($42,001 - $52,000), ($52,001 – $62,000), ($62,001 – $72,000), (72,001 – $82,000), ($82,001 - $92,000)
(Greater than $92,000)

What is your income for the last 12 months since receiving a loan?
Answer Choices (<$10,000), ($10,001 - $20,000), ($20,001 – $32,000) ($32,001 -$42,000), ($42,001 - $52,000), ($52,001 – $62,000), ($62,001 – $72,000), ($72,001 – $82,000), ($82,001 - $92,000)
(Greater than $92,000)

Assessment of H3: Creation of Sustainable Enterprises

How many years have you been in business since receiving a loan?
Answer Choices: (Less than 1), (1 yr.), (2 yr.), (3 yr.) (Greater than 3 years)

What industry best describes your business?

How many years of industry experience did you have before starting this business?

Have you enrolled in any Entrepreneur Training courses? If so, Where?

Were the courses completed before you established your business?

What type of ongoing Entrepreneurial Training are/were you involved in?

How has the training made a contribution to your business?

What Barriers have you faced as an entrepreneur? (i.e. ageism, sexism, racism)

Which barrier has impacted your business the most?

Which tools have assisted you in overcoming these barriers? (i.e. mentors, training,)

(GRIT-S Survey) by Angela Duckworth – University of Pennsylvania

Here are a number of statements that may or may not apply to you. There are no right or wrong answers, so just answer honestly, considering how you compare to most people.

1. New ideas and projects sometimes distract me from previous ones.
   Very much like me
   Mostly like me
   Somewhat like me
   Not much like me
   Not like me at all

2. Setbacks don't discourage me. I don't give up easily.
   Very much like me
   Mostly like me
   Somewhat like me
   Not much like me
Not like me at all

3. I often set a goal but later choose to pursue a different one.
   Very much like me
   Mostly like me
   Somewhat like me
   Not much like me
   Not like me at all

4. I am a hard worker.
   Very much like me
   Mostly like me
   Somewhat like me
   Not much like me
   Not like me at all

5. I have difficulty maintaining my focus on projects that take more than a few months to complete.
   Very much like me
   Mostly like me
   Somewhat like me
   Not much like me
   Not like me at all

6. I finish whatever I begin.

Very much like me
Mostly like me
Somewhat like me
Not much like me
Not like me at all

7. I am diligent. I never give up.
Very much like me
Mostly like me
Somewhat like me
Not much like me
Not like me at all

8. I have been obsessed with a certain idea or project for a short time but later lost interest.
Very much like me
Mostly like me
Somewhat like me
Not much like me
Not like me at all

APPENDIX C

QUALTRICS DATA

Qualtrics Survey - Impact of Microfinance

2019	Start Date	Consent for Study	What is your ZIP Code? (5 digits)	What is your gender?	binary	What is your year of birth? (i.e. 1974)	Age	Did you receive a business loan for less than or equal to $50,000?	What is the highest level of education you have completed or the highest degree you have received?	Are you Spanish, Hispanic, or Latino?	Are you Spanish, Hispanic or Latino?	Choose one or more races that you consider yourself to be:	Information about income is very important to understand for this research study. Please respond with your best estimate. Please indicate the answer that includes your entire household income during the year BEFORE receiving the business loan.	What year did you receive the most recent business loan? (i.e. 2011)	If you have received business loans prior to the most recent, indicate the year and the amount of each.	What year did you establish the business? (i.e. 1999)
1	12/14/18 10:10	I consent, begin the study	19046	Female	1	1972	47	No								
2	1/17/19 1:17	I consent, begin the study	19046	Female	1	1978	41	Yes	Master's Degree	None of these		Black or African Ame	$50,001 - $75,000	2013	2009- $2500 2007- $1500	2007
3	12/10/18 8:15	I consent, begin the study	19047	Female	1	1962	57	No								
4	1/16/19 8:52	I consent, begin the study	19079	Male	0	1976	43	Yes	Associate Degree (2 -year)	None of these		Black or African Ame	Greater than $100,000	2015	2014 $800	2006
5	1/10/19 9:23	I consent, begin the study	19082	Female	1	1982	37	Yes	Bachelor's Degree (4-year)	None of these		Black or African Ame	0 - $25,000	2015	$8,000 201	2009
6	1/20/19 17:51	I consent, begin the study	19102	Female	1	1984	35	No								
7	12/14/18 11:56	I consent, begin the study	19103	Female	1	1987	32	No								
8	1/7/19 11:29	I consent, begin the study	19107	Female	1	1986	33	No								
9	12/23/18 14:19	I consent, begin the study	19120	Female	1	1965	54	No								
10	12/23/18 15:05	I consent, begin the study	19120	Female	1	1965	54	Yes	Bachelor's Degree (4-year)	None of these		Black or African Ame	$25,001 - $50,000	2018		2009
11	3/2/19 22:46	I consent, begin the study	19121	Female	1	1980	39	No								

APPENDIX D

SUMMARY OF INTERVIEWS

Interview #905:

