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Relationship Between a Company's Owner Demographics, Socioeconomic Conditions, and Entrepreneurial Funding

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
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Walden University
2025

Abstract

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MS, Walden University, 2017

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Portfolio Submitted in Partial Fulfillment

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Abstract

Entrepreneurial funding remains a persistent challenge for U.S. business owners, particularly as firms navigate demographic shifts and post-COVID-19 pandemic economic conditions. This challenge is important to entrepreneurs, investors, and lenders who rely on access to capital to support business development and economic growth. Grounded in Hersey and Blanchard's situational leadership theory, the purpose of this quantitative, ex post facto study was to examine the relationship between gender of owner, age of firm, effect of COVID-19, and entrepreneurial funding. Data were collected from 309 U.S. employer firms drawn from a national small business credit survey. A binomial logistic regression analysis was conducted to examine whether the predictors significantly contributed to the likelihood of receiving funding. The overall model was statistically significant, $\chi^2(4) = 72.81$, $p < .001$, and accounted for 33.7% of the variance in funding outcomes. The age of the firm emerged as a significant predictor of funding, $p < .001$, whereas the gender of the owner and the effect of COVID-19 were not significant predictors, $p > .05$. A key recommendation is that entrepreneurs and investors consider firm longevity as a predictor when developing funding strategies. The implications for positive social change include the potential for entrepreneurs, lenders, and investors to use evidence-based insights to strengthen funding practices, enhance equitable access to capital, and support sustainable business growth that improves the availability of goods and services to consumers.

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Dedication

I would like to dedicate this achievement, the Doctoral Degree in Business Administration, to my granddaughters, Joy Maria Arrington and Journey Faith Arrington. May you always trust in God and never give up on the pursuit of your own dreams.

Acknowledgments

I would like to acknowledge my Doctoral Committee, Dr. Charlie Shao, Chairperson and Dr. Cheryl Waters, Second Committee Member. It has been an honor working with you.

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Section 1: Background and Content

Despite an increase in total entrepreneurial activity in the United States from 2019 to 2020, one third of U.S. entrepreneurs who considered opening businesses decided not to for fear of business failure and lack of adequate funding (Global Entrepreneurship Monitor, 2020). For many entrepreneurs, the ability to secure funding is complicated. The challenges are often not due to a lack of innovative thinking or uniqueness of business concepts but rather the lack of money or financing that is needed for business startup or expansion. Research has shown that traditional lending institutions, such as banks, are more likely to lend money to established businesses with proven profitability than to entrepreneurs seeking funding for business startups (Brown et al., 2020). This is where private lenders and crowd funding platforms, like Go Fund Me and Kickstarter, step in to fill the void, providing entrepreneurs with critical dollars for business startup or expansion.

Historical Background

The challenge for entrepreneurs is to broaden their knowledge of traditional and nontraditional funding sources to identify new and more innovative ways to attract investors. In this research study, I examined certain factors in the entrepreneurial business environment, including owner demographics and socioeconomic conditions, to determine if there is a relationship between these factors and funding challenges. While there is a plethora of scholarly research on entrepreneurship, there is a dearth of research that explores the relationship between business owners' demographics, socioeconomic conditions in the business environment, and inadequate funding. I conducted the current study to expand the body of knowledge about this phenomenon.

In existing entrepreneurship literature, researchers have identified several factors that can help or hinder the funding of entrepreneurial ventures. Internal factors such as the age of the firm and the gender and experience level of the entrepreneur, as well as external factors such as socioeconomic conditions and gender bias can be a help or hindrance depending on the business environment (Global Entrepreneurship Monitor, 2021). Chinta et al. (2016) found that owner demographics play a significant role in determining funding options for entrepreneurs. An entrepreneur's gender, experience level, ethnicity, personal wealth, and business location have all been noted in entrepreneurship research as factors that investors consider when deciding if they will finance a business venture.

Chinta et al. (2016) found that independent wealth can sometimes be a predictor of funding opportunities with wealthy entrepreneurs often securing investors more easily than those who are not independently wealthy. Researchers have also noted that female entrepreneurs face more financing challenges and endure closer scrutiny of their creditworthiness than their male counterparts (Zhang et al., 2020). However, Bewaji et al. (2015) stated that funding decisions are more often driven by a company's profitability than by the owner's gender or other personal characteristics. Some researchers have insisted that the business owner's years of experience as an owner and operator of a successful business or number of years in an industry are more important demographics that lead investors to fund entrepreneurial ventures (Berger & Kuckertz, 2016; Galpin & Bell, 2010).

The effects of the socioeconomic conditions in a company's external environment on funding have also been under academic scrutiny. Researchers have found that in general financial investments in small- to medium-sized enterprises (SMEs) decreased during the COVID-19 pandemic (Fed Small Business, 2023). The Global Entrepreneurship Monitor (2021) has noted that most entrepreneurial companies in the United States are SMEs. The Small Business Credit Survey (SBCS) has documented the impact of the COVID-19 pandemic on SMEs across the United States with many still struggling years later. It was clear that funding for these businesses decreased from 2019 to 2021, with small businesses, businesses owned by African American, Hispanic and other people of color, and businesses in the leisure and hospitality industries taking the biggest hit (Fed Small Business, 2023). The SBCS showed that the number of firms receiving all the financial assistance they sought went from 3,602 (51%) in 2019 to 31% (2,339) in 2021 (Fed Small Business, 2023).

Organizational Context

In this section, I provide details about the entrepreneurial businesses that I examined in this study. The purpose of the study was to determine whether the gender of the owner, age of firm, or a socioeconomic condition such as the COVID-19 pandemic can affect funding options for entrepreneurs. According to the Global Entrepreneurship Monitor (2021), most entrepreneurial businesses in the U.S. are SMEs that operate in a variety of industries, including manufacturing, health care, education, retail, and insurance. Some of these same industries such as manufacturing, healthcare, education, and retail, are among those represented in the 2021 Small Business Credit Survey Report data set with demographic and financial data used for this study (Fed Small Business, 2023). Among the other industries represented in the SBCS data set are nonmanufacturing goods production and associated services, leisure and hospitality, professional services and real estate, and business support and consumer services (Fed Small Business, 2023.

The small businesses listed in the SBCS data set are defined as having 499 employees or less (Fed Small Business, 2023). This differs from the U.S. Small Business Administration (2020), which defined SMEs as having 249 employees or less. This difference is significant because the SBCS definition expands the number of entrepreneurial firms that can be included. The U.S. Small Business Administration has noted that most entrepreneurial firms in the United States are small businesses. The SBCS data set, which is compiled annually by 12 banks of the Federal Reserve System, also provides demographic data, such as gender of the owner and age of the firm (Fed Small Business, 2023). The survey offers statistical data about the socioeconomic conditions in the business environment that could hinder the startup or sustainability of these companies such as current bank lending practices, owners' ability to access loans or lines of credit when needed, or the impact of a public health crisis like the COVID-19 Pandemic (Fed Small Business, 2023). The SBCS began reporting data on the pandemic in the third and fourth quarters of 2019.

Problem Statement

Across the United States, entrepreneurial companies are a mainstay in many communities with entrepreneurs being responsible for the employment of 120 million people in 2017, earning approximately $33 million in revenues, according to the U.S. Census Bureau (2017). Despite being proven stimulators of economic growth and development, many of these SMEs with 249 employees or less do not enjoy the same financing opportunities that large companies enjoy, securing 8% fewer bank loans from 2019 to 2020 than large companies (U.S. Small Business Administration, 2020). Despite the financial challenges they face, many aspiring entrepreneurs will start their businesses with less than the desired amount of capital and other resources (Zhang et al., 2020).

The business problem that I examined was that some entrepreneurs and investors in SMEs do not understand the relationship between entrepreneurs' gender, age of firm, socio-economic conditions, and entrepreneurial funding. While entrepreneurship has consistently raised the educational levels and living standards of many in the United States and worldwide, funding challenges persist for entrepreneurs, particularly for female and social entrepreneurs (Global Entrepreneurship Monitor, 2021).

In addition, reports have shown that socioeconomic turmoil such as economic recession and the business closings and work disruptions caused by the COVID-19 Pandemic may exacerbate funding challenges that already existed for many entrepreneurs, (Organization for Economic Cooperation & Development, 2022). The SBCS showed that nearly 70% of small businesses surveyed experienced a large negative effect from the COVID-19 pandemic and nearly 90% of small businesses experienced a moderate negative effect (Fed Small Business, 2023). Escamilla-Fajardo et al. (2020) found that lenders in the United States decreased investments in entrepreneurial companies during the pandemic and many struggling entrepreneurs chose not to start or expand businesses. Still, some industries such as the food and package delivery industries experienced growth during the pandemic, finding new and innovative ways to serve consumers (Escamilla-Fajardo et al., 2020). The SBCS data set provides demographic and financial data on entrepreneurial firms, but it has not been examined to explore the probability of a relationship existing between entrepreneurs' gender, age of firm, effects of the COVID-19 pandemic, and entrepreneurial funding. After an exhaustive review of empirical literature on entrepreneurship, I found none that focused on this problem.

Purpose Statement

The purpose of this quantitative ex-post facto study was to examine the relationship between entrepreneurs' gender, age of firm, socio-economic condition, and entrepreneurial funding. Although several socioeconomic conditions can influence business operations, in this research study I explored the influence of the COVID-19 pandemic. The independent/predictor variables were entrepreneurs' gender, age of firm, and socioeconomic condition. The dependent/criterion variable was entrepreneurial funding. The target population in the study was U.S. entrepreneurs, investors, and consumers with a focus on the funding challenges faced by SMEs and entrepreneurial businesses across the United States. Implications for social change include more opportunities for business ownership for Americans, easier access to private and governmental lenders for aspiring entrepreneurs, and an increase in goods and services for consumers.

Target Audience

The target audience for this study included U.S. entrepreneurs, investors, and consumers, the primary stakeholders who stand to benefit from its findings. With 72% of entrepreneurs expecting to create new jobs within the next 5 years and 87% expecting to employ workers other than themselves, the funding of entrepreneurial businesses will be critical to the economic growth and development of many communities and regions across the United States (Global Entrepreneurship Monitor, 2019). Additionally, policymakers in the United States and worldwide who set the legal and institutional guidelines for the governance and financing of SMEs and entrepreneurial businesses should also find the results of this study useful.

Female entrepreneurs, social entrepreneurs, African American and Hispanic entrepreneurs and others from underrepresented communities should find the results especially useful since they often face more challenges securing financing than other entrepreneurs. Bonini et al. (2019) found that females, African American and Hispanic entrepreneurs and entrepreneurs from other marginalized communities were funded at much lower rates than male entrepreneurs with women often receiving lower valuations for their businesses. Because of this bias, female entrepreneurs more often than male entrepreneurs have less capital to start businesses, making sustainability and expansion more difficult (Zhang et al., 2020). This phenomenon presents new topics for entrepreneurship research as does the economic impact of entrepreneurship in African

American and Hispanic communities and among other marginalized groups.

Research Question

RQ: What is the relationship between entrepreneurs' gender, age of firm, socioeconomic conditions, and entrepreneurial funding?

H_0: There is no statistically significant relationship between entrepreneurs' gender, age of firm, socioeconomic conditions, and entrepreneurial funding? H_1: There is a statistically significant relationship between entrepreneurs' gender, age of firm, socioeconomic conditions, and entrepreneurial funding?

Definition of Terms

For the sake of clarity, this section includes the definition of important terms that are used throughout the study.

Entrepreneurial funding: The dependent variable in the study, having two categories (i.e., received funding or did not receive funding). Funding sources include bank loans (plus lines of credit) and private loans (including credit unions, online lenders, finance companies, and other unspecified lenders; Fed Small Business, 2023).

Experience level: To align with the headings in the SBCS data set that I used for statistical analysis, the owner's experience level was identified as the age of firm (see Fed Small Business, 2023). For example, if a company has been in operation for 6–10 years, then the entrepreneur has 6–10 years of experience as a business owner.

Owner demographics: The personal characteristics of a business owner are the owner's demographics that I investigated in this study. These demographics include the owner's gender and age of the firm. These are among the internal factors that can influence business performance that could affect lenders' decision to invest or not invest in a business (Chinta et al., 2016).

Socioeconomic condition: The COVID-19 pandemic is one socioeconomic condition that has been shown to influence business performance in entrepreneurial companies (Global Entrepreneurship Monitor, 2021). The SBCS data set categorizes statistical data on the effect of COVID-19 on entrepreneurial companies as: (a) large negative effect, (b) moderate negative effect, and (c) little to no effect (Fed Small Business, 2023). Future research was needed to explore the relationship between entrepreneurial business performance and the ability to secure funding. This study contributes to that body of knowledge.

Significance of the Study

While many business leaders acknowledge the economic and social benefits of entrepreneurship, funding sources for entrepreneurial ventures are often difficult to identify and secure. It is important that entrepreneurs and potential investors understand the complexities of business startups and sustainability. In this study, I explored certain personal, societal, and business phenomena associated with entrepreneurship to determine if and how they affect funding. I used statistical data from the SBCS to search for these relationships. The SBCS provides statistical information on entrepreneurial companies across the United States, including demographic details about business owners and funding sources. Not only will these data be important for business research, but they are also useful for entrepreneurs deciding what type of businesses to start and where.

