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Factors Predicting Profitability of Enterprises Funded by Microfinance Institutions in Burkina Faso

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This is to certify that the doctoral study by

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2017

Abstract

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MBA, Metropolitan College of New York, 2011

BA, University of Ouagadougou, 2004

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

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Abstract

In sub-Saharan Africa, only 13% of new businesses show profitability and survive beyond start-up. Such a low rate of success has an adverse impact on the region economy as small and medium enterprises comprise 90% of African businesses. Understanding the cause of business failure can help existing and new entrepreneurs to focus on factors that may help to overcome barriers to business growth and increase entrepreneurs' chances of success. The purpose of the correlation study was to examine the relationship between business ownership characteristics, resources and professional management, timing, and profitability. The resource-based theory served as the theoretical lens for the study. A random sample of 238 micro-, small, and medium enterprises in Ouagadougou, the capital city of Burkina Faso, completed the questionnaire via the Survey Monkey website. Analysis revealed R^2 (15, $N = 238$) = 94.9, $p < .005$ ($p = 0.000$) supported the validity of Lussier's model in predicting profitability. The data analysis showed that 14 out of 15 independent variables made a unique statistically significant contribution to the model at $p < 0.05$. The implications for positive social change may include the potential to reduce entrepreneurship failure, increase employment opportunities, improve standards of living, and increase economic growth. New or existing businesses may benefit from the findings of the study in increased entrepreneurship success and job creation due to greater awareness of effective business success and failure models. Sustainability of micro-, small, and medium enterprises may increase the number of successful entrepreneurs who can provide regular meals for the families and send the children to school, which may lead to an increase in educational attainment.

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Dedication

I dedicate this study to the memory of my father, Weoghin Kabore, who passed away in 1998. When I was 11 years old, my father told me how important a doctorate is, and he encouraged me to pursue it one day. He believed in my ability to achieve this level of education, and I thank him for his guidance and support.

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Section 1: Foundation of the Study

The microentrepreneurship sector plays a vital role in generating employment and income in Africa (Peters, 2014). Microentrepreneurship firms have fewer than five employees (Dugguh, 2013), and the microbusiness sector accounts for the majority of the workforce in Africa (Gindling, 2014). In an underdeveloped country such as Burkina Faso, which is located in West Africa and is one of the poorest nations in the world, ranking 183 out of 188 countries according to the Human Development Index (World Bank, 2015), micro-, small, and medium enterprises (MSMEs) are particularly critical for economic growth. MSMEs represent enterprises having up to 250 employees (World Bank, 2015).

However, the survival rate of MSMEs in Africa in general, and in Burkina Faso specifically, has been relatively low. Prospective and existing entrepreneurs face many challenges, such as lack of access to capital, inadequate managerial skills, and lack of access to infrastructure in sustaining their businesses (Lekhanya & Mason, 2014). In Africa as of 2010, 75% of newly formed small businesses were unable to become sustainable (Fatoki & Garwe, 2010). This high failure rate indicated that sustainability represents a challenge for startups. The purpose of the study was to identify the factors contributing to the success or failure (S/F) of MSMEs. Determining which factors influence performance may help prospective entrepreneurs, advisors, investors, and business managers sustain businesses over time (Pantea, Gligor, & Anis, 2014). Understanding the success factors of MSMEs may provide information that can lead to these enterprises' sustainability.

Background of the Problem

Small businesses are critical for the development of any nation's economy and function as generators of employment and developers of indigenous entrepreneurs (Adisa, Abdulraheem, & Mordi, 2014). In sub-Saharan Africa, only 13% of new businesses are profitable and survive beyond start-up (Global Entrepreneurship Monitor, 2014). The numbers have indicated that sustainability represents a challenge for start-up businesses in Africa. Expanding knowledge in this area may influence existing and new entrepreneurs to focus on factors that may help to overcome barriers to business growth and increase entrepreneurs' chances of success. MSMEs play a critical role in economic growth and wage employment in both developed and developing economies, yet major obstacles remain in unlocking the potential of these businesses (Deluca, Meehan, & Lloyd, 2014).

Policymakers in Burkina Faso may use the results of the study as a baseline for creating policies to promote entrepreneurship, reduce business failure rate, increase new job creation, and boost national economic. The resources such as social capital, entrepreneurial orientation, and intellectual capital, along with strategic management of the community as a stakeholder, contribute to small-business performance (Campbell & Park, 2016). My intent with the study was to examine the critical success factors Lussier (1995) identified that would be required to drive profitable returns of MSMEs in Burkina Faso.

Problem Statement

In sub-Saharan Africa, only 13% of new businesses have shown profitability and survive beyond start-up (Global Entrepreneurship Monitor, 2014). Such a low rate of success has an oversized impact on the economy, as small and medium enterprises comprise 90% of African businesses and contribute to more than 50% of the continent's employment and gross domestic product (GDP; Mukumba, 2014). The general business problem is that business owners in Burkina Faso have limited strategies to sustain businesses in the long-term. The specific business problem is that some business owners in Burkina Faso do not understand the importance of the relationship between business ownership characteristics, resources and professional management, timing, and profitability.

Purpose Statement

The purpose of the quantitative correlation study was to examine the relationship between the business ownership characteristics, resources and professional management, timing, and profitability. The independent variables were (a) business ownership characteristics (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status), (b) resources and professional management (start-up capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover, and marketing), and (c) timing (product and service timing and economic timing). The dependent variable was profitability, with two levels, profitable and not profitable. The target population consisted of MSMEs located in

Ouagadougou, the capital of Burkina Faso. The findings may contribute to positive social change by providing information MSMEs can use to reduce the failure rate and an increase in the sustainability of businesses, thus increasing the financial prosperity of owners, employees' families, communities, and the local economy. With more information about successful business strategies, MSME owners in Burkina Faso might be better able to contribute to the local economy and create additional jobs.

Nature of the Study

I used a quantitative method for the study to examine the relationship between business ownership characteristics, resources and professional management, timing, and profitability (Farrelly, 2013). The purpose of the study was to examine the strength and nature of the relationship between the independent variables and dependent variable. As such, the quantitative method was most appropriate because I required numerical data to analyze and address the research question (Lach, 2014). The primary interest of qualitative researchers is to explore and understand the quality and texture of the participants' experience (Park & Park, 2016). The mixed method is applicable for researchers to provide a comprehensive understanding of a phenomenon from an interpretive and statistical perspective (Fretschner & Weber, 2013).

I used a correlation design in the study. Quantitative research designs include correlation, quasi-experimental, and experimental (Turner, Balmer, & Coverdale, 2013). Using a correlation design, a researcher can examine the relationship between or among two or more variables (Dong & Maynard, 2013). The experimental and quasi-experimental designs were not appropriate because these designs require the use of a

control and a treatment group, which was not compatible with measuring the necessary critical success factors (Dong & Maynard, 2013).

Research Questions and Hypotheses

The overarching research question for the study was as follows: What is the relationship between the business ownership characteristics, resources and professional management, timing, and profitability?

Hypotheses

Null Hypothesis (H_0): There is no relationship between the business ownership characteristics, resources and professional management, timing, and profitability.

Alternative Hypothesis (H_1): There is a relationship between the business ownership characteristics, resources and professional management, timing, and profitability.

Theoretical Framework

The resource-based theory (RBT) proposed by Barney (1991) served as the theoretical lens for the study. Lussier used the RBT as entrepreneurs make judgments about which resources are more important, based on the expectations about the future of the venture (Lichtenstein & Brush, 2001). Lussier and Halabi's (2010) model also included RBT along with variables that may affect the success or failure of the small businesses. Many resource-based theorists have argued that an organization already controls a basic set of resources (Wernerfelt, 1984) and that these resources confer a competitive advantage in and of themselves (Barney, 1991). Penrose (1959) argued that a critical growth activity is the reorganization or reconstruction of organizational resources.

Combinations of organizational resources that improve production processes may become capabilities or activities that the firm does especially well (Amit & Shoemaker, 1993; Barney, 1991). The resources and capabilities of a firm can be important factors of sustainable competitive advantage and superior performance if they possess certain special characteristics (Barney,1991; Conner, 1991; Wernerfelt, 1984).

Researchers have used RBT to help understand the role of resources in new businesses by focusing on the identification and acquisition of resources. Key constructs underlying the RBT are (a) resources, (b) capabilities, (c) competencies, (d) skills, (e) factors, and (f) assets (Bridoux, 2004; Campbell & Park, 2016). The key constructs of the RBT were compatible with the constructs of the study. As applied to the study, I expected the 15 independent variables represented by the following three categories of (a) ownership characteristics, (b) resources and professional management, and (c) timing, as identified by Lussier (1995), to predict the probability of success or failure for MSMEs in Burkina Faso.

Operational Definitions

For additional clarity, the following definitions refer to terms used in the study. The goal was to explain the meaning of operational terms to increase the reader's understanding of the study.

Burkina Faso: A landlocked country in western Africa with borders that touch six countries: Mali to the north, Niger to the east, Benin to the southeast, Togo and Ghana to the south, and Côte d'Ivoire to the southwest (World Bank, 2015). The country is also known as Burkina.

Entrepreneur: An entrepreneur is someone with creativity and ability to identify new solutions to challenges, which may take the form of new products, processes, markets, and organizational forms (Neil, Metcalf, & York, 2015).

Human Development Index: An index used to help distinguish whether a country is a developed, a developing, or an underdeveloped country, and to measure the impact of economic policies on quality of life (Kareemulla, Venkattakumar, & Samuel, 2017).

Microcredit: The extension of small loans to the unemployed and poor entrepreneurs to enable a way out of poverty (Roodman & Morduch, 2014).

Microfinance: The provision of loans and other financial services to poor and excluded individuals to address the challenge of better meeting the needs of people living in poverty while providing cost-effective financial services (Okibo & Makanga, 2014).

Microfinance institution: An organization that offers financial services to the poor. Most microfinance institutions are nongovernmental organizations committed to assisting some sector of the low-income population (Parvin & Shaw, 2013).

Assumptions, Limitations, and Delimitations

Researchers' viewpoints and assumptions underlie the research undertaken. Regardless of the method used, the researchers should be aware of the underpinning assumptions and limitations of the approach, both in the design of the study and in any conclusions (Kirkwood & Price, 2013). Assumptions in a study are facts not verified (Roy & Pacuit, 2013).

Assumptions

My first assumption was that Lussier's (1995) S/F prediction model was reliable, suitable for, and applicable to examining success predictability factors related to sustainability of MSMEs in Burkina Faso. A second assumption was that the success of MSMEs would, in turn, help microfinance institutions be successful and expand across Burkina Faso. This success may facilitate an increase in both individual and household assets by granting the underprivileged access to capital for agricultural and livestock production. A third assumption was that participants would provide honest answers so that my findings will help investors and leaders of microfinance institutions increase the investment in the sector, which will in turn help develop the MSME sector in Burkina Faso.

Limitations

Limitations represent potential weaknesses in a study (Connelly, 2013). One limitation of the study was that in Africa, Internet connectivity is relatively high but of poor quality (Ezema, Ezeah, & Ishiwu, 2015). A limited number of MSME owners have an Internet connection at their business locations (Mbatha, 2013). To complete the study's online survey questionnaire, the owners of MSMEs may have had to go to a public place or to a cyber café to assess the instrument, which could have delay data collection. Another limitation of the study could involve individual biases of participants. The study was limited to MSMEs established with loans from the Promotion of Industrial, Artisanal, and Agricultural (PRODIA) or other microfinance institutions in Ouagadougou, the capital of Burkina Faso, and the results may not be generalizable to

MSMEs beyond the targeted geographic area. Because of time and financial constraints, I did not physically travel to Burkina Faso for data collection but used the SurveyMonkey website, which may represent a limitation of the study.

Delimitations

Delimitations are those characteristics and restrictions that reduce the range and define study limitations (Simon & Goes, 2013). First, the study focused on a targeted population of MSMEs, recipients of microloans from PRODIA and other microfinance institutions. Second, the delimitation of the study consisted of MSMEs located in Ouagadougou, the capital of Burkina Faso. Third, I focused on only MSMEs in business for more than 3 years.

Significance of the Study

MSMEs are the engine of growth and employment creation in Africa (Adisa et al., 2014). The findings of the study may add knowledge to the factors that may contribute to reducing the failure rate of MSMEs in Burkina Faso. The results of the study may have both economic and social implications for MSMEs in Burkina Faso.

The Value to the Business

The purpose of the study was to examine the relationship between profitability and the critical success factors identified by Lussier (1995) required to drive profitable returns of MSMEs in Burkina Faso. MSMEs must possess knowledge of successful strategies for viability and growth to occur. New or existing businesses may benefit from the findings of the study in improved understanding of how variables can affect success. Startups and young firms are important contributors to job creation and productivity

growth (Decker, Haltiwanger, Jarmin, & Miranda, 2014). Building on the S/F predictive model developed by Lussier (1995), and using the results of the study, I aimed to add insights relevant to the performance of MSMEs in Burkina Faso. The findings of the study could be of interest to government organizations, scholars, business owners, microfinance institutions, and not-for-profit organizations as a means of implementing strategies that could lead to MSMEs success.

Contribution to Effective Practice of Business

Small businesses are critical for the development of any nation's economy and function as generators of employment and developers of indigenous entrepreneurs (Adisa et al., 2014). Expanding knowledge in this area may influence existing and new entrepreneurs to focus on factors that may help to overcome barriers to business growth and increase entrepreneurs' chances of success. The study might serve as a foundation for promoting MSMEs and microfinance in Burkina Faso. MSMEs play a critical role in economic growth and wage employment in both developed and developing economies, yet major obstacles remain in unlocking the potential of these businesses (Deluca et al., 2014). The findings from the study could help local entrepreneurs focus on the factors affecting the performance of their enterprises. Other researchers interested in the subject could use the findings from the study as a baseline for further studies. The study findings might help existing microfinance institutions capitalize on improving the successes of MSMEs receiving microloans.

Implications for Positive Social Change

The implications for positive social change include the potential to reduce entrepreneurship failure, increase employment opportunities, improve standards of living, and increase economic growth. New or existing businesses could benefit from the findings of the study in increased entrepreneurship success and job creation due to greater awareness of effective business success and failure models. Microfinance institutions could leverage the study's results to promote entrepreneurship success in Burkina Faso. Sustainability of MSMEs may increase the number of successful entrepreneurs who can provide regular meals for their families and send their children to school, which may lead to an increase in educational attainment. The study could introduce effective growth strategies for owners of MSMEs to create more jobs and reduce unemployment in Burkina Faso. Policymakers in Burkina Faso could use the results of the study as a baseline for creating policies to promote entrepreneurship, reduce business failure rate, increase new job creation, and boost national economic growth. Bulevska (2014) noted that economic growth is a concern of any economic system.

A Review of the Professional and Academic Literature

The sources of the literature selected for the study include a variety of search engines and database searches and contains three sections. In the first section, I discuss the sources on the theoretical framework. The second section contains an inventory of past articles related to the 15 variables identified by Lussier (1995) as the factors that may predict the success or failure of MSMEs. In the third section, I provide a discussion of the literature on the success and failure and then an overview of (a) the characteristics

of microentrepreneurship performance, (b) the role of government in promoting entrepreneurship, and (c) microentrepreneurship and economic growth.

Database and search engine searches included some standalone keywords as well as a combination of keywords. The keywords include *microfinance, entrepreneurship success, entrepreneurship failure, Lussier's success versus failure model, start-up capital, education, economic timing, marketing, microentrepreneurship, poverty, microloans, microfinance and poverty reduction, microfinance in Africa, poverty reduction strategies in Africa, women and microfinance,* and *microfinance and education.* Keywords that I used were related to both the study research questions and the hypotheses.

The sources used were from both current and archived sources in books and peer-reviewed articles from various databases, including Google Scholar, EBSCO, ABI/INFORM Business Source Complete, and Academic Search Complete. The total number of references included was 201. The peer-reviewed materials represented 95.5% of all references. The percentage of references used that were less than 5 years and were peer-reviewed was 85.1%. Source material also reflected the use of government websites and textbooks. Table 1 shows the source material breakdown for the literature review.