Demographic Information:	
Age	41
Education	High School Diploma, Some College Credits
Race	African American
Marital Status	Separated
# in Household	5 members in household
Income	Annual Income $80-90,000
Industry of Business	
Business Structure	S-Corp and LLC
Time in Industry	Started in 2004, however, worked informally as a stylist as a teenager
Description of Business	Day Spa (Hair, Skin, and Nail care)
Years of Experience in industry	5 years before establishing Day Spa in 2004
Capital	
How much equity did you contribute	$20,000
How much was borrowed	$60,000
Sources of Borrowed Money	Private Individual
Terms	7 years
Business Training	
Enrolled in Entrepreneur Training	Yes, at a university small business development center Also participated in business training at an MFI
Completed before establishing business	Yes, One before and one after
What type of ongoing Entrepreneurial Training are you involved in?	Continuing Education required for the cosmetology license in PA Also took other courses of interest
Has the training made a contribution to your business?	Yes, made me more competitive
GRIT Score	4.59/ 5.00

Discussion of Barriers/Challenges :

Two of the most significant challenges to me were the lack of available capital and racism. Traditional institutions categorized my loan as “high risk” and would not make business loans available. I obtained a loan from an angel investor for $60,000 to be repaid over 7 years. I paid the loan back within one year because of the revenue my business generated. I operated my business for more than 10 years and I was still categorized as “high risk .” I would have been able to expand sooner if I was able to obtain traditional bank loans.

Racism was another barrier I experienced as an African American female entrepreneur. Confronting racism was a challenge from both potential employees and potential patrons. I would speak with a potential stylist on the phone or via social media posting and arrange an in-person interview. When the individual would arrive and greet me, they would sometimes no longer be interested in the employment opportunity. Clients were also surprised to see that I was the owner. Depending upon the industry, there are expectations that certain demographics have the expertise and should be owning those respective businesses. For example, a non-Korean individual as the owner of a nail salon, is not as well received as a Korean nail salon owner. I often heard comments such as, “this doesn’t look like a black business.”

I was able to overcome these obstacles by striving to provide excellent work and always looking for ways to improve.

Interview #235:

Demographic Information:	
Age	47
Education	High School Diploma
Race	African American
Marital Status	Separated
# in Household	5 members in household
Income	Annual Income $40-45,000
Industry of Business	
Business Structure	LLC in 2016
Time in Industry	I had no previous experience in the industry My business partner operated a home-based child care
Description of Business	Child Care
Years of Experience in industry	No previous experience
Capital	
How much equity did you contribute	$5,000
How much was borrowed	$35,000
Sources of Borrowed Money	$12,000 from MFI $7,000 from Bank $16,000 from various credit cards
Terms	3 years for MFI 3 years from Bank Minimum Balance on credit cards
Business Training	
Enrolled in Entrepreneur Training	Yes, participated in business training at an MFI
Completed before establishing business	Yes
What type of ongoing Entrepreneurial Training are you involved in?	Educational certificate required for day care operators in PA
Has the training made a contribution to your business?	Yes, definitely helpful
GRIT Score	4.40/ 5.00

Discussion of Barriers/Challenges :

Greatest barrier for me was the lack of business assessment, resources and mentorship. The individuals that I reached out to that were already day care operators were not very helpful. I had to do a lot of self-study. There were not a lot of resources for "For-Profit" daycare centers. I reached out to SCORE and I was able to be assigned a mentor. Now SCORE has a workshop for individuals wanting to establish a daycare.

The business was established and operational for 3 months. There was an unfavorable clause in the lease agreement and the landlord would not allow access to the facility once all the leasehold improvements were made.

APPENDIX E

MICROTRACKER / FIELD DATA

Data Entry Sheet

100 ...ber of clients with data (do not skip any rows as you are entering data)

1	2	3	4	5	6	7	8
Unique Client ID	Did the client participate in a particular program that you would like to analyze separately?	Please enter the date the client first enrolled in your program (MM/DD/YYYY):	Please indicate the gender of the client	Please indicate the race/ethnicity of the client	Total number of microenterprise or small business loans the client has received through the end of the FY 15?	Total dollar amount of microenterprise or small business loans the client has received through the end of FY 15?	Did the client receive business development services from your program through the end of FY 15?
1	NEW	3/13/15	Female	Asian/Pacific Islander	1	3000	Yes
2	NEW	7/13/15	Female	...an American/African-E	1	5000	Yes
3	ACT	10/14/14	Male	Asian/Pacific Islander	2	10000	Yes
4	NEW	11/1/14	Female	...an American/African-E	1	2000	Yes
20	ACT	9/23/04	Female	White/Caucasian	3	15000	Yes
5	NEW	9/29/15	Female	...an American/African-E	1	1000	Yes
6	ACT	8/2/14	Female	...an American/African-E	1	5000	Yes
50	NEW	1/28/15	Male	...an American/African-E	2	10000	Yes
8	ACT	9/28/12	Male	Latino/Hispanic	5	66500	Yes
10	ACT	6/10/09	Female	Mixed-race	1	35000	Yes
7	NEW	9/24/15	Female	...an American/African-E	1	8500	Yes
9	NEW	3/27/15	Male	...an American/African-E	1	5000	Yes
11	New	9/4/15	Male	...an American/African-E	1	5000	Yes
13	ACT	9/20/14	Male	...an American/African-E	1	10000	Yes
15	NEW	1/12/15	Male	White/Caucasian	1	10000	Yes
12	ACT	6/30/09	Male	...an American/African-E	4	14500	Yes
14	ACT	10/28/13	Female	...an American/African-E	2	5000	Yes
16	NEW	10/30/15	Female	Asian/Pacific Islander	1	150	Yes
18	ACT	9/29/13	Female	...an American/African-E	1	1500	Yes
22	ACT	9/30/15	Male	White/Caucasian	1	35000	Yes