This study should provide entrepreneurs, potential investors, and other stakeholders with a better understanding of how entrepreneurship affects business and social environments in positive ways, demonstrating a need for viable funding sources for new and innovative businesses and for the sustainability of existing ones. Across the United States, entrepreneurship is a known driver of economic uplift. Holstein and Eschenfelder (2017) noted that many business, government, and community groups will sometimes unite to create community-based or regional entrepreneurial ecosystems that support entrepreneurs who want to open businesses to meet specific needs of the area. In Massachusetts, government and community investors established business incubators that provided financial support along with training to entrepreneurs (State News Service, 2014).

Investors often consider the personal profile of an entrepreneur important because the personal characteristics of business owners will often influence their management style. Berger and Kuckertz (2016) studied individual and group motivations for starting businesses, finding that many entrepreneurs were motivated by the needs of their community. Chipeta and Surujlal (2019) found, however, that entrepreneurs started businesses out of a desire to utilize their own skills, talents, and creativity. No matter the motivation, entrepreneurs continue to make notable contributions to local and state economies.

Contribution to Business Practice

Prior research has noted that communities thrive when entrepreneurial ecosystems are strong and business and social entities come together to encourage the risk-taking and creativity that is associated with entrepreneurship (Berger & Kuckertz, 2016). The current study contributes to the effective practice of business by helping business leaders see the financial and social benefits of entrepreneurial investments. This study also contributes to business practice by identifying for entrepreneurs and investors the cultural, socioeconomic, and personal factors that influence entrepreneurship. With a heightened awareness of these variables, entrepreneurs should be able to identify and avoid certain problems when establishing and operating businesses. Lenders should be able to use this information when making investment decisions.

Implications for Social Change

The findings of this study will create positive social change for entrepreneurs and investors across the United States. Since I provide insight into how entrepreneurs' personal demographics and factors in a company's external environment can combine to impact organizational performance, the results of this study should help lenders make more informed funding decisions. Because I explored the impact of entrepreneurial funding on contemporary trends, such as crowdsourcing, the findings should also shed new light on potential funding options for entrepreneurs. This would be especially helpful to entrepreneurs who are not likely to secure bank loans or other traditional financing due to limited financial resources, credit issues, or little experience as a business owner

(Belleflamme et al., 2015).

Theoretical/Conceptual Framework or Program Theory

Situational leadership was the theoretical framework for this study. The theory was introduced in 1969 by Paul Hersey and Kenneth H. Blanchard whose research focused primarily on the adaptation of leadership styles to match employee readiness levels (Gates, 1976). The constructs of situational leadership theory are (a) leadership style adjustment should match employee maturity levels, (b) employee readiness levels drive leadership style and oversight, and (c) organizational performance is influenced by leader/follower behaviors. Because the theory addresses the influence of external and internal factors on business outcomes, it was applicable to the current study that explored the relationship between entrepreneurs' gender, age of firm, socioeconomic conditions, and entrepreneurial funding.

The purpose of this quantitative, ex-post facto study was to examine the relationship between a company's owner demographics, socioeconomic conditions, and entrepreneurial funding. The owner demographics specified in the study were gender and age of firm, although I also addressed the influence that other demographics, such as experience level, age, race, and ethnicity, may have on entrepreneurial funding. The socioeconomic conditions specified in the study were investments in SMEs by banks and by private lenders. According to the Global Entrepreneurship Monitor (2019), most entrepreneurial companies in the United States are SMEs.

Specific Business Problem & Research Question

In this study, I also explored the relationship between socioeconomic conditions and entrepreneurial funding, specifically the COVID-19 pandemic and periods of recession. The specific business problem in this study was that some entrepreneurs and investors in SMEs do not understand the relationship between entrepreneurs' gender and age of firm, socioeconomic conditions, and entrepreneurial funding. The research question guiding the study was: What is the relationship between entrepreneurs' gender, age of firm, socioeconomic conditions, and entrepreneurial funding? My literature search strategy included Google searches of peer-reviewed, scholarly journals; ; government websites, and online databases accessible through the Walden University Library, including Google Scholar, ABI/INFORM Complete, Business Source Complete, Academic Search Complete, Education Resources Information Center, ProQuest, eBook Collection (EBSCOhost), Emerald Management Journal, Thoreau, and SAGE Premier.

Of the 106 sources included in the literature review, 89 are peer-reviewed articles from scholarly journals, eight are books, four are from government publications, one is from a university publication, and four are from electronic publications (see Table 1). About 80% of the sources cited were published within the past 5 years. One seminal work, which was published in 1976 by Paul E. Gates, provides the background on situational leadership theory. All of the sources cited in the study either related to the theoretical framework, situational leadership theory, or to the business problem.

Table 1

Summary of Sources for the Literature Review

Type of source	5 years +	2017	2018	2019	2021	2022	2023/4	Total
Peer reviewed	10	8	14	16	21	14	6	89
Books				2		6		8
Other sources		4			3		2	9
Total	10	12	14	18	24	20	8	106

The keywords and terms that I used to search a variety of databases included: *entrepreneurship and funding, entrepreneurship and the economy, entrepreneurship research, entrepreneurship theory, situational leadership theory and entrepreneurship, transformational leadership theory, entrepreneurship and human capital theory, entrepreneurship and the theory of planned behavior, Schumpeter's theory of innovation and entrepreneurship, entrepreneurship and recession, entrepreneurship and location, entrepreneurship and gender, entrepreneurship and innovation, entrepreneurship and COVID-19, SMEs and entrepreneurship, SMEs and entrepreneurial financing, entrepreneurship and owners' characteristics, female entrepreneurship, social entrepreneurship, corporate entrepreneurship, entrepreneurship and race, entrepreneurship and ethnicity, entrepreneurship and cultural norms, entrepreneurship and regional influences, entrepreneurship,* and *globalization*.

Representative Literature Review

This literature review begins with an introduction of situational leadership theory, which was the theoretical framework for the study. The section continues with an explanation of key constructs of the theory, application of the theory across different industries, evolution of the theory, and limitations of the theory. I then provide an examination of supporting and contrasting theories, along with future directions of the theory as well as an explanation of the independent variables and dependent variable in the study and how they relate to the theory constructs. I close the literature review with a discussion of secondary data analysis in academic and professional research across industries, a description of how secondary data analysis was used in this study, and an introduction to the SBCS data set that was used for data collection and analysis.

Situational Leadership Theory

Paul Hersey and Kenneth H. Blanchard introduced situational leadership theory in 1969 to emphasize how leadership styles and leader/follower behaviors affect individual task completion and general business performance (Gates, 1976). While the focus was on internal factors that influenced business performance, the theorists also acknowledged the influence of external factors. The key constructs underlying situational leadership theory are that: (a) the readiness level of employees drives managers' leadership style; (b) as employee readiness levels change, leaders adjust their task and relationship behaviors to match new employee readiness levels; and (c) that leader/follower behaviors determine organizational culture and influence general business performance (Cairns et al., 1998).

The leader/follower behaviors that Hersey and Blanchard studied continue to intrigue researchers as topics for business and scholarly research. Because the personal demographics of leaders and followers (such as their gender, experience level, age, or education) inform their workplace behaviors, these characteristics have become popular topics of research for scholars who want to know more about situational leadership theory.

First Construct: Leadership Style Adjustment

The first construct of Hersey and Blanchard's theory is that managers should adjust their leadership styles to match the readiness level of their employees. In a study of entrepreneurial companies, Arnold (2019) found that leadership styles that encouraged innovation, employee motivation, and opportunity identification lead to improved task completion and job satisfaction among employees and positive business performance. Once managers become familiar with the abilities of their employees, they should adjust their leadership style, accordingly, knowing when to provide close oversight and guidance and when to pull back. Wright (2017) applied situational leadership theory to explore a trend in entrepreneurial companies in which administrators designated project managers to ensure that organizational goals were achieved. The researchers concluded that the personal characteristics of managers, such as their experience level, skill set, and leadership style, influenced how they allocated financial and human resources which in turn affected general business performance. Dubois (2015) et al. noted that managers who demonstrated flexibility in their leadership styles built strong relationships with employees and improved the culture of their company.

The interplay of leader/follower behaviors and their impact on business performance cannot be understated. Wright (2017) stated that organizational culture is a cocreated reality that is shaped by the behaviors of managers and employees. Wright saw employee engagement as the key to effective management and managers' willingness to adapt leadership styles to match employee readiness levels not only affected employee motivation but also determined how well employees performed job tasks. In entrepreneurial companies, where managers are also owners of the business, Cassar (2012) found that managers' experience levels influenced their decision-making and influenced business performance.

Ventresca (2020) found that relationships between managers and employees improved as each became more knowledgeable about their respective jobs and that managers' skills and professional development affected the culture of the entire organization. A well-trained and experienced leader is aware of these dynamics and governs themself accordingly.

Second Construct: Employee Readiness

The second construct of situational leadership theory is that as employee readiness levels improve, leaders must adjust their task and relationship behaviors to match the needs of employees, specifically in terms of managerial oversight. Researchers have shown that a manager's ability to understand employee readiness levels and appropriately adapt their leadership styles can be connected to the managers' own professional skill set and their years of managerial experience. Ventresca (2020) suggested that these characteristics and managers' commitment to professional growth and development for themselves and their employees would determine organizational culture and influence business performance. Effective managers will monitor the development of employees closely enough to recognize when adjustments are needed, such as additional training or reassignment.

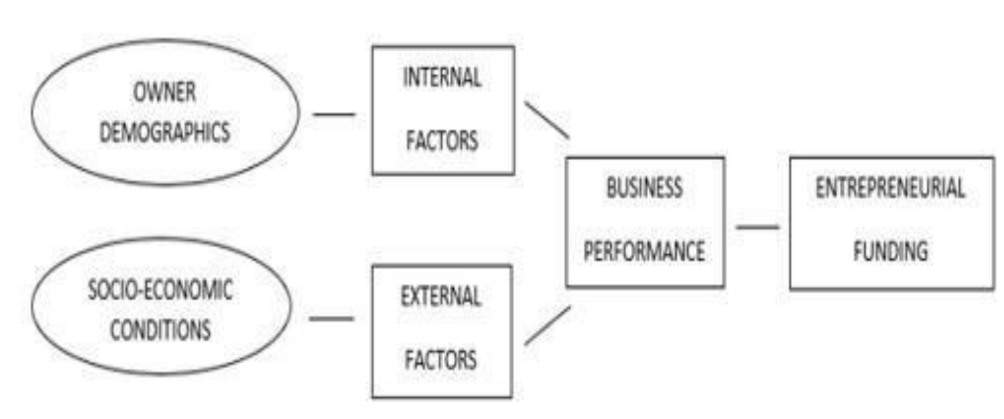
Situational leadership theory provides managers flexibility to oversee a variety of situations. Cannatelli et al. (2017) found that in distributed leadership workplaces, where leadership roles are shared between managers and employees, managers must understand their employees' readiness levels well enough to know when and when not to provide guidance and/or oversight. In these instances, the adaptation of leadership styles to match employee readiness levels can lead to cohesive work environments and positive performance outcomes. Situational leadership theory provides a workable approach to business operations, allowing for different settings across industries and different organizational needs within a given company.

Third Construct: Organizational Performance

The third construct of situational leadership theory is that leader/follower behaviors influence organizational culture and affect business performance. Hersey and Blanchard noted that leaders set the goals of an organization, determining what tasks are assigned and which employees will perform them (Gates, 1976). Therefore, the behaviors of a company's leaders and employees will determine how the company performs. The theorists noted that situations within and outside of a company could also affect managerial decisions and influence organizational performance (see Figure 1).

Figure 1

Situational Leadership Theory and Organizational Performance



No matter which leadership style a manager chooses, they must know their employees' readiness levels and be familiar enough with their skills and workplace behaviors to assign tasks and monitor progress appropriately. Cairns et al. (1998) described two leadership styles that govern how managers interact with employees that include: (a) a task-driven leadership style and (b) a relationship-driven leadership style. Gibson et al. (2002) explained that task-driven managers focus on providing directions, while relationship-driven managers focus on providing support. In general, managers are not held to one approach and may choose to use a combination of task- and relationshipdriven leadership styles based on employee needs.

In such instances, the experience levels of managers and employees are significant variables because a seasoned manager will be more skilled at understanding employee readiness levels. In the situational leadership model, a manager's ability, or inability, to gauge employee readiness levels can affect many aspects of business operations. As managers adjust their leadership styles to match employee readiness levels, employees should feel more empowered to perform tasks with less oversight, leaving managers more time to devote to other managerial duties.

Cairns et al. (1998) stated that some managers found that building strong relationships with employees improved the work environment, getting to know employees' long-term goals and acknowledging their value to the organization enhanced employee motivation levels and improved job performance. Ma et al. (2020) reported that managers who used a situational leadership approach found decision-making easier, noting its positive effect on their job performance and on their interactions with employees.