Table 1

Source Study Material

Sources	Outside of 5-year range (2011 and earlier)	Within 5-year range (2012-2016)	Total of all sources
Peer-reviewed journal articles	21	171	192
Government websites	0	3	3
Books	0	6	6
Total sources by year grouping	21	180	201

RBT

The objective of this section is to present a literature review of the RBT of a firm as a theoretical framework for the analysis of MSMEs' success and failure. Penrose (1959) contributed to the RBT and argued that a firm is more than an administrative unit and is a collection of productive resources. Wernerfelt (1984) coined the term *resource-based theory* of the firm. However, most scholars have considered Barney (1991) as the seminal author of the modern RBT concept. The RBT has since become one of the leading contemporary approaches to the analysis of sustained competitive advantage (Barney, 1991). I included Barney's definition of resources of a firm to include all (a) assets, (b) capabilities, (c) organizational processes, (d) firm attributes, (e) information, (f) knowledge, and (g) intellectual property controlled by a firm that enables an enterprise to conceive and implement strategies. I used RBT to help explain the role of resources in new businesses by focusing on the identification and acquisition of resources.

The key constructs underlying the theory encompass (a) resources, (b) capabilities, (c) competencies, (d) skills, (e) factors, and (f) assets (Bridoux, 2004; Campbell & Park, 2016). The value-creating potential of strategy is a firm's ability to establish and sustain a profitable market position (Conner, 1991). RBT emphasizes strategic choice, charging the firm's management with the important task of identifying, developing, and deploying key resources to maximize returns. Barney (1991) argued that abnormal rents could earn from resources to the extent that resources are valuable, rare, imperfectly imitable, and nonsubstitutable. The resources must be rare among the firm's competitors, imperfectly imitable in that they are resistant to duplication, and must not have substitutes. On the basis of RBT, competitive advantage and performance results are a consequence of a firm's specific resources and capabilities that are costly for competitors to reproduce (Barney, 1986a, 1986b, 1991; Rumelt, 1987; Wernerfelt, 1984). The resources and capabilities should be valuable, increasing efficiency and effectiveness, rare, imperfectly imitable, and nonsubstitutable (Barney, 1991).

Campbell and Park (2016) suggested that resources such as social capital, entrepreneurial orientation, and intellectual capital, along with strategic management of the community as a stakeholder, contribute to small-business performance. The RBT perspective has an intraorganizational focus and argues that performance is a result of firm-specific resources and capabilities (Barney, 1991; Wernerfelt, 1984) and that successful firms will find future competitiveness in the development of distinctive and unique capabilities, which may often be implicit or intangible in nature (Bromiley & Rau,

2016). RBT was relevant to the study as it helped explain and predict the basis of a firm's competitive advantage and performance (Barney, 1991).

Ownership characteristics. Lussier (1995) identified 15 S/F factors that are critical to driving profitability. I organized the 15 factors in the following three categories: (a) ownership characteristics; (b) resources and professional management, and (c) timing. This section of the literature review includes the business ownership characteristics as described by the Lussier model. The specific elements of the category include (a) owner's age, (b) owner's education, (c) the number of partners, (d) parental business ownership status, and (e) owner's citizenship status.

Age. Lussier (1995) noted that older owners have a greater chance of success than younger entrepreneurs do. A large body of research exists to understand whether age affects the success or failure of a venture. The entrepreneurial activities increase linearly with age for individuals who prefer to be the sole employee (Kautonen, Down, & Minniti, 2014). Studies have shown that among the demographic variables, age plays a crucial role in entrepreneurship decisions (Pete et al., 2010). Akehurst, Simarro, and Mas-Tur (2012) posited that entrepreneurs who start a business at a younger age encounter greater problems in managing staff and have difficulties in training and finding infrastructures, which in turn may affect firm performance. Akehurst et al. noted that younger entrepreneurs have greater growth and performance aspirations for their venture, but also have less accumulated life experience and lower opportunity costs to staying in the venture.

Education. Education plays an important role in many sectors. Among other factors that contribute to the success of a microenterprise, education is an element of long-term success for the microenterprise. Lussier (1995) noted that business owners with a college education have a greater chance of success. Elmuti, Khoury, and Omran (2012) posited that entrepreneurial education and basic entrepreneurial training skills contribute to a firm's success, which validated Lussier's statement. The business owner's education is a key factor in the success of an established business (Ipate & Pârvu, 2014).

Jain and Ali (2013) noted that education enhances entrepreneurs' performance both directly and indirectly. Barth, Birkenmaier, and Berg-Weger (2014) contended that a lack of training and education is a major contributor to the misuse of microloan funds by women. The lending institution should consider product modification or work closely with training providers to achieve a greater impact on entrepreneurship success (Mutai & Osborn, 2014).

A significant majority of entrepreneurs are microenterprises, and this sector plays a key role in economic recovery and prosperity. Education helps entrepreneurs comprehend and exploit information technology for success, and people with higher levels of education are potentially able to see the broader picture of revenue sources coming from internal operations instead of relying on external capital. Cassar (2014) explored the literature on the relationship between entrepreneurial orientation and business performance and suggested that strong entrepreneurial orientation results in high business performance. The concept of knowledge acquisition applies to microentrepreneurship. Friesl (2012) posited that four distinct knowledge acquisition

strategies exist and that these strategies differ in relation to company performance. Some controversy exists as to whether education contributes to entrepreneurship success.

Many others have contradicted Lussier's (1995) statement on the role education plays in entrepreneurship success or failure. For example, Loh and Dahesihsari (2013) noted that the quality of business entrepreneurship and success depends mostly on personal characteristics rather than on any system of formal education or training. Ipate and Pârvu (2014) also contradicted Lussier and posited that high levels of education do not guarantee entrepreneurial success, especially in the case of senior-citizen entrepreneurs.

Partners. Lussier (1995) opined that owners who start a business with at least one partner have a greater chance of success sole proprietorships. Many experts recognize that entrepreneurs cannot achieve success on their own and often need help and support from other people including, but not limited to, partners. Entrepreneurs need to develop partnerships with other people or entities that can be critical to the operation and success of the business. Schirmer (2013) posited that building a partnership offers an efficient and effective way to mobilize resources and gain complementary capabilities.

Business partnerships also provide an advantage by splitting the risk and rewards among other persons and entities. Entrepreneurs are those who constantly innovate. This innovation creates business opportunities and coordinates new combinations of resources to extract the most profits from the innovations in an uncertain environment (Amit, Glosten, & Muller, 1993). Ayayi (2012) found that by becoming a stockholder in the microenterprise rather than a lender, the microequity provider is in a more tightly coupled

relationship, providing knowledge and guidance necessary for ensuring the success of the venture. Globally, MSMEs play an important role in the economic development of a country. Adisa et al. (2014) posited that MSMEs are the main engines of economic growth and constitute one of the biggest contributors to GDP.

Parents. Lussier (1995) noted that owners who have parents who owned a business have a greater chance of success. Parental entrepreneurship is a strong, probably the strongest, determinant of one's ambition to become an entrepreneur. Parents' entrepreneurship experience has a significant influence on the entrepreneurial spirit of the children (Lee, 2015). Fattoum and Fayolle (2009) posited that the entrepreneurs who are successors of entrepreneur parents have a greater chance of success as opposed to the ones without this advantage.

Successor discretion constitutes a particularly relevant factor in productivity and managing organizational renewal in family businesses. Garg and Weele (2012) found that succession planning is a major problem within enterprises and that a lack of proper succession planning can directly cause the collapse of these businesses, particularly when key players leave the business upon retirement or in pursuit of other options. Homiah, Sakyi-Dawson, Bonsu, and Marquis (2012) posited that microenterprise development programs essentially improve the recipient enterprise performance, which results in superior enterprise earnings and savings and may in return increase the family's welfare.

Citizenship. Migrants residing in Burkina Faso come from diverse countries around the world. Many immigrants face the dilemma of looking for employment or starting a new venture. Aldrich and Waldinger (1990) noted that ethnic minorities are

more likely to become self-employed or to participate in the entrepreneurial sector. Vissak and Zhang (2014) posited that immigrant entrepreneurs should engage in local and international business and use their knowledge and connection with both their previous and new home countries to do so.

Transnational entrepreneurs have personal and family characteristics and important motives, responsible for the success of their venture (Lin & Tao, 2012). Mueller (2014) noted that companies owned exclusively by immigrants tend to be smaller and have a higher exit rate. Transnational entrepreneurial success depends on the support of a spouse or the extended family, the attainment of above average education levels, and prior industry experience (Shoebridge, Buultjens, & Peterson, 2012). The host country interaction may offer opportunities to enhance an immigrant entrepreneur's competitive position if the individual can conduct transnational business more effectively by leveraging home-country oriented social capital (Chrysostome, 2010).

Resources and professional management. Lussier (1995) described resources and professional management as including the following specific elements: (a) start-up capital, (b) record keeping and financial control, (c) business owner industry experience, (d) business owner management experience, (e) planning, (f) professional advisors, (g) staffing and employee turnover, and (h) marketing. The elements in this category are critical for predicting a firm's success or failure, according to Lussier.

Capital. In many underdeveloped countries, individuals have numerous notable ideas about starting business ventures but may lack access to adequate capital. Financing constraints are one of the major factors affecting potential entrepreneurs around the world

(Lussier, 1995). The lack of access to adequate financial recourses is one of the main reasons for entrepreneurship failure (Williams, 2015. Other obstacles to success include a lack of working capital and problems in managing company finances (França, de Aragão Gomes, Machado, & Russo, 2014).

The amount of start-up capital granted to novice entrepreneurs varies from country to country. Naser, Nuseibeh, and AL-Hussaini (2012) asserted that in countries with high per capita income, women, for example, have adequate savings and can receive financial support from relatives for assistance in setting up their enterprise. Other researchers revealed that, in some parts of the world, entrepreneurs seek initial funding from their families rather than from outside (Williams, 2014).

The lack of financial or inadequate capital leads to entrepreneurial failure (Shoebridge et al., 2012). Lending institutions often refrain from considering loans to microenterprises due to constraints in accessing relevant information (Hassman, Schwartz, & Bar-El, 2013). A lack of access to finance for medium and small enterprises is one of many factors that contribute to their failure. Mrabet, Jebali, and Ellouze (2013) contended that entrepreneurship capital positively affects and boosts economic performance and constitutes a significant and important factor that provides long-term productivity growth. Brana (2013) posited that female-controlled small and medium enterprises have relatively lower levels of external funding than their male counterparts and have higher repayment rates. In many developing countries, gaining access to start-up capital from traditional banking institutions is not always easy, and microcredit aims

to focus on the provision of credit services to low-income clients, usually in the form of small loans as an alternative to the traditional lending system (Addae-Korankye, 2012).

The objective of most microlending institutions is to increase the community's standard of living with strategic loans to entrepreneurs (Baklouti, 2013). Ouma and Rambo (2013) explored the effect of access to microcredit services on the growth of women-owned enterprises. Further access to microcredit had positive effects on the growth of women-owned enterprises. This position is in line with Lussier and Halabi's (2010) study, which confirmed that access to adequate capital constitutes a factor in entrepreneurship success.

Benjamin (2013) posited that the lack of quantitative information regarding clients and risk limits the supply of funding by the microfinance institution. Medium and small enterprises' inability to access financing is one of the many of the factors that contribute to their failure. The funds needed by new business owners for business survival and growth often exceed available funds, resulting in a state of need (Bouzahir & Chakir, 2013).

Credit is indispensable for economic growth and, if properly positioned, can play an important role in financial capital formation (Bayulgen, 2013). Bylander (2014) posited that access to credit as a financing means for enterprises had grown dramatically throughout the developing world, primarily in the form of expansion of microfinance institutions offering low-interest loans to previously unbankable households.

The lack of access to finance for medium and small enterprises is one among many of the factors that contribute to their failure. While microfinance has many

economic and social benefits, it also causes problems within communities and is not a cure for poverty (Silverberg, 2014). Adisa et al. (2014) noted that MSMEs face major problems without enough start-up capital, liquid capital, working capital, and investment capital to survive and grow in a dynamic and predatory competitive business environment. Countries and development organizations have focused on the promotion of micro and small enterprises as a way of encouraging broader participation in the private sector. Brana (2013) explored the relationship between microfinance, gender, small and medium enterprises' growth and external funding. Brana (2013) indicated that women experience more difficulties than men do when it comes to raising start-up and recurring finance. Such firms primarily use funds to finance both working capital and asset investment and often rely on friends and family (Makler, Ness, & Tschoegl, 2013).

In developing countries, microloans are often so small that rural dwellers barely have enough for their economic activities (Parilla, 2013). Olusola and Tayo (2012) posited that the size of loans and the business owner's borrowing experience have a positive and significant impact on growth in investment of micro- and small-scale enterprises. Olusola and Tayo (2012) also found that policies aimed at making funds available to small-scale enterprises lead to the performance of the small and microenterprise sector. In many countries, venture capital is an alternative to other forms of entrepreneurship finance.

Ambrose (2012) concurred that even though venture capital is one of the most relevant and important sources of finance for innovative entrepreneurship growth, some countries still lack an enterprising culture needed to drive promotion, competition,

innovation, sector development, and industrialization. Ford and Nelsen (2014) identified that venture capital investors have fewer recourses and less appetite for risk and are moving away from high-risk, start-up companies. Cohan (2012) contended that the worst way to finance a start-up is to take venture capital.

Venture capital could be an alternative solution for a start-up business that has no other means to finance a venture. Bylander (2014) found that low-cost credit from microfinance institutions has the potential to both free the poor from reliance on the usurious rates of traditional moneylenders and allow for sustainable improvement in standards of living. Okibo and Makanga (2014) contended that the amount of microloan financing available is far less than the money required to improve living standards and that the resulting business activities are insufficient to meet the monetary demands of the population. Afrin, Islam, and Ahmed (2010) contended that microcredit programs do not help borrowers develop any entrepreneurial capabilities beyond mere survival. Gërgjaliu-Thaçi (2012) maintained that the establishment of micro- and small enterprises have arisen from the need to create jobs rather than from a supportive business environment. There are also controversies as to the role of small and microenterprise in a country's economic development.

Record keeping and financial control. Recent developments in technology have made it easier for record-keeping as well as financial control. In certain cases, these are done remotely, which can give the firm a competitive edge. Entrepreneurship success or failure is due to many factors. Lussier (1995) identified record keeping and financial control as two of the factors that can affect the success or failure of an enterprise.

Karadag (2015) confirmed that entrepreneurship and small business represent a growing discipline, and small business failure is frequently due to poor financial management.

Karadag's (2015) study results are similar to Lussier's (1995) study, which revealed that record keeping and financial control are critical factors for entrepreneurship success. Mazzarol (2014) posited that most small and medium enterprises use only informal record-keeping systems and few use professional accountants or computer-based accounting systems. Internal control reduces the risk of misappropriation and can improve many compliances and operational elements (Wilkins & Haun, 2014). In the United States, the Sarbanes-Oxley Act of 2012 requires the executive management team of an enterprise to attest to the appropriateness and sufficiency of their firms' internal controls. The implementation of internal financial controls compliments entrepreneurial, competitive advantages with the customer, vendor, and investors and reduces financial fraud and litigation risk (Wilkins & Haun, 2014).

Many firms use information technology as a strategic tool for streamlining management and for entrepreneurship success. Ostashkin (2014) explained that the successful implementation of modern, scientific, and methodological financial controls is imperative for entrepreneurship survival. Many promising new businesses fail at the growth stage when managerial accounting becomes an important element. Businesses are inclined to enhance their managerial abilities to ensure not just survival, but also capitalization of opportunities (Silva, Wu, & Ojlako, 2013).

The relevance of record keeping and financial control for entrepreneurship success has become more important for the startups and existing firms. Developing

economies recognize the contribution of small firms to youth employment, but their contribution of revenue to the national budget seems negligible. The lack of attention may be due to weak managerial and financial skills as well as a lack of qualified accounting staff and suitable accounting software (Agyei-Mensah, 2012).

Industry experience. Many factors contribute to entrepreneurship success or failure. Lussier (1995) identified industry experience as one of the key elements for firms' success or failure. Industry experience with entrepreneurial forecast performance is greater in high- technology industries (Cassar, 2014). Chinomona (2013) confirmed in a study that owners' industry experience positively correlates with the venture's performance.

Entrepreneurship plays a vital role in a country's economic development (Adisa et al., 2014). Business experience in the field is an important success factor, while the need for financial resources is a constraint for business success (Jayaweera, 2015). Brixy, Sternberg, and Stüber (2013) posited that providing professional assistance to individuals who want to start up a business is key to improving a firm's performance. The finding is consistent with Lussier and Halabi's (2010) study confirming that industry experience plays an important role in entrepreneurship success.

Experience in the same industry before starting up a venture relates to productivity but does not correlate with profitability (Cassar, 2014). Brixy, Sternberg, and Stüber (2013) noted that firms without previous experience in the industry of the planned business are less willing to seek assistance. Lussier (1995) argued that industry experience might affect the performance of MSMEs.

Management experience. Many entrepreneurs and investors use the experience as a vital indicator of future performance. Lussier (1995) noted that management experience is one of the factors contributing to entrepreneurship success or failure. Peake (2014) posited that management experience contributes to the success of entrepreneurship if that experience is relevant to the venture. An entrepreneur's experience and management competence are crucial to the success of a new enterprise (Shieh & Pei, 2013). While other authors agree that management experience plays an important role in a firm's success, Toft-Kehler, Wennberg, and Kim (2014) noted that entrepreneurial experience does not always lead to the improved financial performance of new ventures.

With relevant work experience and an improving economy, more women are creating and sustaining successful business ventures (Mani, 2013). Jain and Ali (2013) also confirmed that prior entrepreneurial experience is the most consistent predictor of future entrepreneurial performance. Relevant skills and experience are important factors that contribute to the survival of business at start-up, as well as its future performance and growth (Tundui & Tundui, 2012). Mitchelmore and Rowley (2013) posited that entrepreneurs consider the development of managerial skills and management knowledge to be important at different stages of their businesses' life cycles. The authors also found that local growth networks could provide entrepreneurs the opportunity to grow along with the motivation and skills required to drive economic development (Mitchelmore & Rowley, 2013).

Management experience is an important factor that contributes to the survival of business at startup and its future performance and growth (Tundui & Tundui, 2012). One

of the major limitations of microcredit in promoting microenterprise is the lack of skill and education of the recipients (Parilla, 2013). Mitchelmore and Rowley (2013) posited that entrepreneurs consider the development of managerial skills and management knowledge to be important in different stages of their businesses' life cycles. The lack of skills and education limitation is an indication that entrepreneurship education is a lifelong learning process to which higher education institutions can make an important contribution.

Planning. Planning is an important yet frequently neglected factor that contributes to the success or failure of new and existing ventures. Lussier (1995) identified planning as a factor that may contribute to the success or failure of an enterprise. Brad (2014) noted that preparing a business plan is the most important step in building a successful enterprise. Fernández -Guerrero, Revuelta-Taboada, and Simón-Moya. (2012) Contradicted Lussier's (1995) position on planning as a factor for entrepreneurship success as he posited that the creation and quality of a firm's business plan do not influence its chances for survival. The findings of a study performed by Honig and Samuelsson (2012) are consistent with other authors in agreeing that neither formal planning nor a change in the business plan increases the performance of an enterprise.

Professional advisors. Professional advice from a business counselor may help entrepreneurs gather the proper documentation necessary for establishing a firm. Lussier (1995) posited that business entrepreneurs who use professional advisors have a greater chance of success. Soriano and Castrogiovanni (2012) commented that, for an established

business, professional advisors could assist in many areas of the firm. The education and experience of inner-circle advisors contribute to the performance and success of the enterprise. In line with other studies, Klyver and Hindle (2010) revealed that professionals who advise on financial matters provide entrepreneurs with financial resources and emotional support that may contribute to the success of the firm. Professional advisors help business owners and entrepreneurs manage the firm's resources and apply financial discipline. Groenewegen and Langen (2012) noted that a thorough business plan along with an external advisor had a significant positive influence on employment growth.

Staffing. Lussier's (1995) success and failure model showed that businesses that attract and retain quality employees have a greater chance of success. The initial step in staffing is to plan the workforce required for a new or existing venture. Kedmenec, Šebjan, and Tominc (2015) suggested that an increase in human capital resources in entrepreneurship has a significant and positive effect on opportunity identification. Remeikienė and Startienė (2013) posited that a higher degree of human capital has a positive impact on entrepreneurship. A perceived high-performance work system not only reduces the negative effect of emotional labor on burnout but also has a unique negative effect on intention to leave (Bartram, Casimir, Djurkovic, Leggat, & Stanton, 2012).

The importance of staffing is to ensure that the business owner or entrepreneur can create a plan that will attract and retain employees. Haar and White (2013) confirmed the relationship between firms hoping to increase their employee retention rate and firms

concentrating on the development of a strong culture by using information technology resources effectively. Employees' personalization fit associates negatively with employees' intention to leave the organization (Jung & Yoon, 2013). In knowledge-intensive settings, managers should focus on tailoring compensation packages to help minimize the adverse impact of employee turnover (Campbell, Ganco, Franco, & Agarwal, 2012). Allen et al. indicated that human resource practices in small businesses based on leaders' views of employee commitment positively relates to revenue growth and perceptions of performance.

In business settings, employees with extremely high performance levels are less likely to leave firms that offer higher compensation than competitors do. In contrast, employees with extremely low performance levels are more likely to leave for more compensation (Carnahan et al., 2012). Prior studies discuss the importance of employee turnover and its impact on firm performance. Human capital plays a vital role in relaxing constraints and improves entrepreneurial performance (Tran & Santarelli, 2014). In a 2013 study, Ming-Chu revealed that high performance human resource practices in small and medium enterprises could encourage entrepreneurship among employees, which could positively enhance entrepreneurial performance. The author further posited that entrepreneurship of small and medium enterprises positively affects entrepreneurial performance.

Marketing. Lussier (1995) noted that owners who possess marketing skills have a greater chance of success than those without marketing skills. One of the biggest challenges entrepreneurs face is competing against larger, better-known, and more

resourceful companies. Marketing strategies and skills can help an entrepreneur set himself apart. Zhou, Wu, and Barnes (2012) posited that young ventures are usually in a better position to improve their marketing capabilities and to increase the profitability of their firms than older ventures.

The impact of marketing capabilities on the performance outcome of early internationalization seems more salient among ventures that target developed, rather than emerging, foreign markets (Zhou et al., 2012). Marketing orientation influences business growth and performance (Tripathi & Siddiqui, 2012). The use of marketing has a positive influence on the performance of small and medium enterprises (Eid & El-Gohary, 2013).

Countries and development organizations focus on the promotion of micro- and small enterprises as a way of encouraging broader participation in the private sector. Ferdous, Herington, and Merrilees (2013) posited that the development of marketing within an organization potentially increases business success and competitive advantage.

Timing. Lussier describes timing as including the following specific elements (a) product and service timing and (b) economic timing. The elements in this category are important for predicting a firm's success or failure according to Lussier (1995). Businesses that select products and services that are too new or too old have a greater chance of failure than firms that select products/services that are in the growth stage (Lussier, 1995).

Product and service timing. Lussier (1995) noted that businesses that make products that are in the growth stage have a greater chance of success. Hunter (2012) posited that to succeed as a business owner, one must develop the ability to select or offer

the right products or services to customers at the right time and in the right area. Hunter (2012) stated that successful products do not lead to a successful business; new-product development rather than invention will lead to successful outcomes. For early-stage firms, the keys to success are establishing the firm's strategic boundaries and developing early business validation methods (Ogilvie, 2015). Özer and Uncu (2013) revealed that the timing of new product introduction is a critical decision for many firms and represents an important factor in a firm's performance. Market orientation, new-product development process, and predictability of customer demand have a direct and meaningful impact, while technological turbulence, market turbulence, and competitive intensity have a significant moderating effect on the performance of new products (Hong, Song, & Yoo, 2013). The main impact of market orientation is through new-product development proficiency and product meaningfulness, and that of market orientation is through proficient intellectual property management and product novelty (Hong et al., 2013). Ekekwe (2013) noted that small and medium enterprises are the foundation of entrepreneurship and that entrepreneurs address issues that relate to supply and demand.

Economic timing. In the success and failure model, Lussier (1995) noted that businesses that start during a stable or expanding economy have a greater chance of success. Small businesses serve as a medium of economic stimulus and have become an essential building block of business creation and economic prosperity, which leads to further business creation and prosperity (Raudeliūnienė, Tvaronavičienė, & Dzemyda, 2014). Goldszmidt and Vasconcelos (2015) posited that firms could enable superior performance by taking advantage of undervalued resources in the market to invest

counter-cyclically in new business opportunities created by changes in the market. Ejermo and Xiao (2014) stated that entrepreneurial firms are sensitive to and follow a pro-cyclical pattern of survival likelihood over the business cycle. Recessions are recurring events in which most enterprises suffer severe impact while relatively few others prosper (Goldszmidt & Vasconcelos, 2015). Collett, Pandit, and Saarikko (2014) noted that cost-cutting and retrenchment are likely to be necessary but insufficient actions for recovery in a turbulent economy.

Success and Failure

Small and medium enterprises (SMEs) play a vital role in economic development as they are the main source of employment generation and output growth, both in developing and developed countries (Roper, Vahter & Love, 2013). In developing countries, the roles of SMEs become more crucial, as they have the potential to improve income distribution, create new employment, reduce poverty, and facilitate export growth. SMEs foster development of entrepreneurship, industry, and the rural economy (Roper, Vahter, & Love, 2013). However, one of the main factors in the success of any small business is the existence of real business opportunity (Mukumba, 2014). Relevant skills and experience are important factors that contribute to the survival of business at startup and its future performance and growth (Tundui & Tundui, 2012). Consistently, Ming-Chu revealed that high-performance human resource practices in small and medium enterprises could enable entrepreneurship among employees, which in turn could enhance entrepreneurial performance.

Adisa et al. (2014) noted that even though financial capital is important in the financing of small and medium enterprises in general, and for start-ups in particular, many entrepreneurs face several limitations in finding sources for start-up financing. Among other factors that contribute to the success of MSMEs, education plays an important role in MSME success. Jayaweera (2015) noted that business success results from teamwork and depends on the working environment, leadership style, available resources, and employee motivation. Mitchelmore and Rowley (2013) posited that entrepreneurs consider the development of managerial skills and management knowledge as being important factors in entrepreneurship success.

Adisa et al. (2014) identified important factors for success and failure of MSMEs including lack of finance to advance business growth, lack of start-up capital, liquid capital, working capital, and investment capital to survive and grow in a dynamic and predatory competitive business environment. Ayayi (2012) posited that although microcredit financing places a heavy cash drain on MSMEs and leads to suboptimal growth during the evolution of the MSMEs, the mix of microequity with microcredit may prove to be more valuable to nurture the sustainable growth of MSMEs. Garg and Weele (2012) found that succession planning is a major problem within MSMEs and that the lack of proper succession planning can have the direct effect of causing the collapse of these businesses, particularly when key players leave the businesses upon retirement or in pursuit of other options. Mueller and Shepherd (2016) indicated that learning from failure can be facilitative for entrepreneurs who possess a cognitive toolset that consists of opportunity prototypes and an intuitive cognitive style and that prior professional

knowledge negatively moderates this relationship. Steinker, Pesch, and Hoberg (2016) posited that asset optimization is an essential part of a complete and successful turnaround strategy and financially distressed firms should always consider such optimization to prevent failure and bankruptcy.

Minello, Alves Scherer, and da Costa Alves (2014) revealed that competencies influence the behavior of entrepreneurs, and this, in turn, reflects on the success or failure of the organization. Mrabet et al. (2013) asserted that entrepreneurship capital positively affects and boosts economic performance and constitutes a significant and important S/F factors. Kessy (2011) maintained that unplanned implementation of credit risk management, fraud, misconduct, and dishonesty among employees can account for the greatest part of entrepreneurship failure.

Characteristics of Microenterprises' Performance

An entrepreneur is an innovator who introduces a unique combination of innovations (Ariyo, Lee, & McCalman, 2015). Through the research, the authors' objective was to understand the relationship between factors such as entrepreneurial orientation characteristics, entrepreneurial management, and environmental dynamism to firms' financial performance. Ariyo et al. (2015) posited that access to local and foreign markets plays a critical role in entrepreneurial performance. A positive individual characteristic of innovativeness, risk taking, and entrepreneurial management correlates with a firm's financial performance. Ayayi (2012) found that by becoming a stockholder in the microenterprise rather than a lender, the microequity provider engages in a more tightly coupled relationship, providing the knowledge and guidance necessary for

ensuring the success of the venture. Adisa et al. (2014) posited that MSMEs are the main engines of economic growth, constitute one of the biggest contributors to GDP and employment, and play a core role in the supply chain of large businesses.

MSMEs face a major challenge in finding adequate financing to advance business growth, and enough start-up capital, liquid capital, working capital and investment capital necessary to survive and grow in a dynamic and predatory competitive business environment (Adisa et al., 2014). Ayayi (2012) posited that although microcredit financing places a heavy cash drain on microenterprise and leads to suboptimal growth during the evolution of the microenterprise, a mix of microequity with microcredit may prove to be more valuable in nurturing the sustainable growth of microenterprise. Olusola and Tayo (2012) posited that the size of the loan and the owner's borrowing experience have a positive and significant impact on the growth of investment in micro- and small-scale enterprises. Many factors contribute to microenterprise performance. Garg and Weele (2012) found that succession planning is a major problem within enterprises and that the lack of proper succession planning can have the direct effect of causing the collapse of these businesses, particularly when key players leave the businesses upon retirement or in pursuit of other options.

Role of Government in Microentrepreneurship Promotion

Economic growth critically depends on the presence of good government policies and institutions (Sobel, Dutta, & Roy, 2013). The connection between wealth and business creation is one of the most important and well-studied areas in the fast-growing body of literature on entrepreneurship (Fairlie & Krashinsky, 2012). Zhu and Chung

(2014) posited that a firm with sufficient resources and market-entry experience has a better chance of achieving its goals even when a dominant political party withholds its support.

Entrepreneurship is an essential power in the economy of any nation insofar as the strategic role it plays in the accomplishment of macroeconomic goals (Okpala, 2012). Marcus and Chohen (2015) posited that managers of enterprises in a regulated entrepreneurial setting tend to view public policies as substitutes for their efforts to control their business environment, not as complements. In this section of the literature review, I will focus on the role of government as the regulatory agency for the financial institutions financing small and medium enterprises, especially in developing countries. Most of the microenterprises in developing countries are rarely able to meet bank regulations and requirements for obtaining a loan from traditional lending institutions.

Barth, Lin, and Yost (2011) found that bank supervisory agencies, which have greater independence from political influences, cause small and medium enterprises to suffer greater obstacles in accessing loans. Barth et al. (2011) further posited that regulatory restrictions on minimum capital ratios might induce risky behavior on the part of banks, but may ease firms' access to credit at a higher cost. Greater restrictions on bank activities and on owning nonfinancial firms induce banks to loosen credit standards and charge greater interest. Government as a regulatory institution plays an important role in promoting microentrepreneurship. Many studies stress the importance of enterprise growth for ensuring employment and economic growth in a country. The results of such studies provide input for governmental bodies seeking to redesign their

policies on economic growth. Central banks and state governments function to develop entrepreneurship as a remedy to the employment dilemma (Khatri & Sawhney, 2013).

Small business failures result in loss of income for both business leaders and their employees, lead to a reduction in the living standard of members of the community, and represent governmental tax revenue losses (Eniola & Ektebang, 2014). Setting the right policies and strategies at the right time and right place can help boost the entrepreneurship sector and can contribute to an increase in the country's GDP. By implementing such policies, local governments will allow the private sector to invest in microfinance, enabling the local population to escape poverty and in some cases become self-sufficient.