With managerial flexibility being a key construct of situational leadership, managers using this approach found they had more options for resolving workplace problems. In a comparative analysis of SMEs in Russia and the United States, Ardichvili et al. (1998) used a situational leadership model to investigate the influence of leadership style, gender equity, and cultural norms on business performance. Managers in the study had the best of both worlds utilizing democratic and autocratic leadership styles in their decision-making, seeking the input of others (democratic leadership style) when they felt that was necessary or going with their own judgement (autocratic leadership style) when they felt that was best (Ardichvili, 2021).

As situational leadership theory evolves, researchers are applying it to investigate a variety of business practices. Cannatelli et al. (2017) noted that as more companies shift their organizational structure from centralized leadership to distributed leadership where leadership responsibilities are shared between managers and employees, situational leadership's focus on flexible leadership styles makes it appealing. The theory's emphasis on leader/follower behaviors makes it useful to companies that are implementing knowledge creation and knowledge sharing initiatives to help managers and employees identify opportunities for growth as well as potential threats.

Shifting sources of knowledge creation and knowledge sharing means that change becomes a constant part of workplace dynamics. In their study of task-driven and relationship driven leadership styles, Gibson et al. (1998) found that situational leadership is useful for managers navigating change in internal or external environments. Taskdriven leaders, who focus more on order, might fear that any change would interfere with task completion, while relationship-driven leaders would expect their strong relationships with their employees to bring cohesion to address change.

As more companies implement knowledge creation and knowledge sharing initiatives, more scholarly research will be needed to assess situational leadership theory as a theoretical or conceptual framework (Huseman & Penrose, 1974). Whether quantitative or qualitative, scholarly research studies could help company administrators understand how managers and employees cocreate and share knowledge to address internal and external challenges. Ma et al. (2020) found that many aspects of business practices are determined by organizational culture, including how a company approaches manager/employee relationships, socioeconomic challenges, cultural influences, and competing companies. For example, when companies encourage innovation and creativity at all levels of the organization, opportunities for growth and expansion are more likely to be recognized by managers and/or employees (Arnold, 2019; Wales et al., 2021). . Particularly since the strategic incorporation of innovative technologies can expand consumer outreach and attract new investors (Mack et al., 2016). As business and academic research into entrepreneurship and general business practices expand, the evolution of situational leadership theory will make it applicable in a variety of settings.

Evolution of the Theory

In their introduction of situational leadership theory, Hersey and Blanchard originally focused on leadership styles and leader/follower behaviors within companies with some acknowledgement that external factors also influence business outcomes (Gates, 1976). Huseman and Penrose (1974) noted that Hersey and Blanchard have revisited situational leadership theory to address workplace dynamics that the original theory did not address, such as leader/follower motivation, human resource initiatives, organizational change, and differences that exist between leader/follower perceptions of the work environment. In addition, revisions to the original theory address conflict management strategies, personality variables, and leader/follower expectations of their jobs (Huseman & Penrose, 1974). As scholars apply situational leadership theory in a variety of research scenarios, its usefulness continues to evolve.

Since the inception of situational leadership theory in 1969, managers have found practical applications that highlight the adaptability of leadership styles and leader/follower behaviors to address situations in external business environments (Cannatelli et al., 2017). Research has shown that external forces, such as socioeconomic conditions and cultural attitudes, can also affect business performance (Arnold, 2019). Strazda et al. (2020) found that external factors, such as political and societal support and access to funding, are strong influences on young entrepreneurs. Additionally, business leaders increasingly note the practical use of situational leadership within companies to inform human resources research and development projects and managerial training initiatives (Dubois et al., 2015).

Cairns et al. (1998) applied situational leadership to study behaviors of senior managers and their employees in service industry and manufacturing industry jobs to determine if leaders would adjust their task and relationship behaviors to match employee readiness levels. Their findings showed inconsistent behaviors among leaders, with the researchers emphasizing the need for further research, reporting that leaders did not always adjust leadership styles or oversight behaviors to match employee knowledge of the job or performance of tasks (Cairns et al., 1998). As situational leadership theory evolves, Blank et al. (1990) noted a need for future research that will evaluate the efficacy of its constructs in various locations and across different industries. In a comparative study of Russian and U.S. businesses, Ardichvili (2021) investigated certain economic, societal, and political factors to determine if they effected business operations, noting effects on leader/follower behaviors within organizations as well as effects on general business performance.

Application of the Theory in Different Fields

When Hersey and Blanchard introduced situational leadership theory in 1969, their suggestion that leader/follower behaviors in the workplace could increase productivity and improve profitability made business leaders pay attention (Gates, 1976). Emphasizing interpersonal relationships, situational leadership theory provided a useful theoretical framework for researchers who want to explore the influence of leader/follower personal characteristics on business performance (Cannatelli et al., 2017).

The COVID-19 pandemic showed many companies that they were not selfsustaining as weeks and months of forced shutdowns sent many companies into permanent closure (Brown et al., 2020). During the pandemic, adaptable leadership behaviors, a characteristic of situational leadership, were the driving force that saved many companies from closing their doors (Warren & Szotek, 2017). Zahra (2021) found the situational leadership approach to be especially applicable in uncertain or changing times, offering leaders the flexibility to try new ways to manage employee interactions, supply chain problems, and financial strain. Escamilla-Fajardo et al. (2020) saw a heightened demand in business for the creativity and risk-taking characteristics common among entrepreneurs as industries hurt by the COVID-19 cutbacks and closure searched for ways to reinvent their product offerings and service delivery.

Together, these workplace dynamics are realities of the entrepreneurial experience. In the highly competitive and globalized marketplaces of today, entrepreneurs must not only have skill and industry experience, but they should be able to manage a diversity of workers, products, and consumers. While acknowledging the influence of external factors, Wright (2017) posited that business performance is driven mostly by the skill sets and personal characteristics of business owners and their employees. Obschonka et al. (2019) noted that business leaders sometimes use entrepreneurial behaviors, such as passion, innovation, and persistence, to inform training programs and employment policies. The situational leadership approach identifies these same characteristics as key to motivating leaders and followers to work together to achieve organizational goals (Zahra, 2021).

Limitations of the Theory

Hersey and Blanchard's situational leadership theory offers business leaders the flexibility to change the routine behaviors of managers and employees to address internal and external challenges. Despite its adaptability, the theory has limitations. Blank et al.

(1990) found other situational leadership theories to be broader in scope than Hersey and Blanchard’s theory because the other theories address the implications of complex issues, such as organizational structure, conflict management, and power dynamics, on business performance. Blank et al. noted also that these theories highlight the need to understand the impact of a variety of leadership styles, such as participative leadership that promotes employee input in decision-making and achievement-based leadership that is reward based. Arnold (2019) explained that failure to analyze workplace interactions with these dynamics in mind limits the usefulness of Hersey and Blanchard’s situational leadership approach in some work environments.

In a globalized marketplace, diversity, and multiculturalism present new challenges for business leaders. Zahra (2021) posited that as companies become more diverse in location, clientele, and personnel, doing business online and in diverse cultural settings, workplace challenges will go far beyond the leader/follower focus of Hersey and Blanchard’s theory. Kostyra et al. (2016) suggested that situational leadership theory failed to address in any significant way the needs of managers dealing with the complex demands of language barriers, religious differences, and gender identifications. Preparing managers and employees for the new workplace reality will require strategic planning, training initiatives, and organizational support (Arnold, 2019). When management makes the effort to promote social and cultural awareness, employees will follow (Boughzala & DeVreede, 2015), creating new opportunities for situational leadership applications.

Supporting Theories/Contrasting Theories

For the purposes of this study, I read existing literature on several entrepreneurial theories, focusing on three of them for this discussion, including (a) the theory of planned behavior (Ma et al., 2020), (b) human capital theory (Packard & Burnham, 2020), and (c) Schumpeter's theory of innovation and entrepreneurship (Ebner, 2006). In general, these theories offer useful insight into the role of interpersonal relationships within organizations and how they affect business performance. Because investors consider how a business performs when deciding whether they will lend their financial support, this information is important to aspiring entrepreneurs. Each entrepreneurship theory, in some way, addressed the personal characteristics of entrepreneurs and/or societal influences that affect the path to business ownership. Ma et al. (2020) applied the theory of planned behavior to explore the entrepreneurial intentions of college students and identify factors that helped or hindered their path to becoming actual business owners such as parental support, instructor encouragement, and college curriculum. These, of course, are external rather than personal influences.

By focusing on the personal characteristics and motivations of entrepreneurs, the entrepreneurship theories that I describe here resemble situational leadership theory, which was the theoretical framework for the current research study. Hersey and Blanchard introduced situational leadership theory in 1969 primarily to examine interpersonal relationships between business leaders and their employees (Gates, 1976). Similar to the entrepreneurship theories, this meant an examination of personal leadership characteristics, such as risk-taking propensities and persistence and how they affected leader/follower relationships in the workplace and how those relationships affected task performance and business performance in general (Gates, 1976). Packard and Burnham (2020) applied human capital theory to explore the “enterprising spirit” and understand the planning and promotion behaviors of business leaders trying to attract investors to new ventures. Packard and Burnham said innovation and consumer awareness are vital characteristics of successful entrepreneurs.

Situational leadership theory has evolved over the years to deal more extensively with the impact of external factors on leadership styles, leader/follower interactions in the workplace, and general business performance (Arnold, 2019). Ma et al. (2020) also considered the external influences of educational and social structures on entrepreneurial pursuits. Situational leadership theory is evolving to address organizational use of specific manager/employee skills to improve business performance (Dubois et al., 2015). Canibano and Potts (2019) applied human capital theory to learn more about how managers and employees create and share organizational knowledge to enhance business performance. As more companies look for ways to maximize the use of their human capital, new topics of business and academic research will continue to emerge.

While these entrepreneurship theories share some important similarities with situational leadership, there are important contrasts. These theories are focused almost entirely on leader behaviors without addressing in any significant way employee readiness, which Hersey and Blanchard posited should drive leadership styles. That managers in any workplace situation should be willing and able to adjust their leadership styles to match the readiness levels of their employees is the key construct of situational leadership (Gates, 1976).

The other entrepreneurship theories are also focused on the behaviors and intentions of the individual entrepreneur with little attention paid to external influences, which is the focus of the evolved situational leadership approach. While the theory of planned behavior constructs addresses entrepreneurial demographics (Ma et al., 2020), it does not address in any significant way socioeconomic factors or cultural influences. Human capital theory constructs address the personal qualities of leaders and employees as well as the influence of owner/employee behaviors on business outcomes (Canibano and Potts, 2020), but the theory does not deal in any significant way with employee readiness. Similarly, Schumpeter's theory of innovation and entrepreneurship focuses on entrepreneurs' personal creativity and performance behaviors without significantly addressing employee readiness or the influence of external factors (Ebner, 2006).

Future Directions of the Theory

Situational leadership theory is adaptable for the investigation of phenomena in a variety of workplace settings since its focus is on the unique requirements of each business situation (Gates, 1976). Researchers have noted that situational leadership constructs are applicable in studies that cover a variety of topics from leadership styles to employee innovation and motivation to organizational culture and general business performance (Cannatelli, 2017; Ventresca, 2020). The theory also focuses on leader/follower behaviors and their impact on business performance, making it especially applicable in research into entrepreneurship which includes many distinct kinds of ventures.

As Wright (2017) has noted, this is a new and varied topic for future academic research. In a study of public sector entrepreneurship that used situational leadership as the theoretical framework, Arnold (2019) noted that more research is needed to understand the impact of innovation and employee motivation on leader/follower behaviors and on business performance. Exploring knowledge creation as an emerging trend in many organizations, Cannatelli et al. (2017) used situational leadership theory to connect knowledge creation strategies to general business performance when other theories could not provide that bridge.

Researchers relying on situational leadership approaches see entrepreneurial finance, innovation, and sustainability as topics for future research (Douglas & Prentice, 2019). Wales et al. (2021) applied Schumpeter's theory of innovation and entrepreneurship to investigate entrepreneurial orientation or entrepreneurship within organizations, focusing on innovation and risk-taking leadership characteristics. Since situational leadership theory addresses these same characteristics, it could also be applicable in entrepreneurial orientation research. Bewaji et al. (2015) suggested that future scholarly research should focus on the application of situational leadership to understand how external factors and owner demographics together can affect organizational performance.

Situational leadership theory is especially applicable to the study of workplace dynamics in a globalized marketplace where the internet, e-commerce, and technology have created new contexts for exploring the influence of leader/follower behaviors on business performance. Wright (2017) applied situational leadership theory to explore the flexibility of leadership styles in a global marketplace where workplace dynamics can be influenced by diversity in location, employee base, product offerings, language, and cultural environments. Wright found that adjusting leadership styles to address the complexities of global markets created better business performance and improved relationships between managers and employees. In a study that used situational leadership as the theoretical framework, Wennberg and Anderson (2020) noted the significance of cultural influences, socioeconomic factors, and leadership demographics on business performance. In the United States and globally, scholars continue to explore the impact of demographics, such as race, age, experience, and gender, on business performance (Berger & Kuckertz, 2016; Brown et al., 2020; Chinta et al., 2016). These demographics present opportunities for future scholarly research and new applications of situational leadership theory.