Governments could make funds available via grants to research and development centers and universities to facilitate the development of practical technologies. Promoting and funding microentrepreneurship in Africa will help the poor to escape not only poverty but also the capacity of criminal activities that can lead to prison or death sentences. In remote areas, the government can ease the requirements for microfinance expansion to allow private investments for rural development (Chavan, 2013). Small and medium enterprises show a GDP share that is larger than that of large enterprises (Tambunan, 2012). This realization should be an awareness for governments and other agencies to promote microenterprise and to lessen the requirements for microfinance investment. Sobel, Dutta, and Roy (2013) further posited that decentralization is associated with a better business climate and contributes to economic growth. Hartarska (2009) revealed that regulatory contribution and financial statement transparency do not

affect performance, although some but not all rating agencies may play a disciplining role.

Entrepreneurship and Economic Growth

The development of entrepreneurship may be a major means of sustaining a country's economic growth. Bulevska (2014) noted that economic growth is a concern of any economic system. Entrepreneurial activity plays a significant role in the economy of a country, owing, among other factors, to its effects on the labor market and economic growth (González-Sánchez, 2013). The government and the private sector can play a crucial role in the development of entrepreneurship in remote areas and can help implement proper infrastructures.

Oni, Paiko, and Ormin (2012) noted that it is imperative to increase access to microfinance services because microfinance institutions enhance participation in small and medium enterprises for economic growth and improvement of the population's living experience. The major constraints in entrepreneurship development remain capital and appropriate business policies. People in remote areas do have creative ideas but cannot often implement their ideas due to a lack of financing options. Nkpoyen and Eteng (2012) contributed to the concept of entrepreneurship and economic growth and suggested that the availability of opportunities for self-employment through microlending has positively affected the lives of the rural population. Startups and young firms are important contributors to job creation and productivity growth (Decker et al., 2014). Contrary to a reservoir of research linking entrepreneurship to economic growth, Sabella, Farraj,

Burbar, and Qaimary (2014) argued that entrepreneurship has no significant impact on economic growth.

Access to capital to start a micro- or small enterprise remains a big challenge and a struggle for many entrepreneurs in Africa, and in the world in general. The possibility of obtaining microfinancing gives underprivileged individuals the opportunity to set up a venture and contribute to economic growth, which will help the poor by contributing to economic development when the venture is successful, thereby providing food and shelter for many. Mehammud and Sengupta (2013) concurred that microfinance plays an important role in providing financial services to those who lack access to commercial banking due to the absence of collateral. The agricultural segment remains one of the most important sources of income for many households in the underdeveloped world, and an economic enhancement to this sector through microfinance would help enhance production (Whitfield, 2012).

Transition and Summary

In African countries, leaders and governments have implemented many programs to improve the MSME sector, but few have succeeded. The problem statement and the background of the problem contain an explanation of the magnitude of the lack of financing for small businesses in Burkina Faso. Additionally, the section contains a clear definition of the purpose of the study, as well as the research questions and hypotheses for testing. The study followed the quantitative approach. In section 1, I included an explanation that defends this choice, the theoretical and conceptual framework, and the assumptions and delimitations of the study. The section also contains an overview of the

professional and academic literature on the subject. The literature review features a discussion of the studies conducted on the relationship between microfinance and MSMEs' success.

In Section 2 of the study, I described the role of the researcher, the research methodology, and the type of data to be collected. I examined the different data- analysis techniques and tools as well as a description of the type of population suitable for the study. The section also covers a description of the tools and techniques that helped to ensure the reliability and validity of the study.

Section 2: The Project

In the study, I used logistic regression as the primary statistical analysis technique to examine the relationship between profitability and the critical success factors identified by Lussier (1995) required to drive profitable returns of MSMEs in Burkina Faso. Logistic regression is a statistical technique for classification based on logistic function (Ngo, Govindu, & Agarwal, 2015). The focus of the study was to examine the factors that could enable MSMEs to maintain profitability and avoid failure in Burkina Faso. I discuss the method that I used to examine the factors affecting the degree of success of MSMEs in Burkina Faso in the following section. In this section, I address the research method and design, the targeted population, the data analysis techniques, and role of the researcher. I also discuss the nature of the study, an outline of the survey questionnaire, and plans for assuring the study's validity and reliability and the methods for maintaining confidentiality.

Purpose Statement

The purpose of the quantitative correlation study was to examine the relationship between business ownership characteristics, resources and professional management, timing, and profitability. The independent variables were (a) business ownership characteristics (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status), (b) resources and professional management (start-up capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover, and marketing), and (c) timing (product and

service timing and economic timing). The dependent variable was profitability, with two levels, profitable and not profitable. The target population consisted of MSMEs located in Ouagadougou, the capital of Burkina Faso. The findings may contribute to positive social change by providing information MSMEs can use to reduce the the failure rate and increase in the sustainability of businesses, thus increasing the financial prosperity of owners, employees' families, communities, and the local economy. With more information about successful business strategies, MSME owners in Burkina Faso might be better able to contribute to the local economy and create additional jobs.

Role of the Researcher

In the quantitative study, my role as the researcher consisted of collecting, compiling, analyzing, and interpreting the data to test the hypotheses and address the research question. In the study, I was responsible for ensuring the reliability of the data collection, organization, and analysis in an ethical manner. I ensured that each participant receives the consent letter and fully understands the nature and the purpose of the research. Researchers should engage participants in data collection, analysis, and reporting, which provides tools and skills to the future social change effort (Fassinger & Morrow, 2013). I enclosed an introduction and invitation letter to participate in an e-mail along with the survey link to the participants. I used SurveyMonkey, a web-based data collection tool, to administer the survey for the study electronically. Once the data collection was completed, I analyzed and then presented the findings. I also complied with all ethical protocols as established by the Walden University Institutional Review Board (IRB).

Participants

The target population consisted of MSMEs established with loans from PRODIA and other microfinance institutions in Burkina Faso. The population consisted of 3,192 recipients of microloans. The study included a random-based sampling approach to select from the population of 3,192 recipients of microloans from PRODIA and other microfinance institutions and registered with the online business directories. Random sampling, in which every member of the population has an equal chance of selection, is the best way to reduce the influence of uncontrolled factors (Emerson, 2015).

The term *random* indicates that each member of the population has an equal likelihood of selection. Probability sampling is a random selection of elements from the population, in which each element of the same population has an equal and independent chance of being included in the sample (Kandola, Banner, O'Keefe-McCarthy, & Jassal, 2014). The selected group represented those recipients who are at least 18 years of age, have started a microbusiness initiated with a loan, and have been a client of a microfinance institution for at least 3 years. The sample group received a letter of consent via e-mail. Determining sampling type is crucial to participant selection in that it should represent the entire population. Sample size estimation is an important factor used to strengthen confidence in research results (Acharya, Prakash, Saxena, & Nigam, 2013).

Research Method and Design

McCusker and Gunaydin (2014) stated that research is the systematic and rigorous process of inquiry that aims to describe phenomena and to develop and test explanatory concepts and theories to contribute to a scientific body of knowledge. I used

the quantitative research method to examine the factors identified by Lussier (1995) that could enable MSMEs in Burkina Faso to maintain profitability and avoid failure.

Method

I used the quantitative method, as the purpose of the study was to test hypotheses. The quantitative method was appropriate for the study due to the statistical nature of the research and was consistent with the research method used in comparable studies. Researchers use quantitative data to identify and project results to a larger population, to test hypotheses, and to examine specific relationships (Farrelly, 2013). As noted earlier, previous studies have included the original Lussier model and a quantitative method in the United States (Lussier, 1995), Croatia (Lussier & Pfeifer, 2001), Chile (Lussier & Halabi, 2010), Israel (Marom & Lussier, 2014), and Pakistan (Hyder & Lussier, 2016). In quantitative studies, the researcher uses numerical indicators and statistical tools to understand and predict the phenomenon (Yin, 2014). I used numerical indicators and statistical analysis tools to examine the factors identified by Lussier (1995) that could enable MSMEs in Burkina Faso to maintain profitability and avoid failure. As such, the quantitative method was the appropriate choice for the study. A qualitative method is appropriate when the research intent is to explore business processes and how people derive sense and meaning (Rosenthal, 2016). Qualitative research does not work on the predictive relationship and does not consist of proposing and testing hypotheses (Rosenthal, 2016). The purpose of the research was not to determine the meanings placed on social and human problems but to test hypotheses and examine the relationships among variables. Thus, the qualitative approach was not appropriate for the study.

The mixed-method research combines both the qualitative and quantitative methods (Fretschner & Weber, 2013). A mixed-method research approach entails a combination of both quantitative and qualitative research methods with the same research inquiry. Such a method can help yield rich insights into various phenomena of interest that cannot be fully understood using only a quantitative or a qualitative method (Venkatesh, Brown, & Bala, 2013). It was possible to understand the relationship between Lussier's (1995) 15 independent variables and the dependent variable using the quantitative method solely; the mixed method was not appropriate for the study. I chose quantitative over qualitative and mixed-method research because the purpose of the study was to analyze numerical data, test hypotheses, and infer the results to a larger population.

Research Design

I used a correlation design in the study. Correlation design involves the systematic examination of the nature of the relationship or associations between and among variables or factors (Farrelly, 2013). Researchers use correlation designs to examine relationships among manipulated variables or nonmanipulable variables (Leedy & Ormrod, 2013). Experimental design is an alternative to correlation design in which researchers use random assignment, manipulation of an independent variable, and strict controls (Sousa, Driessnack, & Mendes, 2007). Using experimental design, researchers examine the direct cause-and-effect relationships among variables. The purpose of the study was not to examine the direct cause and effect relationship among the variables used in Lussier's (1995) S/F prediction model. The correlation using logistic regression

design was appropriate for the study over other research designs as the intent of the study was to examine the nature of the relationship among variables. In the study, I used logistic regression as the statistical design as the dependent variable is dichotomous. Among the multivariate data-analysis method, the logistic regression model is useful for working with dichotomous variables (Constantin, 2015).

Population and Sampling

The population of the study included all MSMEs operating in Ouagadougou, the capital of Burkina Faso and its largest city. The study involved MSMEs who were recipients of microloans from PRODIA and MSMEs who registered with the online directories in Ouagadougou and received a loan from other microfinance institutions in Ouagadougou. Narrowing the focus of the study to only MSMEs financed by microfinance institutions allowed controlling for the effects of size and industry factors on the findings (Kroes & Manikas, 2014). Previous studies of the factors predicting success or failure of small businesses in other countries focused on a similar population. For example, Halabi and Lussier (2014) drew on a population of small businesses in Chile; Hyder and Lussier (2016) relied on a population of small businesses in Pakistan, and Lussier (1995) used a population of small businesses in the United States. The purpose of the study was to examine the factors identified by Lussier that might enable MSMEs in Burkina Faso to maintain profitability and avoid failure. The population was appropriate and an ideal source of data to answer the overarching research.

Kandola et al. (2014) posited that probability samples commonly associated with quantitative research studies and the use thereof decrease the likelihood of selection bias

and minimize the potential for skewed results. I used random sampling in the study to ensure that each member of the population had an equal likelihood of selection and to minimize the likelihood of selection bias. In quantitative studies, determining the correct sample size is vital for interpreting the correlation strength among variables (Field, 2013). I used G*Power, a statistical software package, to conduct an a priori sample size analysis (Faul, Erdfelder, Buchner & Lang, 2009). A power analysis, using G*Power 3.1.9 software, was conducted to determine the appropriate sample size for the study. An a priori power analysis, assuming a medium effect size ($f = .15$),$\alpha = .05$, indicates a minimum sample size of 234 participants required to achieve a power of .80. Increasing the sample size to 595 will increase power to .99. I planned to include between 234 and 595 participants in the study (see Figure 1). The use of a medium effect size ($f = .15$) was appropriate for the study.

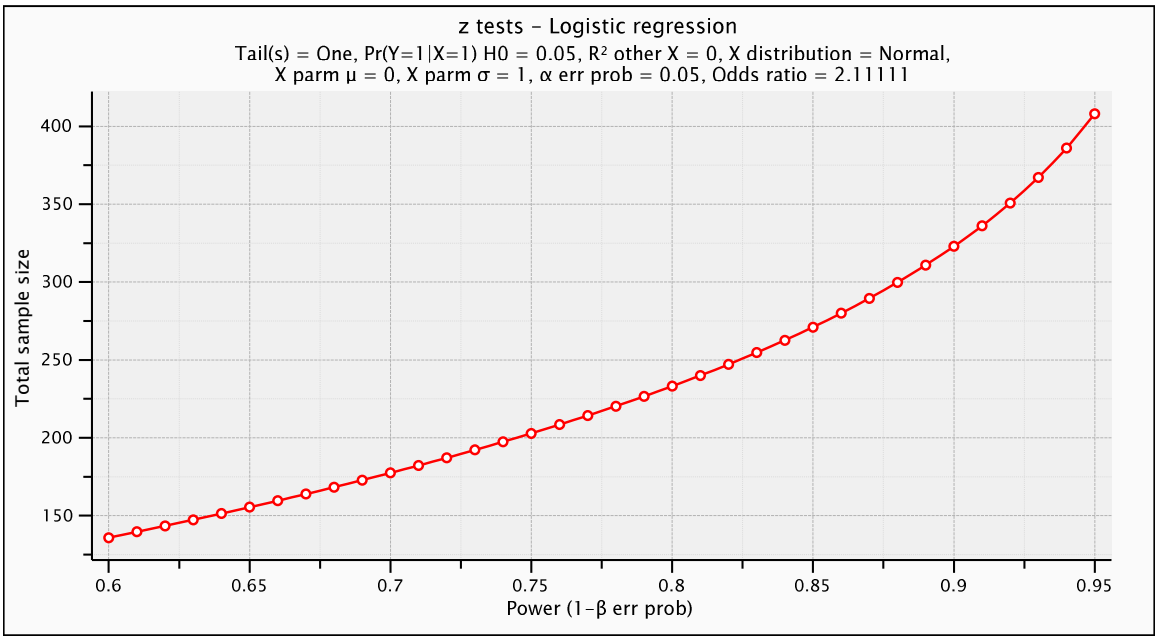

Figure 1. Power as a function of sample size.

Ethical Research

Participants indicated voluntary consent by completing and returning the survey. Ethical research refers to voluntary participation, freedom to withdraw, protection of the vulnerable population, and respect of confidentiality (Whitley & Kite, 2013). The data collection occurred upon obtaining Walden University IRB approval number 06-28-17-0274015. I collected the raw data via Survey Monkey in a password-protected computer. The consent form included a specific clause regarding participants' right to withdraw at any time during the study. Burnr and Kho (2015) argued that for similar responses from different populations to yield comparable results, the participants in the studies must be capable of answering the questions on the instrument used to collect the data.

There was no signature requirement and no identifiers from the participants to ensure that the data collected were anonymous. A coding system within the study served to increase the protection of participants' confidential information and provided better protection for their privacy. No individual's or organization's name appeared within the study, which enables the respondents' data to remain anonymous.

I maintained the data collected in a password-protected account in SurveyMonkey. Considering the ethics requirements for conducting field research, raw data collected remain stored electronically on a password-protected computer (Wahyuni, 2012). All data are backed up in electronic devices and locked in a personal safe. Protecting all devices with a password and encrypting all data served to ensure the safety and confidentiality of the respondents' information. All data will remain secure for 5 years, after which I will destroy the electronic files.

Data Collection Instruments

I used a Lussier (1995) modified survey questionnaire (Appendix E) to assess the different factors influencing the performance of MSMEs in Burkina Faso. I used the website SurveyMonkey.com to collect the data for the quantitative study. The quantitative approach yields a better and more generalizable result and strengthens the research findings (Farrely, 2013).

Previous researchers using Lussier's (1995) instruments have found that the ability of the model to predict a specific business as either successful or failed varies from one study to another. The predictive results of the instrument's accuracy in previous comparable studies were: 70% in the United States (Lussier, 1995), 72% in Croatia (Lussier & Pfeifer, 2001), 63% in Chile (Lussier & Halabi, 2010), 85% in Israel (Marom & Lussier, 2014), and 88% in Pakistan (Hyder & Lussier, 2016). The Lussier (1995) instrument was appropriate to examine the factors that could enable MSMEs in Burkina Faso to maintain profitability and avoid failure. As noted earlier, researchers have long used Lussier's (1995) success-versus-failure model in the general population, as the model effectively captures a wide range of response variance. All data-collection instruments must reflect the study's purpose and specific aims and meet the needs of the study (Caccihione, 2013).

In e-mail correspondence (R. Lussier, personal communication, June 11, 2014), Lussier granted permission to use the survey instrument (see Appendices C D, E). In Lussier's (1995) initial survey, I changed the last variable minority to citizenship to address the demographics of Burkina Faso. The results on the accuracy of the instrument

in different studies serve as validation and reliability of the instrument. The reliability of the instrument resides in the fact that many authors have tested and retested the variables of the model. For example, Studies in the United States (Lussier, 1995), Croatia (Lussier& Pfeifer, 2001), and Chile (Lussier & Halabi, 2010) applied the success versus-failure prediction model.

The prevalence of the S/F model in the literature and its use both in the United States and abroad justify the structural validity of the instrument in this research. The model employs 15 independent variables: (a) start-up capital, (b) record keeping and financial control, (c) business owner's industry experience, (d) business owner's management experience, (e) planning, (f) professional advisors, (g) owner's education, (h) staffing and employees turnover, (i) product and service timing, (j) economic timing, (k) owner's age, (l) partners, (m) parent's business ownership status, (n) owner's citizenship status, and (o) marketing.

Along with the 15 independent variables, there was the dependent variable, which was profitability, with two levels, profitable and not profitable. I changed the minority variable to citizenship from Lussier's initial model because the minority is not relevant in Burkina Faso. I collected data for the model in the first section and demographic information in the second. I used the demographic information to calculate simple descriptive statistics. In the study, profitability measurement was a two-step process resulting in nominal dichotomous measures.

Entrepreneurs who registered with the business online directories in Ouagadougou received an e-mail invitation to the survey and those from PRODIA;

access the web link survey via a kiosk. In the survey, I determined the degree of success assessed on a scale of 1 to 7. Any response from 1 to 4 denoted poor performance (not profitable) whereas a response of 6 to 7 indicated a strong performance (profitable). A response of 5 indicated neither failure nor success. The responses from the recipients helped predict the factors affecting failure and success (Appendix A).

Data Collection Technique

The purpose of the quantitative study was to examine the factors identified by Lussier (1995) that could enable MSMEs in Burkina Faso to maintain profitability and avoid failure. I used SurveyMonkey, a web-based data collection tool, to administer the survey for the study electronically. Cacchione (2013) noted that attention to detail and flow of a data-collection instrument improves the reliability and validity of the results. One advantage of using an online survey is that the participants can access the web survey anywhere and anytime with multiple devices, which gives respondents an opportunity to respond rapidly (Callegaro, 2013). Online surveys are becoming the standard of survey research (Zhang & Zhang, 2015). Online surveys have several benefits, including ease of use, rapid deployment, low cost, and quick response time (Zhang & Zhang, 2015). The disadvantages of a self-administered survey include lower response rates, the risk of lost data, problems of question order, and fear or distrust of technology (Bryman, 2012). I used a web link through Survey Monkey to collect the responses from the owners of MSMEs in Burkina Faso. Cacchione (2013) observed that careful attention to detail and flow of a data collection instrument enhances the reliability and validity of the results.

Data Analysis

The purpose of the study was to examine the factors that could enable MSMEs in Burkina Faso to maintain profitability and avoid failure. The research question for the study was as follow: What is the relationship between the business ownership characteristics, resources and professional management, timing, and profitability?

The null and alternative hypotheses were as follows:

Null Hypothesis (H_0): There is no relationship between the business ownership characteristics of, resources, professional management, timing, and profitability.

Alternative Hypothesis (H_1): There is a relationship between the business ownership characteristics of, resources, professional management, timing, and profitability.

Upon data collection completion, I imported data into an excel spreadsheet and check for missing or invalid data. The data cleaning processes involved checking for any missing or invalid information in the dataset and taking appropriate actions. The first step toward analyzing the data included checking of various assumptions required of logistic regression. The assumptions I tested for the logistic regression model were the independence of cases/errors, linear relationship between the continuous independent variables and the logit transformation of the dependent variable, multicollinearity, and outliers or influential points, and the model fit (Laerd, 2013). Warton, Wright and Wang (2012) noted that data assumptions should always test the distribution of variables and the assumption of the linear relationship between variables. The abnormal distribution of variables or outliers can distort the actual value of the mean (Hannigan & Lynch, 2013).

After checking the various assumptions, I performed the descriptive statistical analysis. The use of logistic regression helped to examine the relationship between the factors representing the independent variables and the degree of success in the central region of Burkina Faso, represented by the dependent variable. Logistic regression was appropriate for predicting the likelihood of belonging to one category or another of a nominal dependent variable, in this case, success or failure. Logistic regression is a statistical technique for classification based on logistic function (Ngo et al., 2015). Lussier (1995) also used logistic regression to test the model that he developed. In the study, I used the Statistical Package for Social Sciences (SPSS) for the statistical analysis and tested different hypotheses. Lussier (1995), Cooper, Gascon and Woo.(1991,), Reynolds and Miller (1989), and Reynolds (1987) used logistic regression to test models based on nominal dependent variables. Scherr (1989) found logistic regression to be more robust than discriminant analysis for predicting success versus failure. As a replication of the Lussier study, the full (all 15 variables) and reduced models (only the four significant variables in the United States and Croatia) developed by Lussier and presented earlier, were tested on the Chilean sample using logistic regression.

Study Validity

Validity concerns measurements and is the extent to which a set of measures accurately assesses the purported objects of measurement (Podsakoff, Podsakoff, MacKenzie, & Klinger, 2013). In quantitative research, validity refers to the legitimacy of the research findings (Venkatesh et al., 2013). Validity has two dimensions: internal or external validity. Validity threats to internal validity include (a) history, (b) maturation,

(c) testing, (d) instrumentation, (e) statistical regression, (f) mortality, (g) selection, (h) experimental treatment diffusion, (i) compensatory rivalry, (j) statistical conclusion validity, and (k) resentful demoralization (Rovai, Baker & Ponton, 2013). Because I did not examine any causal relationship in the study, the only internal validity threat was the selection factor. Furthermore, Becker (2013) stated that internal validity might not be relevant for correlation studies.

Internal validity is the extent to which the researcher controls extraneous variables (Cor, 2016). Hudson and Llosa (2015) defined internal validity as the approximate truth about inferences regarding causal relationships. Venkatesh et al. (2013) stated that internal validity is only relevant in experimental and quasi-experimental studies that try to establish a causal relationship. In the study, I aimed to examine the relationship between variables and did not attempt to establish a causal relationship. I used a nonexperimental design, and threats to internal validity are not applicable. Using statistical conclusion validity, researchers examine potential research errors in conducting data analysis and interpreting results (Field, 2013). In the absence of internal validity concerns, a researcher must be aware of statistical conclusion validity threats (Cor, 2016).

Statistical conclusion validity is the ability to make accurate assessments of the strength of the relationship between the independent and dependent variables are reasonable (Hudson & Llosa, 2015). Threats to statistical conclusion validity may include low statistical power, low reliability of measures, and a random heterogeneity of cases (Cor, 2016). Columb and Atkinson (2016) stated that statistical conclusion validity concerns the appropriate use of statistics to arrive at accurate decisions about accepting or

rejecting hypotheses. Threats to statistical conclusion validity may include low statistical power, low reliability of measures, and a random heterogeneity of cases (Cor, 2016). For the study, I explored (a) reliability of the instrument, (b) data assumptions, and (c) sample size.

Instrumentation reliability refers to the quality and consistency of the instrument. Burns and Kho (2015) mentioned that instruments must be both valid and reliable. The reliability of the survey instrument exists because many authors have tested and retested variables of the model. Researchers in the United States (Lussier, 1995), Croatia (Lussier & Pfeifer, 2001), and Chile (Lussier & Halabi, 2010) used the S/F prediction model. Previous researchers validated the reliability and validity of the survey instrument. Lussier and Halabi (2010) predicted the success or failure of small businesses over 96% of the time. Teng, Bhatia, and Anwar (2011) noted that the Lussier model had an accuracy rate of over 85%. The studies referenced above provide support for the validity and reliability of the factors in Lussier's prediction model. Using a proven survey instrument and random sampling provides mitigation to internal validity threats (Bryman, 2012). The data collection instrument was consistent with instruments used in certain previous studies in study's area of interest. I mitigated external validity threats by using a random sampling model, which ensures that the sample for a study is a true representation of the population. Previous studies validated the Lussier (1995) instrument; there was no need to test the instrument's internal and external measurement validity through a pilot study before data collection.

Warton et al. (2012) noted that data assumptions should always test the distribution of variables and the assumption of the linear relationship between variables. The abnormal distribution of variables or outliers can distort the actual value of the mean (Hannigan & Lynch, 2013). The outliers' identification occurs by using various visual inspection methods such as histograms, the frequency of distributions, or the conversion of data into z-scores (Hannigan & Lynch, 2013). I tested for outliers. Rosner, Cook, Daniels, and Falkner (2013) defined linearity the assumption that the relationship between the independent and the dependent variable is linear. I ran a correlation analysis to assess the degree of multicollinearity among the 15 independent variables using the variance inflation factor (VIF) and found no violation of the assumption of multicollinearity. Sample error can have a negative impact on the validity of a study, and a strategy to alleviate external validity threats is to obtain an adequate sample that is representative of the target population (McKenzie & Woodruff., 2014). If the sample does not represent the target population adequately, a selection bias will be the major threat to external validity (Toebe et al., 2015). The population and time, and place validities show the extent to which the findings apply to different circumstances and settings (Burns & Kho, 2015).

Means of mitigating potential issues with conclusion validity include using a statistical power of .80 or greater, using constructs with good reliability coefficients (.70 or greater), and implementation of standardized study factors (Field, 2013). To address this potential threat, I used G*Power 3.1 to determine the appropriate sample size at a power of .80, alpha of .05, with two probabilities. The measurement revealed that the

minimum required sample size is 234 for logistic regression and was large enough to generalize the results to a larger population. A study must have validity to ensure confidence in the results and for extrapolation of the results to other small business populations (Bryman, 2012). Sampling techniques allow researchers to extend the sample conclusions to the general population (Columb & Atkinson, 2016). I used the scientific method for the research; the result may be generalized and extrapolated to other small business communities outside Ouagadougou.

Threats to validity in a quantitative study include criterion and content validity (Field, 2013). Criterion validity aims to verify an instrument's measurement, and content validity involves the validating and the reliability of the instrument (Field, 2013). Content validity and construct validity are fundamental prerequisites for assuring both reliable and valid research findings (Trumpp, Endrikat, & Zopf, 2015). Content validity refers to the degree to which an instrument measure represents a relevant domain of content (Burns & Kho, 2015). Construct validity refers to the correspondence between the measure of a construct and the actual construct (Burns & Kho, 2015). If a researcher utilizes nonvalidated instruments, the resulting validity of the findings and conclusions of the study may not be valid. Scholars have provided reviews of the construct, content, and criterion-related validity of the Lussier (1995) instrument.

I used the Lussier (1995) success versus failure instrument validated in prior studies, and as such, this threat was not relevant to the current study. In previous studies, the model test results (p = .000) to support Lussier (1995) model to predict success and failure were In the United States (p = .001) and Chile (p = .004). However, the model was

not significant in the Lussier and Pfeifer (2001) Croatian study. Thus, the model has predictive validity. The instrument was found to be significant in the Middle East (Israel), South America (Chile), and North America (United States). The use of the Lussier model reliably predicted a group of businesses as failed or successful more accurately than random guessing in all three countries over 99% of the time. The content validity of the research instruments was essential for the study (Woodman, 2014), and the judgment of experts in the field of a research study can influence content validity (Woodman, 2014). Sampling errors can have a negative impact on the validity of a study, and mitigation of potential sampling errors in research studies includes having a larger sample (Burns & Kho, 2015).

Transition and Summary

In Section 2, I presented and discussed the research method and design approaches. I also described my role as the researcher, the population, the sampling technique, the data-collection methods, the instrument, and the design analysis to ensure the reliability and validity of the results. In Section 3, I outlined the findings of the study, described the applications to professional practice, and examined the implications for social change. I also provided a discussion of the recommendations for action and recommendations for further research and summarized the study and discuss the conclusions.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of the quantitative correlation study was to examine the relationship between business ownership characteristics, resources and professional management, timing, and profitability. The independent variables were (a) business ownership characteristics (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status), (b) resources and professional management (startup capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover, and marketing), and (c) timing (product and service timing and economic timing). The dependent variable was profitability, with two levels, profitable and not profitable. The null hypothesis (H_0) was that there was no relationship between the business ownership characteristics, resources and professional management, timing, and profitability. The alternative hypothesis (H_1) was that there was a relationship between the business ownership characteristics, resources and professional management, timing, and profitability. I received a total of 248 surveys and rejected 10 for incompleteness and retained 238 for the study. The results of the logistic regression indicated that 14 out of 15 independent variables indicated a unique statistically significant contribution to the model at $p < 0.05$. Only the variable level of marketing did not significantly predict the level of profitability.

Presentation of the Findings

In this subsection, I discuss and present the testing of the assumption for logistic regression, present the descriptive and inferential statistics, provide a theoretical interpretation of the findings, and conclude with a summary addressing the research question. I performed logistic regression to evaluate the likelihood of success or failure among MSMEs in Burkina Faso. Logistic regression was appropriate for predicting the likelihood of belonging to one category or another of a nominal dependent variable, in this case, success or failure.

Tests of Assumptions

The purpose of the logistic regression was to evaluate the likelihood of success or failure among MSMEs in Burkina Faso. Logistic regression analysis does not require linearity or normally distributed data (Tabachnick & Fidell, 2013). Homogeneity of variance, or homoscedasticity, refers to the residuals at each level having the same variance (Tabachnick & Fidell, 2013). Before performing the analysis, I examined the data to ensure that assumptions were satisfied for logistic regression. The assumptions associated with logistic regression are (a) independence of cases, (b) linear relationship between the continuous independent variables, (c) multicollinearity, (d) significant outliers or influential points, and (e) the model fit (Laerd, 2013). The assumptions were addressed and met.

Independence of cases. I assured case independence by having randomly selected MSMEs enterprises that received a loan from a microfinance institution in Burkina Faso to participate in the study. I defined each as profitable MSMEs and not

profitable MSMEs; profitable enterprises with profit above industry average and not profitable MSMEs with profit below the industry average.

A linear relationship. For the logistic regression model, there are some methods to test for linearity of the relationship between the continuous independent variables and the logit of the dependent variable (Laerd, 2013). I used the Box-Tidwell method, which adds a new interaction term for each continuous variable. I utilized SPSS to transform the current values of the independent variables to the natural log transformations. I then performed logistic regression. The statistical conclusion from the logistic regression analysis was that there was a linear relationship between the independent variables and the logit transformation of the dependent variable.

Multicollinearity. I conducted a test in SPSS version 21.0 regarding the severity of multicollinearity. I tested the problem of multicollinearity by obtaining statistics such as tolerance and the VIF of the coefficients as one would for linear regression (Tabachnick & Fidell, 2013). Grouping the variables into different redefined categories or dimensions gives the researcher the ability to work with a smaller number of independent variables at a time while performing analysis on them with much less chance of running into multicollinearity (Lussier, 1995). I grouped and redefined the independent variables, and then checked for collinearity, one group at a time: (a) business ownership characteristics (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status), (b) resources and professional management (startup capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional

advisors, staffing and employee turnover, and marketing), and (c) timing (product and service timing and economic timing).

I employed the test to determine whether the linear relationship of the independent variables to one another was too close for data analysis. The result of the test (Tables 2, 3, 4) revealed a VIF of 1.058, 1.053, 1.008, 1.025 and 1.005 respectively for variables (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status). No violation of the assumption of multicollinearity exists when the VIF is less than 10 (Liu et al., 2016; Yu, Zhou, Wang, & Xi, 2013). The VIFs for the different groups were less than 10, indicating no major violation of multicollinearity. Values of VIF that exceed 10 are often regarded as indicating multicollinearity. A Condition Index of 30 to 100 is indicative of moderate to strong collinearities. The higher the condition indexes, the more severe the multicollinearity problem. A tolerance < 0.1 would indicate a collinearity assumption violation as would any VIF > 10. None of the outputs indicated a firm violation of collinearity.