In this literature review, I have provided thorough analysis of scholarly research on entrepreneurial funding, particularly examining specific demographic and socioeconomic influences. While existing literature showed vast research into entrepreneurship as a general business phenomenon, there is little research that explores the relationship between owners' personal demographics, existing socioeconomic conditions, and entrepreneurial funding. Scholars have acknowledged a need for further examination of emerging trends, such as crowdfunding and the use of internet platforms for fundraising. These venues present new options for entrepreneurs to present their goods and services to potential investors (Mack et al., 2016).

In the next subsections, I provide a more detailed explanation of the independent variables and dependent variable in the study, describing how each relates to the theoretical framework. As noted earlier, the independent variables were owner demographics (i.e., gender and experience level) and socioeconomic conditions (i.e., bank and private loans). The dependent variable was entrepreneurial funding.

Owner Demographics

Since demographic data about entrepreneurs can inform their workplace behaviors, these data were noted in the current study as important internal factors that can affect business performance. Business performance is the third construct of situational leadership theory. Adom et al. (2016) found that demographics, such as education and training levels, years of experience as a business owner, and years of experience in a particular industry, influenced business performance in female-owned companies. Robb and Watson (2012) compared the performance of 4,000 female- and male-owned companies, measuring (a) company size, (b) 4-year closure rates, (c) return on assets, and (d) risk levels, noting similar performance levels despite female-owned firms being smaller and considered to be riskier.

Although previous research on entrepreneurship has shown that investors consider how a company is managed and how it performs fiscally before deciding to invest in it (Lukkarinen et al, 2016), there is little scholarly research that establishes a relationship between owners' demographical information, socioeconomic conditions, and the funding of entrepreneurial businesses. I explored these variables to determine if a statistically significant relationship exists between them.

Gender

While prior research has identified gender as an owner demographic that can influence business performance in entrepreneurial firms, few studies have connected gender to the presence or absence of funding. The current study expands the body of academic research on this topic. Existing entrepreneurship research has shown that an entrepreneur's gender may influence how they manage a business and can thus affect business performance. In a comparative analysis of coping strategies used by female and male entrepreneurs during economic distress, Cesaroni et al. (2015) found that female entrepreneurs chose defensive strategies more often, downsizing for efficiency to improve business performance. The researchers surveyed 110 female entrepreneurs and 108 male entrepreneurs using Likert scale questions about offensive coping strategies, such as lowering prices, and defensive strategies, such as downsizing, using *t* tests, along with factor and cluster analyses to analyze the data.

The demonstration of gender-based influences on leadership style and organizational performance provides a link to situational leadership theory constructs noted earlier. Johnston-Louis et al. (2017) suggested that corporate investments in female-owned companies are driven more by profitability than by gender. Yet, JohnstonLouis et al. noted that nearly half of the 50 largest U.S. companies and 40% of the world's largest companies, including Walmart, Coca Cola, and Goldman Sachs, have invested in these firms to meet corporate social responsibility goals and to expand their consumer base.

Berger and Kuckertz (2016) studied 20 leading technology startup ecosystems in 12 countries to determine if gender bias and other societal factors influenced entrepreneurial funding, concluding that governmental and societal support for gender equity led to improved business performance and funding for female-owned companies. This supports a key construct of situational leadership theory that leader/follower behaviors and owner demographics can affect business performance (Gates, 1976).

Researchers have identified a variety of internal and external factors that contribute to the success or failure of female-owned companies. Adom et al. (2016) said key among these factors are (a) the level of family and/or community support, (b) existing socioeconomic conditions, and (c) cultural attitudes about gender roles. McDowell (2020) suggested that certain race- and gender-related challenges are specific to African American women bloggers as they venture into nontraditional employment as digital entrepreneurs. Additionally, Khalid (2022), and Erik and Nerdrum (2001) found that internal factors, such as leadership skills of entrepreneurs, and external factors, such as funding options and legal constraints, affect the entrepreneurial experience. Researchers also noted that female entrepreneurs not only started businesses to improve their own lives but to improve their communities as well (Berger & Kuckertz, 2016; Bullough et al., 2017). Others have pointed out that entrepreneurs' race and ethnicity are personal characteristics that can sometimes affect funding options (Bewaji et al., 2015).

Experience Level

Using both quantitative and qualitative approaches to their research, scholars have studied the relationship between an entrepreneur's experience level, leadership style, and the availability of funding. While some research has shown that experience level can affect leadership style, which in turn affects organizational performance, no relationship has been established between experience level and funding (Dubois et al., 2015). In the current study, the experience level of entrepreneurs was designated as age of firm to align with the headings in the SBCS data set that was used as the primary data source. For example, if a company has operated for 5 years or less, the entrepreneur has 5 years or less in experience.

Since banks and private lenders consider performance indicators, such as solvency and sustainability, in their decisions of whether to fund entrepreneurial ventures, the owner's experience level or the age of firm may be a predictor of funding availability. Dubois et al. (2015) applied the situational leadership framework to understand how personal characteristics of project managers informed their leadership style, concluding the more skilled and experienced managers were better able to assign tasks and allocate financial and operational resources appropriately to achieve organizational goals.

Adom et al. (2016) found that entrepreneurs' experience level contributed to positive business performance and sometimes improved investor engagement with the number of years managing one's own company and number of years working in one industry improving leadership behaviors. Chinta et al. (2016) also found that the personal characteristics of entrepreneurs informed their leadership styles, pointing out that the more experienced project managers generally allocated their company's financial and personnel resources more efficiently than less experienced managers.

Arnold (2019) used the situational leadership approach to note the advantages of entrepreneurs being open to adapting their leadership style to match employee skill, finding improved task completion among employees, and enhanced organizational performance. Dubois et al. (2015) found that owners' experience levels, skill sets, and leadership styles contributed to positive business performance as well, with experienced project managers showing a more efficient allocation of financial and human resources than less experienced managers.

Socioeconomic Conditions

The third independent variable in the study was socioeconomic conditions, focusing on the COVID-19 pandemic that became a public health crisis in the United States in 2020. According to the Global Entrepreneurship Monitor (2019), most entrepreneurial companies are SMEs that rely primarily on bank loans and on private investors. Prior research shows that in the United States and worldwide, financial investments in entrepreneurship diminish during times of economic distress (Zahra, 2021, Global Entrepreneurship Monitor, 2019). I explored the investment trends of banks and private lenders to SMEs to expand the existing body of research on this phenomenon to understand how it affects entrepreneurial funding in the United States.

Brown et al. (2020) used secondary data analysis of financial and demographic information from the Crunchbase data set to determine the effect of the COVID-19 pandemic on entrepreneurial funding in the United Kingdom. They concluded that the pandemic had led to a dramatic decrease in initial investments in startups. From 2007 to 2010, these data showed positive entrepreneurial funding trends that peaked at 500 new investments in 2010. When the COVID-19 pandemic arrived several years later, only 350 financing deals were made, with SMEs suffering disproportionately (Brown et al., 2020).

Before choosing secondary data analysis, entrepreneurs should consider these realities and have a plan for addressing them. Having personal finances to rely on during uncertain times is helpful. Personal financial wealth is a proven advantage for entrepreneurs because research has shown that entrepreneurs who are independently wealthy will secure investors more easily than those who are not (Chinta et al., 2016). Stewart (2021) found that entrepreneurs often become more innovative and more resourceful during times of economic distress, creating businesses that meet consumer demand. Gonzalez-Pernia et al. (2018) posited that the number of entrepreneurial firms drop sharply during recession because fewer people want to risk business failure. Still, even in developing nations, entrepreneurship is a proven source of economic uplift for under-served communities (Singh, 2014).

Bank Loans to SMEs

Bank loans are generally more difficult for entrepreneurs to secure for several reasons. Along with the criteria of financial solvency and a proven record of profitability, banks considering funding entrepreneurial ventures will consider owner demographical data, such as years of experience as a business owner and number of years in a given industry (Mack et al., 2020). Research has shown that socioeconomic distress will often lead to fewer bank loans being secured by startups yet may not necessarily impact loans to established companies that have proven their sustainability (Bonini et al., 2019). The Organization for Economic Cooperation & Development or OECD (2022) has noted the COVID-19 pandemic among the more recent socioeconomic disturbances to cause a significant drop in bank loans to SMEs in the United States and around the world in 2021 and 2022.

Private Loans to SMEs

Choi et al. (2018) pointed out that most entrepreneurial ventures are not initially self-sustaining and will require some financial backing in the early stage, making private lenders vital to entrepreneurship. Established funding sources include venture capital, government support, angels' funding, and accelerator funding, a more recent source of financial support for entrepreneurial ventures. Accelerator investors are especially significant because they provide financial support, along with mentoring services, support networks and education on business ownership. Many of these investments are in the form of loans, though some are gifts.

Online crowdfunding platforms, such as Kickstart and GoFundMe, present unique venues for entrepreneurs to make direct appeals to potential investors. Ryu & Kim (2018) said these platforms provide entrepreneurs with a place to shop their goods and services to private investors, exchanging ideas, advice, and resources for mutual benefit. Despite the diversity in private lenders, COVID-19 affected investment behaviors (OECD, 2022)

Entrepreneurial Funding

The dependent variable in the study was entrepreneurial funding. Despite being proven catalysts for economic growth and development in many communities and regions of the country, entrepreneurial ventures do not always enjoy the financial support they need to survive and flourish (Global Entrepreneurship Monitor, 2019). Many corporations now see dual benefits from investing time and finances in entrepreneurial ventures, increasing their company's profitability while also strengthening their ties to the communities and populations they serve (Driver, 2012). In the United States, entrepreneurial ventures are proven economic mainstays with 33% of them operating for 16 or more years and 8.9% operating for at least 2 years (U.S. Census, 2017). In this regard, entrepreneurship creates positive social change, improving the lives of individuals and communities that embrace it.

Securing funding for startup or expansion can be especially challenging during recession (Bonini et al., 2019) and other times of economic distress, such as during the COVID-19 pandemic (Zahra, 2021). Many of these investments are in the form of loans, though some are gifts. Online crowdfunding platforms, such as Kickstart and GoFundMe, present unique venues for entrepreneurs to make direct appeals to potential investors. These companies bring positive social change to individuals and communities, creating new jobs and opportunities for many (Berger & Kuckertz, 2016).

Secondary Data Analysis

In the ex-post facto research design, researchers use secondary data analysis to determine if a relationship exists between one or more independent variables and one dependent variable (Lund & Lund, 2024). I used secondary data analysis to determine if a significant statistical relationship exists between the gender of the owner, age of the firm, the COVID-19 pandemic, and entrepreneurial funding. I collected statistical data from the SBCS data set, which is a collaborative effort of 12 banks in the Federal Reserve Banking System that track the financial activities and business operations of entrepreneurial firms in the United States.

I employed binomial (binary) logistic regression (BLR) for statistical data analysis. This regression model is one type of statistical test that belongs to a group of tests known as generalized linear models that are designed for research studies that have a dependent variable that is not continuous but may be dichotomous or ordinal (Lund & Lund, 2024). Researchers use this model to determine the probability that a certain phenomenon will occur in the logit of a dependent variable based on one or more independent variables (Howell, 2020). Arroyo et al. (2016) used BLR to predict whether high-growth expectations among entrepreneurs affected actual business growth. With gender as a predictor variable, data analysis calculated odds ratios at 0.536 for males and 0.462 for females with the researchers concluding that male entrepreneurs were twice as likely to have high growth expectations that positively impacted the actual business growth (Arroyo et al., 2016). Van der Zwan et al. (2010) used the model to explore the probability that entrepreneurial intent would lead to actual business startup. Investigating the influence of gender on the potential for realizing business ownership, these researchers used log odds ratios to interpret the findings of the model.

Howell et al. (2020) used this model to investigate the impact of COVID-19 on venture capitalists' investments in entrepreneurial businesses from 2019 to 2020 at the height of the pandemic. Considering early-stage ventures and late-stage ventures as binary variables, findings showed a higher likelihood of investments in late-stage ventures (0.006) than in early-stage ventures (0.018). Pisani and Morales (2020) explored the likelihood of Latino-owned entrepreneurs in the United States identifying their businesses as formal or informal. Of the 4,024 entrepreneurs surveyed, they found that most were not registered. Odds ratios, which were calculated as 1 − Exp(B), were all greater than 1: Mexicans (95.9%) and Puerto Ricans (54.1%) being more likely to operate informal businesses than other Latinos (Pisani & Morales, 2020).

Transition

In summary, in this section I presented the background of the business problem explored in the study, purpose of the study, research question and hypotheses guiding the study, population and sampling procedures, theoretical framework of the study, significance of the study, and a review of the professional and academic literature related to the research topic. The review of professional and academic literature included the history and evolution of situational leadership theory, the theoretical framework of the study, and an explanation of the independent and dependent variables in the study. In Section 2, I will discuss the secondary data analysis procedures that were followed in the study in addition to providing a description of the SBCS data set that was used for the collection of demographical, financial, and socioeconomic data in the study. I will also provide a detailed description of the research project, including the researcher's role, research method and design, population and sampling information, description of data collection, data analysis procedures, and the assumptions for BLR. In Section 3, the findings of the study will be discussed, including the conclusions that I have drawn about the research question and hypotheses based on the statistical data analysis, the results of descriptive and inferential statistical tests, how the findings will broaden the existing knowledge on entrepreneurial funding, my recommendations for application of the findings in professional practice, and the study's implications for social change.