Table 2

Multicollinearity of Business Ownership Characteristics Variables

			Tolerance	VIF
(Constant)	1.971	.050		
Age of owner	5.479	.000	.945	1.058
Education	.595	.553	.949	1.053
Partners	.867	.387	.992	1.008
Parents	-.077	.939	.976	1.025
Citizenship	.256	.799	.995	1.005

Note. $N = 238$ Tolerance > .2, VIF < 10, CI <30; No indication of collinearity.

The collinearity test for the business ownership characteristics variables (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status) revealed Tolerance > .2, VIF < 10, CI < 30. There is a firm indication of collinearity for the variables under the business ownership characteristics (Table 2). None of the outputs indicated that there was a violation of collinearity.

Table 3

Multicollinearity of Resources and Professional Management Variables

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
Capital	.309	3.237
Record keeping and financial control	.984	1.016
Industry experience	.970	1.031
Management experience	.841	1.188
Planning	.278	3.597
Professional advice	.298	3.356
Staffing	.550	1.820
Marketing	.417	2.396

Note. $N = 238$ Tolerance > .2, VIF < 10, CI < 30 on these variables; No indication of collinearity.

The collinearity test for resources and professional management (start-up capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover, and marketing) revealed a VIF respectively of 3.237, 1.016, 1.031, 1.188, 3.597, 3.356, 1.820 and 2.396. The results displayed a Tolerance > .2, VIF < 10, CI < 30. There is no firm indication of collinearity for the variables under resources and professional management (Table 3).

Table 4

Multicollinearity of Timing Variables

Model		Collinearity Statistics	
		Tolerance	VIF
1	Economic timing	.999	1.001
	Product/ Service timing	.999	1.001

Note. $N = 238$ Tolerance > .2, VIF < 10, CI < 30 on both variables; No indication of collinearity.

The collinearity test for timing (product and service timing and economic timing) revealed a VIF respectively of 1.001 for both variables. The results displayed a Tolerance > .2, VIF < 10, CI < 30. There is no firm indication of collinearity for the variables under timing (Table 4). None of the outputs indicated that there was a violation of collinearity.

Significant outliers. An outlier represents an observation that diverges markedly from other observations in the sample (Williams, 2015). When computing the residual statistics and outliers using SPSS, I ran a linear regression with a confidence interval of 95% with case wide diagnostic defining outliers as exceeding three standard deviations (SD). Results revealed a range of standard residuals from -1.68 to 1.69. Results of the SPSS analysis revealed that there were no values outside of + or -3 SD. I did not produce a case wise plot because no outliers were found (Table 5).

Table 5

Significant Outliners Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted value	.33	1.45	.87	.171	238
Residual	-1.022	.434	.000	.285	238
Std. predicted value	-3.174	3.358	.000	1.000	238
Std. Residual	-3.470	1.473	.000	.968	238

Note. $N = 238$

Model fit. One way for examining the model's fit is through the Hosmer and Lemeshow's goodness-of-fit test (Allison, 2014). Goodness-of-fit tests produce a *p*-value. If the *p*-value is low (.05), then the model passes the test. I analyzed the data using SPSS version 21. I used a binary logistic regression test and selected the Hosmer and Lemeshow Test option. After running the goodness-of-fit test, the model was correctly specified because the significance value was .625, which is greater than .05 (Table 6).

Table 6

Hosmer and Lemeshow's Goodness-of-Fit for Test

Step	Chi-square	df	Sig.
1	6.203	8	.625

Note. $N = 238$

Descriptive Statistics

I analyzed data using SPSS Version 21 and exported them from Excel Spreadsheet directly into SPSS. After cleaning the data set by removing several extraneous variables, such as response ID, survey start day and time, and so forth, I recorded missing data and assigned a value of "999." This value was identified for all

variables as a discrete missing value to exclude any cases with 999 from any analysis completed. In total, I received 248 surveys and eliminated 10 records due to missing data, resulting in 238 records for the analysis.

Capital. According to Lussier (1995), businesses that start with inadequate capital have a greater chance of failure than firms that start with an adequate capital. Seventy-six percent of the participants had started their venture with adequate capital and 24%of them with less than adequate capital. Based on the 238 responses received, 182 participants commenced the business with adequate capital (Table 7).

Table 7

Capital

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Much more than needed	39	16.4	16.4	16.4
	Much more than needed	84	35.3	35.3	51.7
	About Right	38	16.0	16.0	67.6
	About right	21	8.8	8.8	76.5
	Less than needed	53	22.3	22.3	98.7
	Much less than needed	3	1.3	1.3	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Recordkeeping and financial control. From the study, 92% of the participants started businesses with insufficient or poor record-keeping and financial control. The descriptive statistics revealed that based on the 238 participants, 220 began the business without proper record keeping and financial control (Table 8). According to Lussier

(1995), businesses that do not keep adequate financial controls have a greater chance of failure than those that keep an adequate degree of record-keeping and financial controls.

Table 8

Table Record Keeping

	Frequency	Percent	Valid Percent	Cumulative Percent
Inadequate	69	29.0	29.0	29.0
Inadequate	71	29.8	29.8	58.8
Very Poor	53	22.3	22.3	81.1
Very poor	27	11.3	11.3	92.4
Adequate	9	3.8	3.8	96.2
Adequate	4	1.7	1.7	97.9
Very good	5	2.1	2.1	100.0
Total	238	100.0	100.0	

Note. $N = 238$

Industry experience. The descriptive statistics revealed that on average, the business owners had 4 years of industry experience before starting or managing their ventures (Table 9). Lussier (1995) argued that businesses managed by people without prior industry experience have a greater chance of failure than those managed by people with prior industry experience. The results of the study showed that the youngest participant had 1 year of industry experience while the oldest had 13 years of industry experience.

Table 9

Industry Experience

	N	Minimum	Maximum	Mean	Std. Deviation
Industry experience	238	1.00	13.00	4.3193	2.34001
Valid N (listwise)	238				

Note. *N* = 238

Management experience. Lussier (1995) commented that businesses managed by people without prior management experience have a greater chance of failure than firms managed by people with prior management experience. The descriptive statistics revealed that the business owners had on average more than 3 years of management experience before starting or running the firm. (Table 10). The results also revealed the business owner with the greatest management experience had 10 years of such experience.

Table 10

Management Experience

	N	Minimum	Maximum	Mean	Std. Deviation
Management experience	238	1.00	10.00	3.4412	1.52984
Valid N (listwise)	238				

Note. *N* = 238

Planning. Lussier (1995) contented those businesses that do not develop specific business plans have a greater chance of failure than firms that do. Of the 238 participants, 236 had a specific business plan. The descriptive analysis frequencies revealed that 99% of the business owners had a specific business plan when they first started the firm. (Table 11).

Professional advisors. Businesses that do not use professional advisors have a greater chance of failure than firms that do use professional advisors according to Lussier (1995). The descriptive analysis frequencies revealed that 95% of the businesses made good use of professional advisors, for example, bankers, attorneys, and accountants when first starting the firm. (Table 12). Microfinance institutions usually assign an advisor to a borrower, which could account for the high percentage.

Table 11

Planning

	Frequency	Percent	Valid Percent	Cumulative Percent
Very specific	46	19.3	19.3	19.3
Very specific	80	33.6	33.6	52.9
Very specific	51	21.4	21.4	74.4
Specific	35	14.7	14.7	89.1
General planning	17	7.1	7.1	96.2
General planning	7	2.9	2.9	99.2
No plans	2	.8	.8	100.0
Total	238	100.0	100.0	

Note. $N = 238$

Table 12

Professional Advisors

	Frequency	Percent	Valid Percent	Cumulative Percent
Great use of professional advisors	53	22.3	22.3	22.3
Great use of professional advisors	78	32.8	32.8	55.0
Great use of professional advisors	47	19.7	19.7	74.8
Use of professional advisors	36	15.1	15.1	89.9
Use of professional advisors	13	5.5	5.5	95.4
No use of professional advisor	9	3.8	3.8	99.2
No use of professional advisor	2	.8	.8	100.0
Total	238	100.0	100.0	

Note. $N = 238$

Education. People without any college education who start a business have a greater chance of failing than people with one or more years of college education (Lussier, 1995). In the survey questionnaire, I used four different levels to access the extent of education of the business owners, and the majority of the responses came from people with at least a high school degree. Of the 238 participants, 177 had at minimum a high school degree or equivalent. The descriptive analysis frequencies revealed that 75% of the participants had a least a high school degree (Table 13).

Table 13

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	At least Primary school	61	25.7	25.7	25.7
	High school	106	44.5	44.5	70.2
	Bachelor degree	47	19.7	19.7	89.9
	Masters	24	10.1	10.1	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Staffing. Per Lussier (1995), businesses that cannot attract and retain quality employees have a greater chance of failure than firms that can. Out of the 238 participants, 231 did not have difficulty recruiting and maintaining employees. The descriptive analysis frequencies showed that 97% of the participants had a greater than average degree of difficulty recruiting and maintaining quality employees, while only 3% had below average difficulty (Table 14).

Table 14

Staffing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely difficult	35	14.7	14.7	14.7
	Extremely difficult	94	39.5	39.5	54.2
	Extremely difficult	62	26.1	26.1	80.3
	Difficult	27	11.3	11.3	91.6
	difficult	13	5.5	5.5	97.1
	Not at all difficult	4	1.7	1.7	98.7
	Not at all difficult	3	1.3	1.3	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Product/service timing. Businesses that select products/services that are too new or too old have a greater chance of failure than firms that select products/services that are in the growth stage, according to Lussier (1995). The descriptive analysis frequencies revealed that 53% of the participants started their ventures during the introduction stage. Only 37% of the respondents started their firm during the growth phase of their products and or services. The respondents who started their venture at the mature or declining phase represented 10% of the total (Table 15).

Table 15

Product/ Service Timing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Introduction	50	21.0	21.0	21.0
	Introduction	79	33.2	33.2	54.2
	Growth	64	26.9	26.9	81.1
	Growth	25	10.5	10.5	91.6
	Maturation	16	6.7	6.7	98.3
	Maturation	4	1.7	1.7	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Economic timing. Lussier (1995) revealed that businesses that start during a recession face a have a higher chance of failure than those that start during expansion periods. The descriptive analysis frequencies revealed that 81% of the respondents started their venture during a recession and 19% during an expansion period of the economy. The result of the descriptive statistics revealed that of the 238 participants, 195 started during a recession (Table 16).

Table 16

Economic Timing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Recession	38	16.0	16.0	16.0
	Recession	93	39.1	39.1	55.0
	Recession	64	26.9	26.9	81.9
	Stable	27	11.3	11.3	93.3
	Stable	13	5.5	5.5	98.7
	Expansion	3	1.3	1.3	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Age. Lussier (1995) maintained that younger people who start a business have a greater chance of failing than older people starting a business. The statistical results indicated that on average, the business owners started their ventures at the age of 30. The oldest business owners started the venture at the age of 53 (Table 17).

Table 17

Age of Owner

	N	Minimum	Maximum	Mean	Std. Deviation
Age of owner	238	19.00	53.00	30.6345	5.77759
Valid N (listwise)	238				

Note. $N = 238$

Partners. Enterprises started by one person have a greater chance of failure than enterprise started by more than one person, according to Lussier (1995). The results indicated that 94% of the participants had only one owner and 6% have more than one owners. Based on the 238 participants, 225 had only one owner (Table 18).

Table 18

Partners

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	One owner	225	94.5	94.5	94.5
	More than one owner	13	5.5	5.5	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Parents. Lussier (1995) argued that business owners whose parents did not own a business have a greater chance of failure than owners whose parents did own a business. The results indicated that 36% of the participants had parents who owned a business and 64% did not have a parent who owned a business. Among the 238 participants, 152 did not have a parent who owned a business (Table 19).

Table 19

Parents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	152	63.9	63.9	63.9
	Yes	86	36.1	36.1	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Citizenship. The majority of the sample answered that they were citizens of Burkina Faso, accounting for 95% of the 238 respondents. Other nationalities or citizenships formed the remaining 5% (Table 20). Lussier (1995) put forth the argument that minorities have a greater chance of failure than nonminority. In Burkina Faso,

"minority" is not relevant, so I changed the variable to the business owner's citizenship status.

Table 20

Citizenship

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Citizen of Burkina Faso	225	94.5	94.5	94.5
	Not a citizen of Burkina Faso	13	5.5	5.5	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Marketing. Lussier argued that business owners without marketing skills have a greater chance of failure than owners with marketing skills. The results of the descriptive analysis frequencies revealed that 64% of the owner had below average marketing skills before starting the firm, while 36% had above average marketing skills. Of the 238 participants, 152 had a low marking skill (Table 21).

Table 21

Marketing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low skill	34	14.3	14.3	14.3
	Low skill	118	49.6	49.6	63.9
	skill	60	25.2	25.2	89.1
	Advance skill	13	5.5	5.5	94.5
	Advance skill	7	2.9	2.9	97.5
	Advance skill	6	2.5	2.5	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Descriptive statistics of the dependent variable. The answer to the question in the questionnaire on the level of business profits enabled me to classify the sample into profitable and not profitable businesses. I classified businesses as profitable if they made a profit above the industry average in the previous 3 years. I classified businesses as nonprofitable, on the other hand, if they did not make a profit in the last 3 years. The dependent variable of this study was the level of profitability. The descriptive analysis frequencies revealed that 87% of the participants had profits at the industry average while only 13% had profit below industry average or not profitable (Table 22).

Table 22

Level of Profit

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not profitable	30	12.6	12.6	12.6
	Profitable	208	87.4	87.4	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Descriptive statistics of the demographic variables. In addition to the dependent and independent variables, the data also included demographic questions. The descriptive analysis frequencies of the demographic variables, by industry or primary sector of activities, revealed that 8% of the participants were in the agriculture business, 10% were in the livestock production business, 17% were in food and beverage, 26% in retail and wholesale, 10% in transportation, 5% in education, 10% in sewing and clothing, and 14% in telecommunications. The greatest percentage of the participants operates in the retail and wholesale businesses.

Table 23

Industry or Primary Sector of Activities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agriculture	20	8.4	8.4	8.4
	Livestock production	24	10.1	10.1	18.6
	Food and beverage	40	16.9	16.9	35.4
	Retail and Wholesale	62	26.2	26.2	61.6
	Transportation	23	9.7	9.7	71.3
	Education	32	13.5	13.5	84.8
	Sewing and clothing	13	5.5	5.5	90.3
	Telecommunication	23	9.7	9.7	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Number of years this firm has been conducting business. The descriptive analysis revealed that on average, the businesses have been in operation for over 5 years. The oldest business has been in operation for 14 years and the youngest for 3 years. This is consistent with the requirement to participate in the study was for businesses in operation for at least 3 years.

Table 24

Number of Years This Firm Has Been Conducting Business

	N	Minimum	Maximum	Mean	Std. Deviation
Number of years this firm has been conducting business	238	3.00	14.00	5.2437	2.35451
Valid N (listwise)	238				

Number of locations. The results descriptive analysis frequencies revealed that 54% of the businesses had only one location while 23% had two locations. The results

also indicated that 46% of the participants had more than two locations (Table 25). This result is consistent as most of the business owners operate as sole proprietors.