Section 2: Project Design and Process

In this section, I describe the research project, including a restatement of the purpose of the study and the research question. The quantitative research method and the ex-post facto research design are explained. I will briefly describe the data collection instrument, the data collection technique, the data analysis instrument, and the data analysis technique. The statistical tests employed to answer the research question and the SBCS data set that was used as the primary source of statistical data in the study are described. In February 2025, I delivered oral presentation of my proposal before my committee chair and second committee member, receiving their approval. I subsequently received approval from the Walden University Institutional Review Board (IRB) with permission to move forward into the final study stage.

Method and Design

The purpose of this quantitative, ex-post facto study was to examine the relationship between entrepreneurs' gender, experience level, socio-economic condition, and entrepreneurial funding. The research question guiding the study was: What is the relationship between entrepreneurs' gender, experience level, socioeconomic condition, and entrepreneurial funding? The null hypothesis was: There is no statistically significant relationship between entrepreneurs' gender, experience level, socioeconomic condition, and entrepreneurial funding. The alternative hypothesis was: There is a statistically significant relationship between entrepreneurs' gender, experience level, socioeconomic condition, and entrepreneurial funding.

Research Method

In scientific studies, scholars must choose a research method that will guide the study and determine how the research will be conducted. Based on the research question(s) and hypotheses, the research method will be qualitative, quantitative, or mixed method. Time constraints, access to study participants, availability of appropriate data, and availability of adequate financial resources are all factors that could influence the selection of a research method (Saunders et al., 2015). In the following subsections, I explain why the quantitative method was most appropriate for this study and why the qualitative and mixed methods were not.

Quantitative Method

I chose the quantitative method for this study because it relies on the collection and analysis of numerical data rather than the subjective, interpretive nature of qualitative and mixed-method designs (see Stoecker & Avila, 2021). Since many business and academic scholars see the quantitative method as the more scientific research strategy (Stoecker & Avila, 2021), use of this method should lend credibility to the current study and its findings. Quantitative researchers examine two or more independent variables and one dependent variable to determine if a statistically significant relationship exists between them (Castillo-Page et al., 2012). This aligned with the current study because I explored the relationship between three independent variables (i.e., entrepreneurs' gender, experience level, and socioeconomic condition) and one dependent variable (i.e., entrepreneurial funding). Research findings showed whether these variables predict funding of SMEs. Critics of quantitative research say the lack of firsthand accounts of a business phenomenon is one disadvantage of this method (Castillo-Page et al., 2012). They point out that numerical data alone cannot give a complete picture of how managers and employees experience the phenomenon in a work environment. Castillo-Page et al. emphasized that quantitative findings lack the expression of human emotions, concerns, and opinions that help explain a business phenomenon.

Qualitative and Mixed-Method Research

I also considered the qualitative and mixed-method approaches to academic research. Qualitative research studies rely primarily on the personal accounts of managers and employees to understand how a business phenomenon is experienced in the workplace (McCusker & Gunaydin, 2015). Among the disadvantages of this method are the subjective nature of research findings and the costly and time-consuming data collection procedures (Stoecker & Avila, 2021). Because of these characteristics, the qualitative method was not appropriate for the current study. In considering the mixedmethod approach, I discovered that some researchers favor this method because it combines both quantitative and qualitative techniques (see Saunders et al., 2015). However, I also learned that this method could cause research to become too broad, too time-consuming, and too costly (see Stoecker & Avila, 2021). For these reasons, I concluded that this was not appropriate for the current study.

Research Design

To address the research question in the study, I chose the ex-post facto design. In ex-post facto research, scholars study variables that have already occurred to determine if a relationship exists between them (Lacruz &Cunha, 2018). Okafor (2022) used the expost facto design in a comparative study of learning outcomes among students in virtual settings versus students in brick-and-mortar classrooms. Bellini et al. (2020) employed the ex-post facto design to examine employees' cognition and behavior on their workplace performance, noting that the ex-post facto design simplified the interpretation of data and made the explanation of research findings more precise.

In the ex-post facto design, researchers may use secondary data analysis to determine if a statistically significant relationship exists between two or more independent variables and one dependent variable (Saunders et al., 2015). In this research study, I used secondary data analysis to explore the relationship between gender of owner, age of firm, socioeconomic condition, and entrepreneurial funding. I employed financial and demographic information from the SBCS data set, which is located at https://www.fedsmallbusiness.org/survey and serves as a national storehouse of statistical data on SMEs and entrepreneurial companies (Fed Small Business, 2023).

One advantage of the ex-post facto design is that it saves time and money on data collection and analysis because the data has already been gathered and tested for other uses (Saunders et al., 2015). Abegaz et al. (2023) used the ex-post facto design to evaluate the relationship between two independent variables (i.e., political stability and education standards) and one dependent variable (i.e., global entrepreneurship). They found that these variables can affect entrepreneurial success. While entrepreneurial firms are a proven stabilizing force in the economies of high- and low-income level countries around the world, many of these countries fail to invest in entrepreneurship in any significant way (Abegaz et al., 2023). Governance indicators in these countries often influence the performance of entrepreneurial businesses and can determine the impact of entrepreneurship in general (Abegaz et al., 2023). Tingbani et al. (2023) used the design to study the impact of an environmental tax on business owner behavior. In ex-post facto research, Okafor (2022) explored the relationship between three independent variables (i.e., online learning, course types and teaching strategies) and one dependent variable (i.e., student motivation).

Notable disadvantages in the ex-post facto design include that the statistical data needed for secondary data analysis may not always exist, may not be timely, or may not be available from one source (Castillo-Page et al., 2012). In such instances, researchers may be forced to expand their search for the appropriate data and may have to collect and analyze data from several sources (Saunders et al., 2015).

Population and Sampling

The target population of this study was entrepreneurs and investors across the United States. Statistical data for the 2021 SBCS data set was collected in fiscal year 2020. The Small Business Administration (2020) has noted that most entrepreneurial companies in the United States are SMEs with 249 employees or less. This is significant because much of the media attention about entrepreneurial business growth and development highlights the larger high-tech companies. It is important in academic studies that researchers clearly define the population they will explore and can explain why they chose that population (McComb, 2019).

Sampling

Selection of an appropriate sample size for an academic study is particularly important. To produce reliable research findings that are useful to stakeholders and applicable across different industries, a researcher must measure a number of cases that are representative of the entire population experiencing the business problem (Faul et al., 2009). In this study, I used simple random sampling for statistical analysis. I employed G* Power 3.1 statistical analysis software to calculate the effect size, sample size, and power. McCombes (2019) described simple random sampling as the most effective probabilistic sampling method for achieving generalizable results. In probabilistic simple random sampling, each member in a population has the same chance of being selected for closer analysis (Lund & Lund, 2024).

To calculate the sample size, I performed a priori power analysis using the G*Power statistical analysis program. This analysis uses the relationship between the sample size and the alpha and beta parameters to determine the appropriate sample size (Wang et al., 2020). The alpha parameter measures the probability that a relationship is found between the named variables when it should not be, creating a Type II error (Wang et al., 2020) The beta parameter measures statistical power and signals an insufficient sample size by missing a relationship between variables that should be present, creating a Type I error (Wang et al., 2020). Using BLR, I explored the probability of a relationship existing between the dependent variable, entrepreneurial funding, and the independent variables (i.e., gender of owner, experience level or age of firm, and effect of the COVID-19 pandemic. BLR uses the sigmoid curve to model the relationship between the independent variables and the probability of the binary outcome of the dependent variable (Dyanty et al., 2025). The mathematical formula for this regression model is logit(Y) = $\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$. In this study, logit(Y) represents the logit or log odds of the dependent variable, entrepreneurial funding. β_0 represents the intercept term or constant. β_1, β_2, and β_3 represent the coefficients of each independent variable. X represents each independent variable as follows: X_1 = gender of owner, X_2 = age of firm, and X_3 = effect of COVID-19. The ε represents the standard error.

I began the analysis of data for this study with a total population of 9,547 entrepreneurial firms from the SBCS data set that had applied for financial assistance from an external source in 2020 at the height of the COVID-19 pandemic. Of these firms, 4,974 are men owned and 4,573 are women owned. Some 1,347 or 27% of the menowned firms received funding, while 1,050 or 23% of the women-owned firms received funding.

To determine the appropriate sample size for the study, I used the G*Power calculator program. I selected logistic regression as the statistical analysis test and was prompted to proceed with the z-test for a priori power analysis. For the input parameters, I selected the two-tails option. I based my selection of an odds ratio on several research studies on entrepreneurship and entrepreneurial funding behaviors which are described in the following paragraph. This includes studies that are similar to the current study in that the researchers also explored the influence of factors, such as gender of owner, age of firm, and/or the effect of the COVID-19 pandemic on business, as factors that could influence outcomes for entrepreneurs and their business ventures.

Arroyo et al. (2016) used logistic regression to determine if entrepreneurs' highgrowth expectations for business ventures led them to open new businesses. Findings showed that high-growth expectation was more likely to be a predictor of actual business startup for men than for women, with the researchers recording odds ratios of 0.536 for males and 0.462 for females (Arroyo et al., 2016). Van der Zwan et al. (2010) found that male entrepreneurs were much more likely to move from thinking about starting a business to actually starting a business than their female counterparts, noting an odds ratio of 0.509 for men and 0.819 for women.

Using BLR, Pisani and Morales (2020) examined the entrepreneurial behaviors of Latino American entrepreneurs who choose to do business informally rather than formally, often not registering their companies with government agencies. Logistic regression of survey data of 4,024 Latino entrepreneurs calculated odds ratios as 1 − Exp(B) with all being greater than 1 (Pisani & Morales, 2020), supporting the hypothesis of a strong likelihood that these entrepreneurs would not formally register their businesses.

Using the odds ratios that are noted in previous research studies is one way to reach an appropriate odds ratio in a quantitative research study (Lund & Lund, 2024). Determining an odds ratio that falls somewhere between those that are cited in the studies mentioned above should yield an appropriate odds ratio for my study, being near the

0.536 in the Arroyo et al. (2016) study without going as high as the 1 − Exp(B) noted in the Pisani and Morales (2020) study or as low as the 0.0018 and 0.006 recorded in the Howell et al. (2020) study. To determine the odds ratio for this study, I input 0.57 into the G*Power calculator for the null hypothesis Pr(Y=1/X=1) H_0 and 0.43 for the alternative hypothesis Pr(Y=1/X=1) H_1 calculating an odds ratio of 0.569. Next, the alpha and beta values of 0.05 and 0.95 respectively were automatically input into the G*Power calculator as standard values in social scientific research (see Faul et al., 2009). The Rsquared Other X distribution that measures the effect of the three independent variables on the dependent variable was calculated at 0.36. I selected the Poisson option for X distribution since all three independent variables are categorical, choosing the odds ratio, using enumeration and likelihood ratio options to calculate the sample size of 304. I included a graph depicting this procedure (see Figure 2). I selected the X-Y plot for range of values option and chose the odds ratio option to produce a second graph (see Figure 3).

Figure 2

*G*Power Sample Size Calculation*

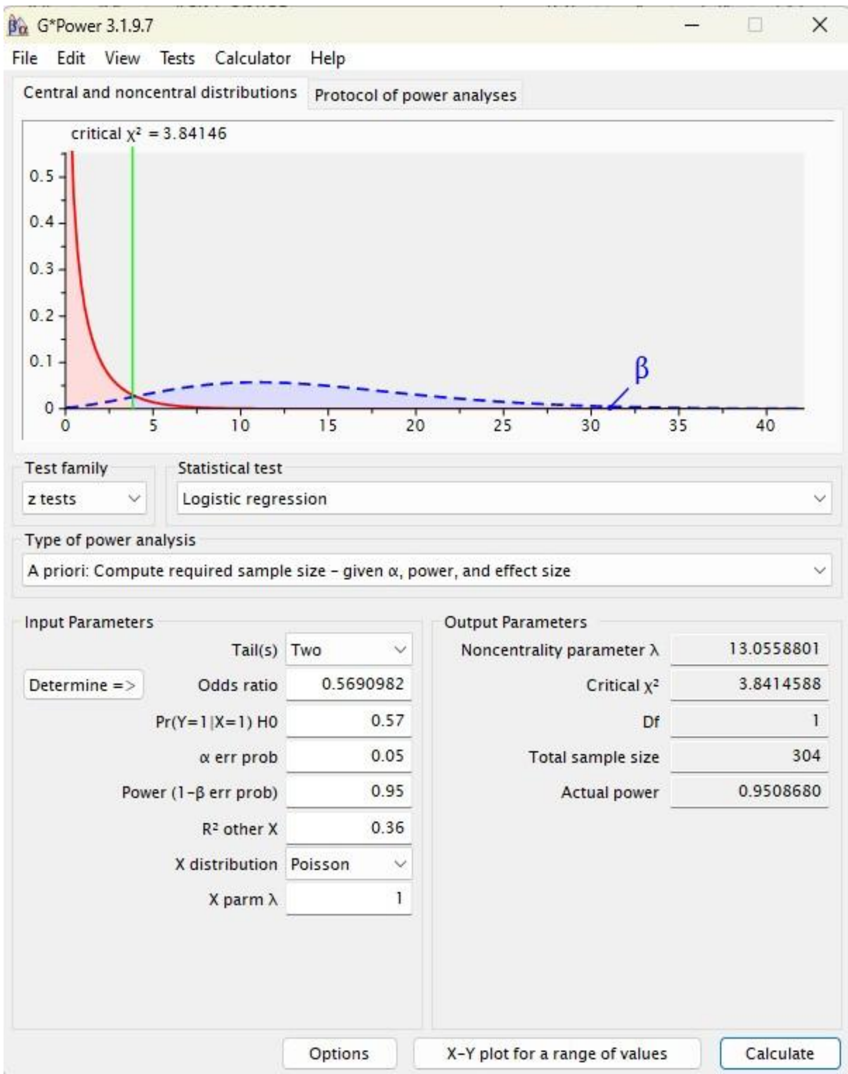
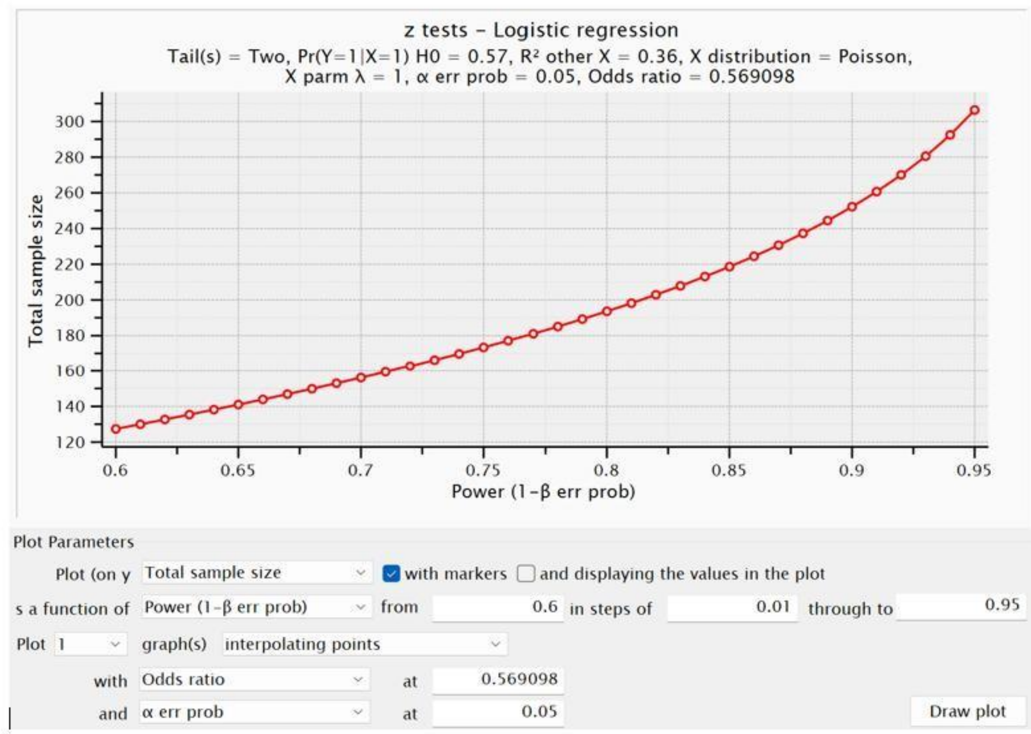


Figure 3

*G*Power X-Y Plot for Range of Values*



Calculating the appropriate sample size of 304 means that I needed to investigate the funding outcomes of at least 304 entrepreneurial firms that sought financial assistance to draw reliable conclusions about the probability that gender of owner, age of firm, and the effect of the COVID-19 pandemic are predictors of funding outcomes in the greater population.

Ethics in Research

In academic research studies, the scholar must always take the necessary steps to protect the integrity of data they collect for statistical analysis. Data that are compromised at any stage of the process, whether during collection or analysis, can potentially jeopardize any subsequent analysis or interpretation that the researcher may employ to reach conclusions (Saunders et al., 2015). In addition to the precautions that I took to ensure the integrity of this study; Walden University requires scholar-practitioners to submit to the IRB documentation of consent from the appropriate data sources and partner sites used in their study. Scholar practitioners must explain to IRB satisfaction how they plan to protect the privacy of participating individuals and organizations and the information they provide (Walden Doctoral Research Handbook, 2023). The current study did not involve the participation of human subjects but relied on SBCS data that has already been collected and verified by U.S. Federal Reserve. Therefore, I did not need to provide proof of informed consent or privacy protections. I stored the data that I collected and used in this study on encrypted flash drives, which I will secure safely in my home. The Walden University IRB approval number for this study is 01-17-25-0517218.

Data Collection

I collected data for statistical analysis on 309 entrepreneurial firms in the United States from the 2020 SBCS data set, which is published in the *2021 Report on Employer Firms*. The SBCS is a survey produced by 12 member banks of the Federal Reserve System that compile financial and demographical data on small businesses across the United States that have 499 employees or less (Fed Small Business, 2023). In addition to academic and business professionals, state and federal agencies also cite demographic and financial SBCS data in their reports on entrepreneurship across the United States

(Ohio States News Agency, 2021). Georgia, Hawaii, and Ohio are among the states that have cited these data, urging small business in their states to participate in the survey and apply its financial and demographic data as needed for guide public policy use (Georgia State News Agency, 2022). Vincent (2007) is among scholars who cited the SBCS statistical data to support research into the availability of financial assistance and guidance for startups owned by African Americans, Hispanics, and others from marginalized communities. In quantitative research, the secondary data analysis option gives researchers the freedom to use data that has already been collected for business or scientific research (Castillo-Page et al., 2012). Because the data has already been verified and established as dependable by governmental agencies and other entities that compile them, researchers can use it with confidence in their studies (Castillo-Page et al., 2012).

The target population of the study was U.S. entrepreneurial firms, focusing on SMEs. The target audience was entrepreneurs, investors, and consumers. My goal was to gain a better understanding of the funding challenges that many entrepreneurs encounter at business startup and expansion. Because most entrepreneurial businesses are also SMEs (Global Entrepreneurship Monitor, 2021), I collected statistical and demographic data on SMEs from 2019 to 2024, a period during which I was able to gain sufficient insight into this business phenomenon to answer the research question.

From the SBCS data set, I collected funding data on U.S. entrepreneurs based on the subgroups that I have specified, which are the gender of the owner, experience level (i.e., age of firm), and socioeconomic condition (i.e., the effect of COVID-19). While keeping identifying information private, the data set gives a snapshot of each firm’s financial activities including applications for external funding such as bank loans, private loans, and lines of credit (Fed Small Business, 2023). Primary funding sources for entrepreneurial businesses include (a) retained business earnings, (b) personal funds, and (c) external financing (Fed Small Business, 2023). This study was focused on the external funding sources used by business owners to meet financial challenges.

Internal and External Influences on Funding

The funding of entrepreneurial companies can be affected by external and internal factors in the business environment (Escamilla-Fajardo et al., 2020). Within a company, those factors can vary depending on the entrepreneur, the employees, the business, and even the industry. Outside the company, any number of factors can influence funding such as an unanticipated health crisis, like the COVID-19 pandemic, which led to business closures and reductions in hours of operation, or an economic recession like the one that occurred in 2009 that hurt business growth and development in the United States and around the world (Global Entrepreneurship Monitor, 2021).

In this study, I explored the possibility of a relationship existing between owners' gender, the age of a firm, COVID-19, and funding. For the age of firm, I collected data on businesses operating from 0–2 years and 6–10 years. For socioeconomic conditions, I collected data on the negative effect of the COVID-19 pandemic on business operations. While research has shown that entrepreneurial investments diminish when socioeconomic conditions worsen (Global Entrepreneurship Monitor, 2021), more research is needed to understand how these conditions impact the lending practices of banks and private investors. The current study expands the body of knowledge on these practices.

Data Collection Instrument

The SBCS 2021 Report on Employer Firms was the data collection instrument for this study. This 2020 SBCS data set included in the report was the primary source of financial and demographical data on entrepreneurial businesses in the United States. The SBCS is a collaboration of 12 member banks in the U.S. Federal Reserve System that report annually on the funding sources, fiscal management, and general status of these businesses. The companies listed in the SBCS data set have approximately 499 employees or less and are in different regions of the United States. The 2021 Annual Survey and Report can be accessed online at https://www.fedsmallbusiness.org/survey. Gender of owner categories include women owned and men owned. Age of firm categories include 0–2 years and 6–10 years. The effect of the COVID-19 pandemic categories include: (a) large negative effect, (b) moderate negative effect, and (c) little or no effect. Entrepreneurial funding categories are did receive funding and did not receive. I selected data that were specific to the current study. For gender of owner, I collected data on women- and men-owned firms, excluding equally owned firms. I collected data on only two age of firm categories, 0–2 years and 6–10 years. I collected data on the relative effect of COVID-19, not on details like closures, staff reductions, etc. For entrepreneurial funding, I collected SBCS data on whether firms received or did not receive the funding they sought, excluding the details of any partial funding that firms received.

Data Analysis

For statistical analysis, I used the BLR model to analyze the data that I have collected from the SBCS on the demographic and financial characteristics of entrepreneurial firms. In academic research, scholars use this regression model to predict the probability of a business phenomenon occurring in the logit of a dichotomous dependent variable (rather than in one of two categories of the variable) based on one or more categorical or continuous independent variables (Lund & Lund, 2024). The logit is defined as the natural log of the odds of a phenomenon occurring (Lund & Lund, 2024). I explored the probability of entrepreneurs applying for external funding receiving it or not receiving it based on the three independent/predictor variables (i.e., gender of owner, age of firm, and effect of the COVID-19 pandemic). I will use the BLR model to conduct the statistical analysis of SBCS data, presenting the research findings in display tables throughout Section 3 to demonstrate existing relationship(s) between the dependent variable (i.e., entrepreneurial funding) and the independent variables in the study (i.e., gender of owner, age of firm, and effect of COVID-19). I input the coded SBCS data into the Statistical Package for Social Sciences (SPSS) Version 29 to perform the necessary statistical tests.

In addition to BLR, I also considered multiple linear regression as a possible statistical analysis method. Multiple linear regression requires at least one continuous independent variable and one or more continuous dependent variables (Lund & Lund, 2024). Since there are no continuous variables in the study, multiple linear regression was not appropriate for this study.

Scale Measurements for Independent and Dependent Variables

In quantitative academic studies, researchers collect two types of data for analysis, numerical and categorical. The type of data collected determines the scale measurement of each variable to be examined in the study (Saunders et al., 2015). Castillo-Page et al. (2012) explained that the difference between the two types of data is that numerical data can be counted and categorical data can be grouped by their shared characteristics. The scale measurements for the independent variables in this study are gender of owner (nominal), age of firm (nominal), and the effect of the COVID-19 pandemic (ordinal/nominal). According to Lund and Lund (2024), an ordinal variable such as the effect of the COVID-19 pandemic may be classified as nominal to apply the BLR model. Therefore, I have classified the effect of the COVID-19 pandemic as nominal rather than ordinal for this study. The scale measurement for the dependent variable, entrepreneurial funding, is nominal (see Table 2).

Table 2

Scale Measurements of Study Variables

Variable	Value	Measurement
Gender of owner	0 -Men owned 1 - Women owned	Nominal
Age of firm	0 - 0–2 yrs 1 - 6–10 yrs	Nominal
Effect of COVID-19	0 - LNOE* 1 - MNE 2 - LNE	Nominal
Entrepreneurial funding	0 - Did not receive 1 - Did receive	Nominal

*LNOE=Little/No Effect, MNE=Moderate Negative Effect, LNE=Large Negative Effect

Data Cleaning

I screened the SBCS data to make sure that potential problems were eliminated. I created my own data set from the original SBCS data set, collecting only data that are relevant to the research study. Chai (2020) pointed out that poor data quality is a fundamental problem that researchers face that can lead to incorrect interpretations and inaccurate conclusions being drawn from the research. Corrales et al. (2018) noted that missing data, outliers, redundancy, and noise are all common issues that researchers may encounter in the data and data analysis phases of their projects. Corrales et al. also suggested ways to resolve data issues that include identifying new data from other sources to replace any missing data and deleting redundant data that could potentially skew the results of the statistical analysis. Chai suggested cleaning large data sets by: (a) replacing missing values with numerical values that are too large or too small and are easily identified as being erroneous, (b) addressing numerical values that seem unusually high or unusually ow by checking them against the metadata to detect possible discrepancies that occurred in the data collection process, and (c) correcting questionable dates by retrieving similar or matching dates from other sources. I sought comparable data from other reliable sources to replace missing data and deleted redundant data and outliers or extreme cases from the study.

Assumptions of BLR

Seven assumptions must be met in the statistical data of a study and in its variables if the researcher intends to use BLR as the statistical analysis method. These seven assumptions help to ensure that the model is the best fit for the data and that it will yield accurate predictions about the relationships between the variables being examined (Lund & Lund, 2024). By addressing these assumptions before the research begins, the researcher can trust that the research findings will answer the hypothesis or hypotheses, and that the data that are collected will be representative of the larger population (Lund & Lund, 2024). If the seven assumptions of BLR are violated, the researcher must address the violations by (a) choosing not to use the problematic data, (b) transforming the data, (c) getting the appropriate data from a different source(s), or (d) selecting a different statistical test.