Table 25

Number of Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Location	128	53.8	53.8	53.8
	2 Locations	54	22.7	22.7	76.5
	3 Locations	29	12.2	12.2	88.7
	4 Locations	10	4.2	4.2	92.9
	5 Locations	17	7.1	7.1	100.0
	Total	238	100.0	100.0	

Note. $N = 238$

Inferential Results

Logistic regression was used to examine the efficacy of (a) business ownership characteristics, (b) resources and professional management and (c) timing. The dependent variable was profitability, with two levels, profitable and not profitable. The null Hypothesis (H_0) was that the business ownership characteristics of resources, professional management, timing, would not significantly predict business profitability. The alternative hypothesis (H_1) was that the business ownership characteristics of resources, professional management, timing, would significantly predict business profitability. I conducted preliminary analyses to assess the assumptions of multicollinearity, outliers, normality, linearity, homoscedasticity, and independence of residuals; no serious violations were noted (see *Tests of Assumptions*). The full model containing all predictors was statistically significant, R^2 (15, $N = 238$) = 94.9, $p < .005$,

indicating that distinctions could be made between respondents who reported profits for the previous years (profitable) and those who had not made profits for the previous years (not profitable). The Lussier (1995) 15 variable model explained between 32.95 (Cox &Snell *R* square) and 61.9% (Nagelkerke *R* squared) of the variance of MSMEs performance, and correctly classified 93.3% of cases. The model was much better, however, at predicting business profitability (at 98%) than business not profitable (60%). As shown in Table 26, the results of the logistic regression revealed that 14 of the independent variables made a unique, statistically significant contribution to the model at $p < 0.05$(owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status, startup capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover, product and service timing and economic timing.

Hypothesis Testing

A binary logistic regression test was conducted to assess the likelihood of attitudes toward entrepreneurship, subjective norms, and perceived behavioral control predicting business success. Logistic regression is the statistical test applied when the research goal is to examine the likelihood of a set of independent variables predicting a dichotomous dependent variable (Streletzki & Schulte, 2013; Tabachnick & Fidell, 2013).

Capital. Alternative Hypothesis (H_1): There is a relationship between the amount of start up capital and profitability. The amount of startup capital is positively and

significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis indicated a statistically significant relationship between the amount of startup capital and profitability (B = -403, p = 0.377 p > 0.05; Table 26).

Record keeping and financial control. Alternative Hypothesis (H_1): There is a relationship between the level of record keeping and financial control and profitability. The level of record keeping and financial control is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis showed a statistically significant relationship between the level of record keeping and financial control and profitability (B = -806, p = 0.067 p > 0.05; Table 26).

The business owner's industry experience. Alternative Hypothesis (H_1): There is a relationship between the business owner industry experience, level of record keeping and profitability. The business owner industry experience is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logit regression analysis showed a statistically significant relationship between the business Owners' industry experience and profitability (B = -006, p = 0.578 p > 0.05; Table 26).

Management experience. Alternative Hypothesis (H_1): There is a relationship between the business owner management experience and profitability. The business owner management experience is positively and significantly associated with MSMEs profitability in Burkina Faso. The logistic regression analysis results revealed a statistically significant relationship between the business owner management experience and profitability (B = -394, p = 0.170 p > 0.05; Table 26).

Planning. Alternative Hypothesis (H_1): There is a relationship between planning and profitability. The business level of planning is positively and significantly associated with MSMEs profitability in Burkina Faso. The outcome of the logistic regression analysis suggested a statistically significant relationship between the business level of planning and profitability (B = .536, p = 0.254 p > 0.05; Table 26).

Professional advice. Alternative Hypothesis (H_1): There is a relationship between the amount of professional advice and profitability. The amount of professional advice is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis denoted a statistically meaningful relationship between the amount of professional advice and profitability (B = -759, p = 0.184 p > 0.05; Table 26).

Owner's education. Alternative Hypothesis (H_1): There is a relationship between the level of the owner's education and profitability. The business owner's level of education is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis indicated a statistically significant relationship between the business owner's level of education and profitability (B = -423, p = 0.157 p > 0.05; Table 26).

Staffing and employee turnover. Alternative Hypothesis (H_1): There is a relationship between the staffing and employee turnover and profitability. The business staffing and employee turnover is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logit regression analysis denoted a

statistically significant relationship between the staffing and employee turnover and profitability (B = -284, p = 0.344 p > 0.05; Table 26).

Product and service timing. Alternative Hypothesis (H_1): There is a relationship between the Product and service timing and profitability. The Product and service timing is positively and significantly associated with MSMEs profitability in Burkina Faso. The outcome of the logistic regression analysis indicated a statistically significant relationship between the product and service timing and profitability (B = .802, p = 0.068 p > 0.05; Table 26).

Economic timing. Alternative Hypothesis (H_1): There is a relationship between the economic timing and profitability. The economic timing is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis indicated a statistically significant relationship between the economic timing and profitability (B = .936, p = 0.165 p > 0.05; Table 26).

Owner's age. Alternative Hypothesis (H_1): There is a relationship between the business owner's age and profitability of the business. The business owner's age is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis showed a statistically significant relationship between the business owner's age and profitability (B = .141, p = 0.081 p > 0.05; Table 26).

Number of partners. Alternative Hypothesis (H_1): There is a relationship between the number of partners and profitability. The number of partners is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the

logistic regression analysis displayed a statistically significant relationship between the number of partners and profitability (B = -104, p = 0.901 p > 0.05; see Table 26).

Parental business ownership status. Alternative Hypothesis (H_1): There is a relationship between the parental business ownership status and profitability. The parental business ownership status is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis indicated a statistically significant relationship between the parental business ownership status and profitability (B = -104, p = 0.977 p > 0.05; Table 26).

Owner's citizenship status. Alternative Hypothesis (H_1): There is a relationship between the owner's citizenship status and profitability. The owner's citizenship status is positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis revealed a statistically significant relationship between an owner's citizenship status and profitability (B = -316, p = 0.829 p > 0.05; Table 26).

Marketing. Alternative Hypothesis (H_1): There is a relationship between the level of marketing skills and profitability. The level of marketing skills is not positively and significantly associated with MSMEs profitability in Burkina Faso. The result of the logistic regression analysis suggested that there is not a statistically significant relationship between the level of marketing skills and profitability (B = 2.33, p = 0.001 p < 0.05; Table 26).

Table 26

Logistic Regression Predicting Likelihood of Profitability

		B	S.E.	Wald	Df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Capt	-.403	.456	.781	1	.377	.668	.274	1.633
	Rkfc	-.806	.440	3.356	1	.067	.447	.189	1.058
	Inex	-.006	.011	.309	1	.578	.994	.973	1.016
	Maex	.394	.288	1.879	1	.170	1.483	.844	2.606
	Plan	.536	.470	1.299	1	.254	1.709	.680	4.293
	Prad	-.759	.572	1.763	1	.184	.468	.153	1.436
	Educ	-.423	.299	1.998	1	.157	.655	.364	1.178
	Staff	.284	.300	.896	1	.344	1.329	.738	2.394
	Psti	.803	.439	3.339	1	.068	2.232	.943	5.280
	Ecti	.936	.674	1.930	1	.165	2.550	.681	9.550
	Age	.141	.081	3.047	1	.081	1.152	.983	1.349
	Part	-104	.732	.020	1	.977	.901	.000	3.775
	Pent	.006	.059	.010	1	.920	1.006	.896	1.130
	Citi	-.316	1.467	.046	1	.829	.729	.041	12.930
	Mrkt	2.333	.696	11.237	1	.001	10.307	2.635	40.316
	Constant	-7.315	2.248	10.587	1	.001	.001		

Table 27

Prediction Table

Observed			Predicted		
			Identify your level of profits		
			Not profitable	Profitable	Percentage Correct
Step 1	Identify your level of profits	Not profitable	18	12	60.0
		Profitable	4	204	98.1
	Overall Percentage				93.3

Table 28

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	85.376[a]	.329	.619

Analysis summary. The purpose of this study was to examine the efficacy of business ownership characteristics, resources and professional management and timing in predicting profitability. I used logistic regression to examine the ability of business ownership characteristics, resources and professional management and timing to predicting the profitability of MSMEs in Burkina Faso. I assessed assumptions surrounding logistic regression with no serious violations noted. The high R^2 (15, N = 238) = 94.9, $p < .005$ ($p = 0.000$) supported the validity of Lussier (1995) model in predicting profitability. The results of the logistic regression support the model's ability to predict success or failure of MSMEs in Burkina Faso. The conclusion from this analysis is that age owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status, startup capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover, product and service timing and economic timing are significantly associated with MSMEs.

Theoretical conversation on findings. I used the RBT for the study as the theoretical framework. The theory helped to understand the role of resources in new businesses by focusing on the identification and acquisition of resources. The central

concept in RBT is that businesses can improve profitability through effective management of (a) resources, (b) capabilities, (c) competencies, (d) skills, (e) factors, and (f) assets (Bridoux, 2004; Campbell & Park, 2016). Lussier (1995) identified 15 S/F factors that are critical to driving profitability. The regression result that the owner's age, education, number of partners, parental business ownership status, citizenship status, startup capital, record keeping and financial control, industry experience, management experience, planning, professional advisors, staffing and employee turnover, product, service and economic timing are significant predictors of a firm's profitability is in line with the propositions of the RBT. Business owners can improve their firm's level of profitability by proper allocation of key resources (Westerman, 2015). I used the RBT to help explain the role of resources in new and existing businesses by focusing on the identification and acquisition of resources. The study revealed the key resources within the Lussier (1995) prediction model that can help a firm avoid failure. RBT was relevant to the study as it provided an important framework for explaining and predicting the basis of a firm's competitive advantage and performance (Barney, 1991). In line with the extant literature and the RBT framework, Schirmer (2013) posited that building a partnership offers an efficient and effective way to mobilize resources and gain complementary capabilities. Business partnerships also provide an advantage by splitting the risks and rewards among other persons and entities.

An important linkage between this study, the resource-based theoretical framework, and existing literature is the use of different factors to achieve profitability. Among the business demographics, the business owner's education is a key factor in the

success of an established business (Ipate & Pârvu, 2014). This is consistent with the finding of the study that revealed that 14 out of 15 of Lussier's S/F factors helped to predict a firm's profitability. Karadag (2015) confirmed that entrepreneurship and small business represent a growing discipline, and small-business failure is frequently due to poor financial management and is consistent with the findings of the study. Karadag's (2015) study results were also in line with Lussier's (1995) study, which revealed that record keeping and financial control are critical factors for entrepreneurship success. The logistic regression also revealed that record keeping and financial control contribute to business profitability. The study revealed the level of marketing skill does not significantly predict a firm's profitability. In contrast to the results of the study on the level of marketing skill, Eid and El-Gohary (2013) argued that the use of marketing as a resource has a positive influence on the performance of small and medium enterprises. Penrose (1959) contributed to the RBT and argued that a firm is a collection of productive resources and is this is consistent with the findings of the current study that resources such as the owner's age, education, number of partners, parental business ownership status, citizenship status, startup capital, record keeping and financial control, industry experience, management experience, planning, professional advisors, staffing and employee turnover, product, service and economic timing are significant predictors of a firm's profitability.Lussier used the RBT as entrepreneurs make judgments about which resources are more important, based on the expectations about the future of the venture (Lichtenstein & Brush, 2001). Lussier and Halabi's (2010) model also included the RBT along with variables that may affect the success or failure of small businesses.

Combinations of organizational resources that improve production processes may become capabilities or activities that the firm does especially well (Amit & Shoemaker, 1993; Barney, 1991). The resources and capabilities of a firm can be important factors of sustainable competitive advantage and superior performance if the firm possesses certain special characteristics (Barney,1991; Conner, 1991; Wernerfelt, 1984). Consistent with the RBT, the results of the study indicated there was a positive relationship between 14 of Lussier's (1995) factors that are necessary to predict a firm's profitability.

Application to Professional Practice

The purpose of the quantitative correlation study was to examine the relationship between the business ownership characteristics of resources, professional management, timing, and profitability of MSMEs in Burkina Faso. The findings of this study, which showed that owner's age, education, number of partners, parental business ownership status, citizenship status, startup capital, record keeping and financial control, industry experience, management experience, planning, professional advisors, staffing and employee turnover, product, service and economic timing significantly predict MSMEs' profitability in Burkina Faso.Struggling new and existing businesses owners may benefit from the different strategies established in the study and use these as models for their small firms to adapt and capitalize on the factors predicting profitability. The results of the present study may be important for practitioners examining the interplay of factors that contribute to MSMEs' performance to increase the chance of success and the avoidance of failure. Lussier's (1995) factors used in the present research could assist business owners and managers in understanding the nature and importance of each factor,

the source of the factors and how each factor influences business performance in Burkina Faso. Expanding knowledge in this area may influence existing and new entrepreneurs to focus on factors that may help to overcome barriers to business growth and increase entrepreneurs' chances of success. The study might serve as a foundation for promoting MSMEs and microfinance in Burkina Faso. In professional practice, MSME leaders may gain practical insights from the findings of this study about how to identify, evaluate, and manage their organizational assets. The results of this research may help business owners identify knowledge and expertise gaps needed by the organization to maintain sustainability in the long run. This research has confirmed a model that enables MSME owners/managers to identify the factors that may assist them to increase their chance of success. The research, consequently, may help MSMEs owners become more aware of the factors that may increase their opportunity to be successful. The study findings might help existing microfinance institutions capitalize on improving the success of MSMEs receiving microloans.

Implications for Social Change

Small-business enterprises are a crucial part of the global economy and a driver of economic growth. The implications for positive social change include the potential to reduce entrepreneurship failure, increase employment opportunities, improve standards of living, and increase economic growth. New or existing businesses could benefit from the findings of the study in increased entrepreneurship success and job creation due to greater awareness of effective business success-and-failure models. Microfinance institutions could leverage the study's results to promote entrepreneurship success in Burkina Faso.

Decreases in the number of business failures can positively affect local economies, communities, and the global economy. Therefore, reducing the failure rates of MSMEs in Burkina Faso may provide a strong incentive to new microfinance institutions to enter the market. Sustainability of MSMEs may increase the number of successful entrepreneurs who can provide regular meals for their families and send their children to school, which may lead to an increase in educational attainment. Using the findings of the study, owners of MSMEs could introduce effective growth strategies to create more jobs and reduce unemployment in Burkina Faso. Policymakers in Burkina Faso could use the results of the study as a baseline for creating policies to promote entrepreneurship, reduce business failure rate, increase new job creation, and boost national economic growth. Bulevska (2014) noted that economic growth is a concern of any economic system.

Recommendations for Action

The information provided in this study may contribute to the long-term survival of MSMEs in Burkina Faso. The findings of the study revealed that Lussier's (1995) success-versus-failure model is reliable and helps to predict a business's performance. Business owners need to understand the factors that influence their success: (a) business ownership characteristics (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status), (b) resources and professional management (startup capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover, and marketing), and (c) timing (product and service timing and economic timing) in Burkina Faso.

As aligned with the study's theoretical framework, I identified three recommended steps for action from the study. First, new and existing business owners in Burkina Faso may use the model as a baseline to implement strategies that can lead to success. Second, prospective new business owners may review the information in the study and integrate the factors identified in their business start-up planning. Third, as the level of marketing skill did not significantly predict profitability, business owners in Burkina Faso can leverage the use technology to better market their product. I intend to publish this study in ProQuest and take advantage of opportunities to share findings with owners and managers, colleges and universities, and forums where business leaders discuss strategies for business survival in Burkina Faso and elsewhere. Furthermore, the ministry of commerce of Burkina Faso, the chamber of commerce, online business directories, microfinance institutions, the House of Enterprise, the central bank and business research centers in the country should use the results of this research as a resource to assist small companies.

I also plan to share the results of this study with PRODIA, the study participants from the online business directories, and the House of Enterprise in Burkina Faso. I will publish the results of this study for a broader audience. The goal is to provide new knowledge to the business and academic communities about the factors that may help predict profitability.

Recommendations for Further Research

The purpose of the quantitative correlation study was to examine the relationship between the business ownership characteristics of resources, professional management,

timing, and profitability in Burkina Faso. The study was limited to MSMEs established with loans from a microfinance institution in Ouagadougou, the capital of Burkina Faso, and the results may not be generalizable to MSMEs beyond the targeted geographic area. Therefore, to generalize the findings, future researchers can expand to different geographic locations such as different cities or villages in Burkina Faso. This research was in the capital city Ouagadougou; I recommend that further study on this topic involve a different geographical location. Moreover, a future researcher can look at MSMEs in general but not only limited to the ones that have taken a loan from a microfinance institution. In the current study, I limited the scope to the MSMEs in Burkina Faso. So, future researchers can choose to study the factors predicting profitability for large enterprises in Burkina Faso. I used a quantitative correlation study, and I recommend the use of other methodologies and designs for further research.