Defining the Assumptions

According to Lund and Lund (2024), the first four assumptions of BLR relate to the design of the study. They include (a) that the dependent variable must be dichotomous with only two categories; (b) that two or more independent variables must be categorical or continuous; (c) that there must be independence of observation among the variables, which means that there is no relationship between the categories of the dependent variable and the nominal independent variables; and (d) that there must be at least 15 cases representing each independent variable (Lund & Lund, 2024). The three remaining assumptions relate to the data that are collected and include: (a) that there is linearity or a linear relationship between the dependent variable and the continuous independent variables; (b) that there is no multicollinearity or strong correlation between the independent variables; and (c) that there are no significant outliers or extreme cases that do not fit the BLR model well (Lund & Lund, 2024). Before releasing its annual reports, the SBCS explains its procedures for addressing outliers and missing data, a process that includes retrieving comparable data from other reliable agencies, including the U.S. Small Business Administration, the Global Entrepreneurship Monitor, and the OECD, when survey respondents did not submit all the data they were asked to submit (Fed Small Business, 2023).

Addressing the Assumptions

Before applying BLR to a research study, the researcher must assess all data and variables to ensure that no assumptions are violated (Lund & Lund, 2024). If there are violations, the problematic data must be replaced, transformed, or eliminated (Faul et al., 2009). To address the first assumption, a researcher must make sure that the dependent variable is dichotomous, which means that it is nominal with only two categories (Faul et al., 2009). If this assumption is violated, the researcher must choose a different dependent variable or a different statistical test. To address the second assumption that two or more independent variables are categorical, the researcher must determine the scale measurement for each independent variable. If at least two of them are not categorical, the assumption is violated (Lund & Lund, 2024). To address the violation, the researcher must select at least two different independent variables that are categorical. To address the third assumption requiring independence of observation and mutual exclusivity among the dependent and independent variables, the researcher must test the variables for existing relationships (Lund & Lund, 2024). If this assumption is violated, the researcher would have to select a different statistical test. To address the fourth assumption that the data set used in the study contains at least 15 cases for each independent variable, the researcher must inspect the dataset to make sure this minimum requirement is met. If this assumption is violated, the researcher must select a different data set, variables, or statistical test. Without a sufficient number of cases, research findings may not be generalizable to the greater population (Lund & Lund, 2020). To address the fifth assumption of linearity, which requires that the continuous independent variables be linearly related to the logit of the dependent variable, the researcher would need to test the variables. The Box-Tidwell test in SPSS can be used to assess linearity, and its results may provide appropriate steps for transforming the data if this assumption is violated (Lund & Lund, 2024). To address the sixth assumption that there is no multicollinearity or close relationship between two or more continuous variables, the researcher must test the variables. The correlation coefficients and tolerance/VIF values in SPSS descriptive analyses will signal problems with multicollinearity (Lund & Lund, 2024). If this assumption is violated, it may be difficult to say which independent variable is responsible for changes in the dependent variable (Lund & Lund, 2024). To address the violation, a researcher would have to choose different independent variables or choose a different statistical test. To address the seventh assumption that there are no outliers, the researcher must test the data. Outliers are unusual cases that could cause miscalculations of the relationships between variables, skewing the outcome of analyses (Corrales et al., 2018). The Casewise Diagnostics test in SPSS software detects outliers, measuring standard residuals against standard deviations (Lund & Lund, 2024). Corrales et al. (2018) explained that results showing standard residual values greater than 2.5 can signal outliers. To address outliers and missing data, a researcher must transform the problematic data or remove it, then repeat the Casewise Diagnostic test until the problem is resolved (Corrales et al., 2018).

In this study, I assessed SBCS data and the variables in the study for alignment with the seven assumptions, addressing any violations. To assess the first assumption, I reviewed the dependent variable (i.e., entrepreneurial funding) to determine if it is dichotomous with two categories. If that assumption is violated, I would have selected a different dependent variable. The second assumption was assessed by reviewing the three independent variables (i.e., gender of owner, age of firm, and effect of COVID-19) to make sure that two or more of these variables are categorical. If this assumption were violated, I would have selected different independent variables. The third assumption, requiring independence of observation, was assessed by performing the Durbin-Watson test in SPSS. If this assumption were violated, I would have selected a different dependent variable or different independent variables. I assessed the fourth assumption that the data source contains at least 15 cases for each independent variable by reviewing the data source. If the assumption were violated, I would have selected a different data source. I The fifth assumption was assessed by reviewing the independent and dependent variables for linearity. If this assumption were violated, I would have selected new variable(s). The sixth assumption was assessed to determine that there is no multicollinearity among the independent variables by reviewing the Collinearity Diagnostics values in the regression analysis in SPSS. If this assumption were violated, a new independent variable(s) would have been selected. The seventh assumption was that there are no outliers or extreme cases in the data (Lund & Lund, 2024). I assessed this assumption by performing the Case Wise Diagnostics test in SPSS. If this assumption were violated, the extreme case(s) from the study would have been removed.

BLR

I conducted a BLR analysis in this study to determine if the independent variables of gender of owner, age of firm, and the effect of COVID-19 are predictors of the dependent variable entrepreneurial funding. Gender of owner and age of firm are binary measures with categories coded as 0 = men owned and 1 = women Owned and (0 = 0–2 years and 1 = 6–10 years). Effect of the COVID-19 pandemic was an ordinal variable with three levels identified as 0 = little/no effect, 1 = moderate negative effect, and 2 = large negative effect. An ordinal variable may be entered in a BLR and treated as a nominal or continuous variable (Lund & Lund, 2024). For this regression analysis, the effect of COVID-19 was treated as a nominal variable.

The dependent variable in the study, entrepreneurial funding, was a dichotomous nominal variable with two categories identified as 0 = did not receive funding and 1 = did receive funding. Rather than predicting the category of the dependent variable, the BLR model predicts the logit of the dependent variable (Lund & Lund, 2024). The logit is defined as the natural log of the odds of a phenomenon occurring. (Lund & Lund, 2024). In this study, the BLR model was as follows: $\text{logit}(Y) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$. In this equation, Y represents the logit of the dependent variable entrepreneurial funding. β_0 represents the constant. $\beta_1 X_1$ represents the slope coefficient of the independent variable gender of owner, $\beta_2 X_2$ represents the slope coefficient of the independent variable age of firm, and $\beta_3 X_3$ represents the slope coefficient of the independent variable effect of COVID-19. The symbol ε represents the errors. I used this formula to determine the percentage of cases in the study that are correctly classified or predicted by the regression model.

Descriptive Statistics

Descriptive statistics are used in academic research studies to organize and describe research data, using tables, bar charts, scatter plots, graphs, and other visuals to explain research findings (Lund & Lund, 2024). In Section 3, I will present a variety of tables created from SPSS output to explain relationships between the independent and dependent variables in the study. I will use frequency tables to depict characteristics of the data, including the number of firms being studied, the years of operation for firms, the gender of firm owners, and the effect of COVID-19 on business operations.

Inferential Statistics

Inferential statistics allow researchers to draw conclusions about the data and assess whether patterns in the sample population will be present in the greater population (Lund & Lund, 2024). Common inferential statistical tests include *t* tests, analysis of variance (ANOVA), chi-square, correlations, and regression. In this study, I focused on tests for correlation coefficients, regression analysis, ANOVA, and chi-square statistics. These tests examine the relationships between the independent and dependent variables in the study (Lund & Lund, 2024).

In Section 3, I will present the results of these tests. I will begin with test results for the seven assumptions of BLR, then present the odds ratios test results for the independent variables in the study. Next, I will present results of the regression analysis in SPSS, calculating the parameter estimates and correlation coefficients for the variables in the study. The odds ratios help to explain how each independent variable contributes to the model, noting whether the contribution is statistically significant (Lund & Lund, 2024). An odds ratio that is greater than 1 indicates that as scores for the independent variable increase, the probability of the dependent variable occurring will also increase (Lund & Lund, 2024). Likewise, with odds ratios less than one 1, as scores for the independent variable decrease, the probability decreases that it is in that category of the dependent variable (Pisani & Morales, 2020). Next, I will perform the Nagelkerke Rsquare test to evaluate the BLR model fit. Results of the Nagelkerke R-square test will show how much of the variations in the dependent variable can be explained by the regression model (Corrales et al., 2018).

Reliability and Validity

For social scientific research findings to be generalizable and applied across different fields of business, researchers must show that their studies have reliability and validity in the adherence to proper research protocols and to an appropriate theoretical framework (Bolarinwa, 2020). Researchers can choose from two types of tests to evaluate the reliability of the data analysis instrument, including one test for reproducibility and another for internal consistency (Tang et al., 2015). Reproducibility tests yield the same outcomes at various times and in different settings, and internal consistency tests measure connections between items in the data analysis instrument (Tang et al.).

Validity tests check for (a) *internal validity*, which determines if an instrument measures the business phenomenon that it claims to measure, and (b) *external validity*, which determines if the sample population is representative of the greater population (Tang et al., 2015). Validity tests should prove the instrument to be the most appropriate one for the research study, for the data collection and analysis procedures, and for yielding final results that will be credible and generalizable across different industries (Bolarinwa, 2020).

Validity

The test of validity is important in each research study. Bolarinwa (2020) explained that the information provided in an instrument must accurately measure the phenomenon being explored and the constructs of the theory that grounds the study. Taylor (2019) described this as construct validity, emphasizing that research findings are not valid if the instrument does not accurately measure the theoretical constructs. The current study was grounded in situational leadership theory, and the SBCS data set that was used had to measure the constructs of that theory.

When Hersey and Blanchard introduced situational leadership theory in 1969, its key constructs emphasized how leadership styles and leader/follower behaviors affect individual task completion and ultimately affect general business performance (Gates, 1976). The constructs of the theory have evolved through the years to emphasize the adaptability of leadership styles and leader/follower behaviors to address factors present in the internal and external business environment (Cannatelli et al., 2017). Arnold (2019) included potential external environmental influences, certain socioeconomic conditions, political events, and cultural factors.

To evaluate construct validity in this study, I examined the 2021 SBCS, which was the primary source of data used for statistical analysis. The questionnaire is distributed annually to participating entrepreneurial firms across the United States to gather data about key aspects of business operations, such as business demographics; business performance; financial services and debt; and pandemic-related financial assistance, a category that recorded the impact of COVID-19 on business operations. I have reviewed the questions asked in each category of the survey to determine if they appropriately measure the constructs of situational leadership theory. I found that they were in alignment with the constructs of the theory because, taken together, they effectively measure the influence of internal factors, such as internal business demographics of the entrepreneur and the company itself such as years of operation and the influence of any existing or potential financial challenges or investment opportunities on business performance, as well as external factors, such as socioeconomic conditions that may be predictable or that may be unforeseen. For these reasons, the study has construct validity.

Summary

In Section 2, I provided details of the research project, restating the purpose of the study, the research question, and the hypotheses. I described the quantitative research method and ex post facto design as well as the data collection instrument and procedures, including population and sampling strategies. The data analysis procedures, scale measurements for all variables, tests for reliability and validity, and steps for performing BLR were explained. I also discussed the assumptions and the steps that were taken to ensure that they were not violated as well as the steps taken to make sure that this study's processes and procedures are ethical. In Section 3, I will present the findings of the study.

Section 3: The Deliverable

Executive Summary

The purpose of this quantitative, ex post facto study was to examine the relationship between entrepreneurs' gender, age of firm, socio-economic condition, and entrepreneurial funding. The study utilized secondary data from the 2021 SBCS Report on Employer Firms. The independent variables were gender of owner, age of firm, and the effect of COVID-19, while the dependent variable was entrepreneurial funding. I performed a BLR analysis to determine if there is a statistically significant relationship between these specified predictor variables and entrepreneurial funding. The findings of this study could improve collaborations between entrepreneurs and investors, create new funding opportunities for entrepreneurs, and increase the availability of goods and services for U.S. consumers.

Overview of the Study

The objective of this research study was to determine if there is a statistically significant relationship between gender of owner, age of firm, effect of COVID-19, and entrepreneurial funding. The 2020 SBCS was distributed to 15,000 SMEs with 9,547 responding, resulting in a 64% response rate. Data collected were stored in the SBCS data set and presented in the 2021 SBCS Report and Codebook. I used this demographical and financial data to conduct a BLR analysis within SPSS. The SBCS questionnaire included key questions on the external funding that firms sought to meet financial challenges (see Table 3), the types of funding they sought, whether these firms received or did not receive the funding they sought, and external factors, like the

COVID-19 pandemic, that may have helped or hindered the ability to secure funding. The data that I collected focused on gender of owner, age of firm, and effect of COVID-19 on business operations.

Table 3

Sample Questions Small Business Credit Survey

Variable	Questions	Possible responses
Gender of owner	What portion of your business is owned by a woman/women?	None Less than half Half More than half All
Age of firm	In what year was your business established (XXXX)?	
Effect of COVID	Did your business apply for a Paycheck Protection Program loan?	Yes, applied in 2020. Yes, applied in 2021. Yes, applied in 2020 and 2021. No, did not apply.