Reflections

My participation in the DBA Doctoral Study program has provided an enormous learning opportunity for me. I faced challenges that I was able to overcome to get to the level of understanding the factors that can lead to profitability in the business environment in Burkina Faso and can help small-business owners make sound decisions. In Africa, 75% of newly formed small businesses are unable to become sustainable (Fatoki & Garwe, 2010). This high failure rate indicates that sustainability represents a major challenge for startups. The findings of this study show that some factors inferred in the literature as small-business profitability determinants are also success-and-failure factors of businesses in Burkina Faso. It is therefore important that small-business

owners, microfinance institutions, and local government leaders are adequately educated to develop policies to best position entrepreneurs to succeed. Prior to conducting this research, I had no previous knowledge of the study topic. I did my best to approach the research process impartially and exclusively trusted the data to address the responses to the research question. The participants provided sufficient data that led to the findings of the study. The study helped me gain substantial knowledge of the factors leading to small-business profitability, and I developed an interest in becoming an entrepreneur and establishing a small business to create jobs in Burkina Faso. I can now with assurance go out and share my study findings with current and future business owners and stand behind my recommendations to help small businesses become sustainable.

Conclusion

The purpose of the quantitative correlation study was to examine the relationship between the business ownership characteristics of resources, professional management, timing, and profitability in Burkina Faso. MSMEs play a critical role in economic growth and wage employment in both developed and developing economies, yet major obstacles remain in unlocking the potential of these businesses (Deluca et al., 2014). Small-business owners will benefit from this study through the additional data added to existing studies. Also, policymakers in Burkina Faso may use the results of the study as a baseline for creating policies to promote entrepreneurship, reduce business failure rate, increase new job creation, and boost the national economy.

The strategies outlined in the research will allow entrepreneurs to absorb as much information as possible to help make informed decisions. The key components that

emerged for the sustainability of small businesses in Burkina Faso include a focus on (a) business ownership characteristics (owner's age, owner's education, number of partners, parental business ownership status, and owner's citizenship status), (b) resources and professional management (start-up capital, record keeping and financial control, business owner industry experience, business owner management experience, planning, professional advisors, staffing and employee turnover), and (c) timing (product and service timing and economic timing). Now armed with more information about successful business strategies, MSME owners in Burkina Faso might be better able to contribute to the local economy and create a groundswell of new jobs.

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Appendix A: Interview/Survey Questions

Microfinance Recipients' Survey: Please answer the following questions related to you and your business to the best of your knowledge. Please make sure to complete the entire survey.

Lussier Questionnaire on Successful and Failing Businesses Model (Modified)

Data for the model

Capital: This business was started with what amount of operating capital?

More than needed – About right – Less than needed

1 2 3 4 5 6 7

Record keeping and financial control: This business started with what degree of record-keeping and financial control?

Inadequate – Very Poor Adequate – Very Good

1 2 3 4 5 6 7

Industry experience: Years of industry experience the owner/CEO had before running this firm.

_____ Years

Management experience: Years of management experience the owner/CEO had before running this business.

_____ Years

Planning**:** What type of start-up plan the firm developed?

Very Specific – Specific – General – No Plans

1 2 3 4 5 6 7

Professional advice: As a start-up firm, what amount of professional advice (Microfinance institution, accountants, lawyers, bankers, etc.) did your business use?

Great use of Advisors – Advisors not used

1 2 3 4 5 6 7

Education**:** The owner/CEO's education level completed before managing this firm.

0 At least Primary Education
1 High School
2 Bachelor Degree
3 Master Degree
4 Doctorate

Staffing**:** What level of difficulties did this firm have recruiting and retaining quality employees as a start-up business?

Much difficulty – Some – Little difficulty

1 2 3 4 5 6 7

Product/ Service timing: In what stage were your products/services when the firm was started?

Introduction – Growth – Mature – Decline

1 2 3 4 5 6 7

Economic timing: In what stage was the economy when the firm was started?

Recession – Stable – Expansion

1 2 3 4 5 6 7

Age of owner: Age of the owner/CEO when first managing the firm.

_____ Years

Partners: The firm was started by:

1 Owner –2 More than one owner

Parents**:** Did the owner's parents own their own business?

1 Yes 2 No

Citizenship: The owner:

1 Citizen of Burkina Faso – 2 Not a citizen

Marketing: The owner's level of marketing skills before starting this firm was:

Low/Unskilled High/skilled

1 2 3 4 5 6 7

Demographic data questions

Number of location that the business currently has:

1 One location 2 Two locations 3 Three locations

4 Four locations 5 Five and more locations

Number of years this firm has been conducting business.

_____ Years

An average number of full-time workers in last three years. Two or more part-time employees can equal one full-time worker._____

Industry or primary sector of activities

1- Agriculture 2- Livestock production 3- Food and beverage

4 -Retail and wholesale 5- Transportation 6-Telecommunication

7 -Education 8- Sewing and Clothing

Question regarding the degree of success or failure

Identify your level of profits (choose most appropriate).

1 Very much above industry average profits

2 Much above industry average profits

3 About industry average profit

4 At least industry average profitable last three years

5 At least industry average profitable last two years

6 At least industry average profitable in last year

7 Less than industry average

8 Currently not making a profit

Appendix B: Sample Size Calculator

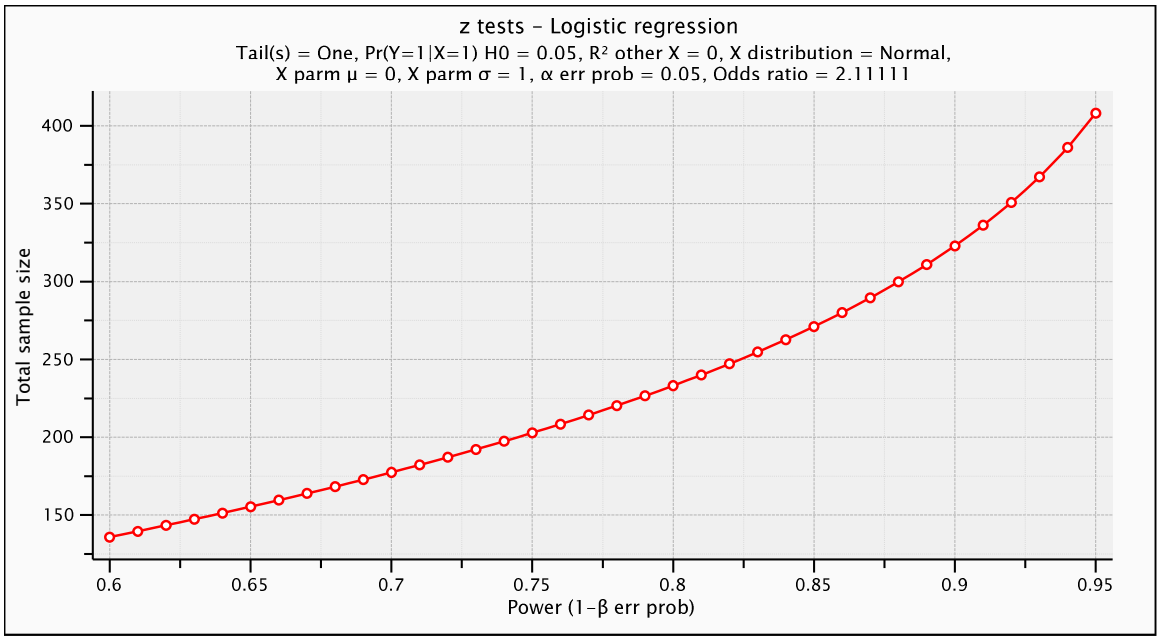
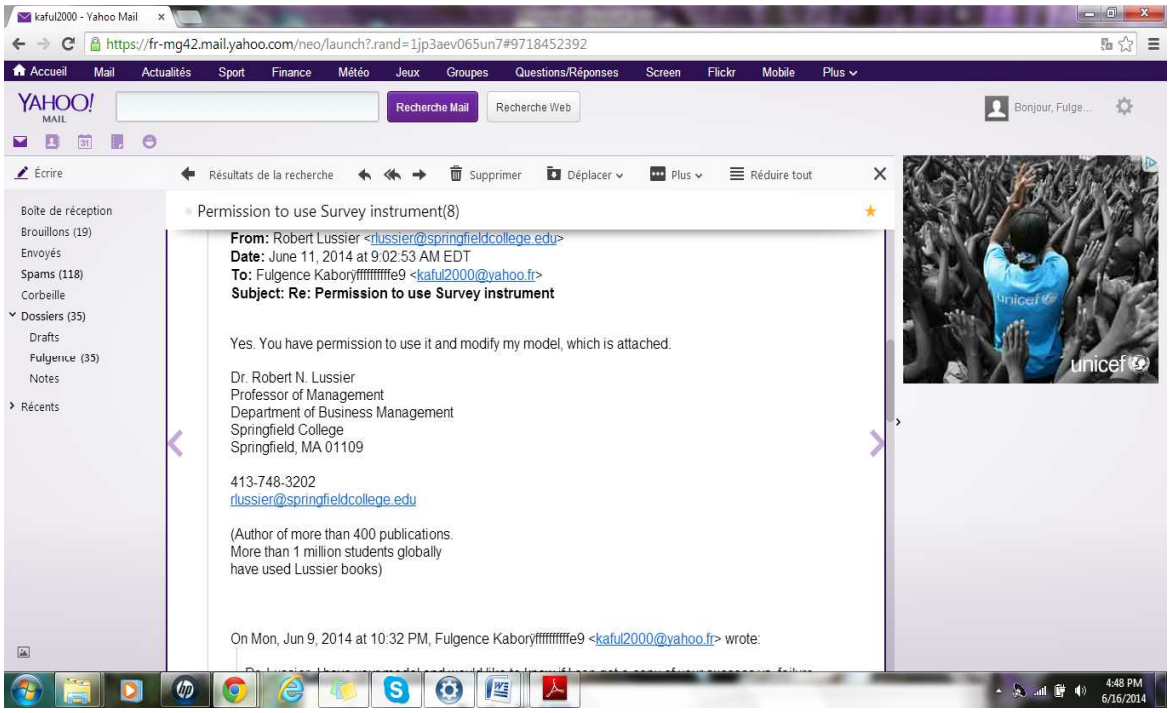
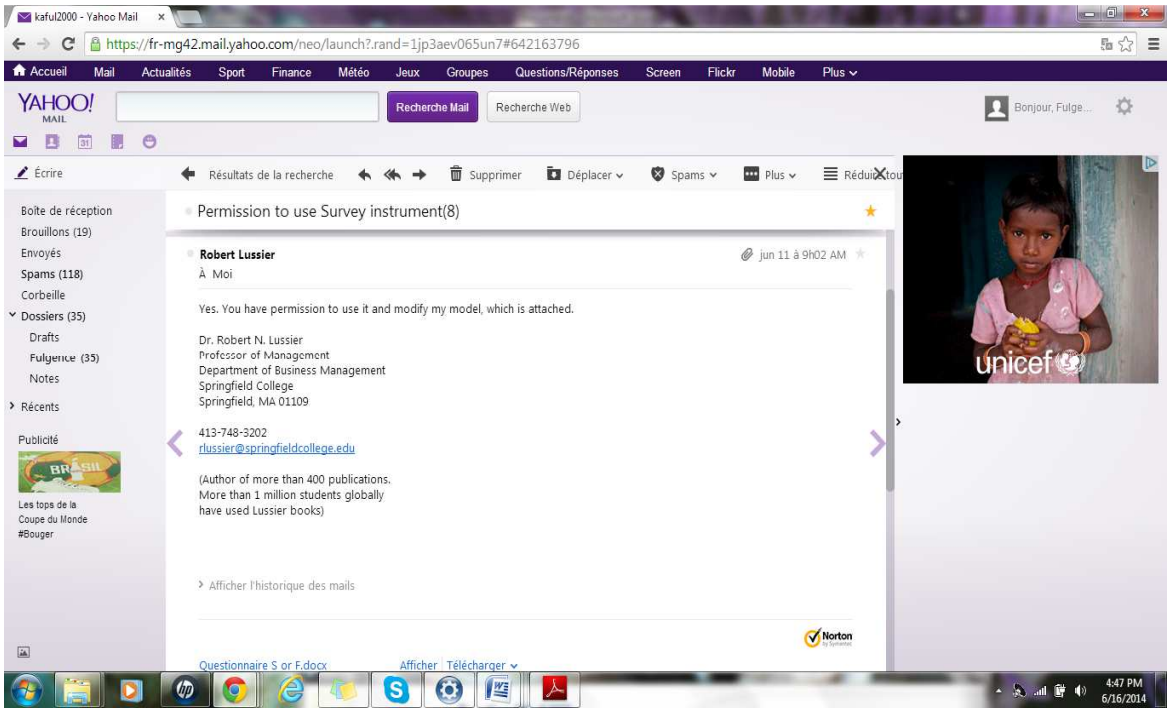


Figure 1. Power as a function of sample size.

Appendix C: Permission to Use Lussier's (1995) Success Versus Failure Model



Appendix D: Permission to Use Lussier's (1995) Survey Instrument



Appendix E: Lussier's (1995) Success Versus Failure Variables for Questionnaire (Modified)

VariablesMeasurement

Capital7-point scale; 1= Much less than needed; 7= More than that needed

Record keeping7-point scale; 1= Very poor; 7= very good
And financial control

Industry experience----Years

Management experience---Years

Planning7-point scale;1= No plan ; 7= very specific plan

Professional advisors 7-point scale; 1= No use of professional advisors; 7= great use of professional advisor

Education 1 High School
2 Bachelor Degree
3 Master Degree
4 Doctorate

Staffing7-point scale; 1= Not at all difficult; 7= Extremely difficult

Product Timing Nominal/categorical 0= Introduction; 1= Growth; 2= Maturation; 3= Decline
Economic timing Nominal/categorical 0= Recession; 1= Stable; 2= expansion
Age------Years
PartnersNominal/categorical 0=1 owner; 1= more than 1 owner
ParentsNominal/ Categorical 0= No; 1= Yes
CitizenshipNominal/ Categorical 0= Non-citizen ; 1= Citizen
Marketing7-point scale;1= Low/Unskilled; 7= High/ Advance Skill

Note: This is a modified list of variable from Lussier (1995) model

Lussier (1995) Explanation of Success versus Failure Variables (Modified)

Capital (capt). Businesses that start undercapitalized have a greater chance of than firms that start with an inadequate capital.

Record keeping and financial control (rkfc). Businesses that do not keep updated and accurate records and do not use adequate financial controls have a greater chance of failure than firms that do.

Industry Experience (inex). Businesses managed by people without prior industry experience have a greater chance of failure than firms managed by people with prior industry experience.

Management Experience (maex). Businesses managed by people without prior management experience have a greater chance of failure than firms that are managed by people with prior management experience.

Planning (plan). Businesses that do not develop specific business plans have a greater chance of failure than firms that do.

Professional Advisors (prad). Businesses that do not use professional advisors have a greater chance of failure than firms using professional advisors. A more recent source of professional advisors is venture capitalism.

Education (educ). People without any college education who start a business have a greater chance of failing than people with one or more years of college education.

Staffing (staff). Businesses that cannot attract and retain quality employees have a greater chance of failure than firms that can.

Product/Service Timing (psti). Businesses that select products/services that are too new or too old have a greater chance of failure than firms that select products/services that are in the growth stage.

Economic Timing (ecti). Businesses that start during a recession have a greater chance to fail than firms that start during expansion periods.

Age (age). Younger people who start a business have a greater chance to fail than older people starting a business.

Partners (part). A business started by one person has a greater chance of failure than a firm started by more than one person.

Parents (pent). Business owners whose parents did not own a business have a greater chance of failure than owners whose parents did own a business.

Citizenship (Citi). Non-citizens of Burkina Faso have a greater chance of failure than citizens.

Marketing (mrkt). Business owners without marketing skills have a greater chance of failure than owners with marketing skills.