To ensure that I only selected the SBCS data that were relevant to the current study, I created a new data set that includes information specific to the variables in the study. I found one instance of missing data in the data set. In this instance, the SBCS did not provide funding data for the finance and insurance industry when it had provided this data for all other industries under the category heading, Financing received (all, most, some, none). To resolve this issue, I searched the original data set and collected comparable data for the finance and insurance industry from the category heading of Took Out Debt, which means that the firm(s) had at some point sought and received external funding. Redundancy was not an issue in the data.

BLR Assumptions Test Results

The use of BLR required testing seven assumptions. The first assumption was not violated because the dependent variable, entrepreneurial funding, is dichotomous with two categories, did receive and did not receive. The second assumption was not violated because all independent variables are categorical, and none are continuous. The third assumption, independence of observation, was not violated because the Durbin-Watson statistic in SPSS was approximately 2 points (see Table 4). Durbin-Watson outcome values approaching 2 signal the absence of high correlations in the data, while outcome values approaching 4 signal high correlations (Lund & Lund, 2024).

Table 4

Durbin-Watson Statistic

Model	*R*	*R* square	Adjusted *R* square	Std. error of the estimate	Durbin-Watson
1	.446 [a]	.199	.191	.354	1.963

[a] Predictors: (Constant), Effect of COVID-19, Gender of owner, Age of firm.

[b] Dependent variable—Entrepreneurial Funding.

The fourth assumption was not violated because the required sample size of 304 firms provides more than 15 cases to represent each variable. The fifth assumption of linearity was not violated because all variables in the study are categorical with two or more levels. With categorical variables, the relationship between the log odds of the dependent variable is inherently linear because a straight line can always be drawn between the levels of the independent variable (Dyanty et al, 2025). The sixth assumption that no multicollinearity exists among independent variables was not violated. Collinearity statistics showed VIF values below 10 (see Table 5), which is the threshold for high variance inflation and warns that an independent variable is redundant with others (see Peng et al., 2002). Tolerance values below 0.10 also signal possible multicollinearity (Peng et al., 2002). Those values are also well above that threshold.

Table 5

Collinearity Statistics

	Sig.	Collinearity tolerance	Statistics VIF
Constant	< .001		
Gender of owner	< .307	.361	.2771
Age of firm	< .001	.361	.2772
Effect of COVID-19	< .207	.999	.1001

[a] Dependent variable: Entrepreneurial funding.

The seventh assumption that no outliers be present in the data was not violated. The assumption was tested using the Case Wise Diagnostics in SPSS, showing standardized residuals at 2.79, 2.94, and 2.79, respectively, which are not far above the 2.5 measure for outliers (see Lund & Lund, 2024). **Descriptive Statistics**

Descriptive statistics may include frequencies, means and standard deviation values for the variables in a research study (Dyanty et al, 2025). I used SPSS to calculate frequency statistics for the variables in this study (see Table 6). The valid percent column represents firms that answered all questions in the SBCS survey, and the percent column represents firms that did not. For entrepreneurial funding, the sample consisted of 250

(80.9%) firms that did receive funding and 59 (19.1%) firms that did not receive funding ($N = 309$). For the independent variables, the sample consisted of 158 (51.1%) womenowned firms and 151(48.9%) men-owned firms ($N = 309$); 155 (50.2%) firms in operation for 6–10 years and 154 (49.8%) firms in operation for 0–2 years ($N = 309$); 120 (38.8%) firms that experienced a large negative effect of COVID-19, 98 (31.7%) that experienced little to no effect of COVID-19, and 91 (29.4%) that experienced a moderate negative effect of COVID-19.

Table 6

Frequencies for Dependent and Independent Variables

Variable	Frequency		Valid percent	Percent
Entrepreneurial funding	250	Did receive	80.9	74.6
	59	Did not receive	19.1	17.6
Gender of owner	158	Women owned	51.1	47.2
	151	Men owned	48.9	45.1
Age of firm	155	6–10 years	50.2	46.3
	154	0–2 years	49.8	46.0
Effect of COVID-19	120	LNE*	38.8	35.8
	91	MNE	29.4	27.2
	98	LNOE	31.7	29.3

*LNOE=Little/No, MNE=Moderate Negative, LNE=Large Negative

Inferential Statistics

Inferential statistics allow researchers to predict whether patterns in the sample population will be present in the greater population (Lund & Lund 2024). I used SPSS to conduct a regression analysis, including correlation coefficients, ANOVA, and chi-square tests. In this section, I discuss test results for odds ratio for each independent variable, parameter estimates or correlation coefficients, and results of the Likelihood Ratio Test.

ANOVA Statistic

The ANOVA test is a common inferential statistical test used to measure the relationship between independent variable(s) and a dependent variable (Lund & Lund, 2024). The sum of squares regression divided by sum squares total = R-Square or odds ratio. In the SPSS output, the ANOVA statistic means that 47.7% of the variations or changes in entrepreneurial funding can be explained by the predictors, gender of owner, age of firm, and effect of COVID-19. With this statistical evidence, I could reject the null hypothesis that there is no relationship between gender of owner, age of firm, effect of COVID-19, and entrepreneurial funding (see Table 7).

Table 7

Analysis of Variance (ANOVA)

Model		Sum of squares	*df*	Mean square	*F*	Sig.
1	Regression	9.488	3	3.163	25.222	< .001
	Residual	38.246	305	.125		
	Total	47.735	308			

[a] Dependent variable: Entrepreneurial funding. [b] Predictors: (Constant), effect of COVID-19, gender of owner, age of firm.

Rejecting the Null Hypothesis

The research question guiding this study was: What is the relationship between entrepreneurs' gender, age of firm, socioeconomic conditions, and entrepreneurial funding? The null hypothesis was: There is no statistically significant relationship between entrepreneurs' gender, age of firm, socioeconomic conditions, and entrepreneurial funding. The results of the inferential statistical analysis showed evidence of a relationship existing between the three independent variables and the dependent variable in the study with one predictor, age of firm, showing a statistically significant relationship. Because of the ANOVA statistic showing that 47.7% of the variations in entrepreneurial funding can be explained by the three independent variables, I could reject the null hypothesis. The Nagelkerke R-square statistic showing that 37.7% of the variations in entrepreneurial funding can be explained by the predictors provides additional support for rejecting the null hypothesis.

Likelihood Ratio Test

The -2 Log Likelihood, the R-square statistic, and the Hosmer-Lemeshow test measure goodness of fit, which tests the ability of the regression model to explain variations observed in an outcome variable based on two or more predictor variables (Dyanty et al., 2025). Results of these tests showed that the BLR model has accurately analyzed the SBCS data to predict variations in the logit of the dependent variable (i.e., entrepreneurial funding) based on the independent variables (i.e., gender of owner, age of firm, and effect of COVID-19). In BLR, values greater than 0.05 indicate that the model is a strong fit for analyzing the data (Lund & Lund, 2024). The large -2 Log Likelihood statistic of 228.935 was not statistically significant, suggesting a good fit for the model. The Nagelkerke R-square statistic of .337 was also not statistically significant, demonstrating that 33.7% of variations in entrepreneurial funding could be explained by the three predictor variables (see Table 8). The Hosmer-Lemeshow goodness of fit test compares observed cases to expected cases in the study (Peng et al., 2002). This value was not statistically significant (.762), indicating that the model is correctly specified and the proportion of observed cases and expected cases are similar.

Table 8

Likelihood Ratio Test

Step	-2 log likelihood	Cox & Snell *R* square	Nagelkerke *R* square
1	228.520 [a]	.210	.337

[a] Estimation terminated at Iteration 7 because parameter changed by less than .001.

Hosmer-Lemeshow Goodness of Fit Statistic

The Hosmer-Lemeshow goodness of fit test compares observed cases to expected cases in the study (Peng et al., 2002). This value was not statistically significant (.762), indicating that the model is correctly specified and the proportion of observed cases and expected cases are similar (see Table 9).

Table 9
Hosmer and Lemeshow Test

Step	Chi-square	*df*	Sig.
1	2.594	5	.762

The chi-square statistic, generated in the Omnibus Test of Model Coefficients (see Table 10), also shows a relationship between the independent variables and the dependent variable with $p < .001$, which is below the 0.05 threshold for statistical significance, meaning the independent variables are accurately predicting entrepreneurial funding.

Table 10

Omnibus Tests of Model Coefficients

		Chi-square	*df*	Sig.
Step 1	Step	72.805	4	< .001
	Block	72.805	4	< .001
		72.805	4	< .001

Variables in the Equation

Table 11 shows the statistical significance of the contribution of each independent variable (i.e., gender of owner, age of firm, effect of COVID-19) to the prediction of the dependent variable (i.e., entrepreneurial funding). The Beta value in the first column represents the log odds coefficient for each independent variable. The positive Beta means the specified independent variable can be associated with an increase in the likelihood of a company receiving funding. A negative Beta value means the specified independent variable may not be associated with that increase and with every one unit of increase in the variable the probability of receiving entrepreneurial funding would decrease.

Table 11

Variables in the Equation

	Variable	B	*SE*	Wald	*df*	Sig.	Exp(B)	95% CI for Exp(B) Lower	Upper
Step 1[a]	Gender of owner	.518	.552	.879	1	.348	1.678	.569	4.951
	Age of firm	3.000	.743	16.319	1	< .001	20.095	4.687	86.159
	Effect of COVID-19			1.934	2	.380			
	Effect of COVID-19 (1)	.469	.386	1.475	1	.225	.636	.294	1.333
	Effect of COVID-19 (2)	.467	.403	1.338	1	.247	.627	.284	1.383
	Constant	.788	.274	8.301	1	.004	2.199		

[a] Variable(s) entered in Step 1: Gender of owner, Age of firm, Effect of COVID-19.

Odds Ratios Statistics

Gender of Owner

The Odds Ratio or Exp(B) for this predictor variable means that the probability of receiving entrepreneurial funding is 1.68 times higher for female-owned firms than for male-owned firms, controlling for age of firm and effect of COVID-19. The 95% C.I. for Exp(B) = [.583, 4.951] is above 1, suggesting that there is a relationship between gender of owner and entrepreneurial funding. The positive .518 Beta value suggests a positive relationship with the outcome variable (i.e., entrepreneurial funding); however, the Wald statistic (.879) and Sig value (.348) are well above the 0.05 threshold measuring statistical significance, indicating that gender of owner is not a statistically significant predictor of entrepreneurial funding (see Table 11).

Age of Firm

The Odds Ratio or Exp(B) for this predictor variable mean that the probability of receiving entrepreneurial funding is 20.1 times higher for firms that have been in operation for 6–10 years than for firms that have been in operation for 0–2 years, controlling for gender of owner and effect of COVID-19. The 95% C.I. for Exp(B) = [4.687, 86.159] is well above 1, suggesting that there is a strong relationship between age of firm and entrepreneurial funding. The positive 3.00 Beta suggests a strong positive relationship with the outcome variable (entrepreneurial funding). The Wald statistic at 16.3 and the Sig value of <.001 suggest that age of firm is a statistically significant predictor of entrepreneurial funding (see Table 11).

Effect of COVID-19

The Odds Ratios or Exp(B) for this predictor variable mean that for firms experiencing a moderate negative effect of COVID-19 the probability of receiving entrepreneurial funding was .626 higher than for firms experiencing a large negative effect or little to no effect of COVID-19, controlling for gender of owner and age of firm. The negative Beta values for at least two of the categories indicate that COVID19 may not be associated with the likelihood of an increase in the outcome variable (i.e., entrepreneurial funding). A negative Beta value means that for each one unit of increase in the independent variable, the dependent variable decreases (Lund & Lund, 2024). The Wald statistics of 1.48 and 1.34, respectively, for the moderate negative effect of COVID-19 (coded 1) and large negative effect of COVID-19 (coded 2) along with the Sig values of .225 for moderate negative effect and .247 for large negative effect are well above the 0.05 threshold for statistical significance. These values indicate that COVID19 is not a statistically significant predictor of entrepreneurial funding (see Table 11).

Constant (Intercept)

The intercept term statistic represents the log odds of entrepreneurial funding when all the predictor variables (i.e., gender of owner, age of firm, and effect of COVID19) are 0. The Sig value of .004 ($p =< 0.05$) indicates statistical significance. The constant is statistically significant, suggesting that the baseline probability of entrepreneurial funding (when all the predictor variables are 0) will not be 0 (see Table 11).

Interpretation of the Findings

The purpose of this quantitative, ex post facto research study was to explore the relationship between the independent variables of gender of owner, age of firm, effect of COVID-19 and the dependent variable of entrepreneurial funding. The findings of the study show that there is a relationship between the three predictor variables and the dependent variable, entrepreneurial funding. Age of firm is the only predictor that was found to be statistically significant. A relationship between gender of owner and entrepreneurial funding was established in the statistical analysis with female-owned firms being 1.68 times more likely to receive funding to meet financial challenges than male-owned firms. Berger and Kuckertz (2016) noted that support for gender equity often led to increased funding of female-owned companies. Arroyo et al. (2016) found gender to be a negative predictor of high-growth expectations among entrepreneurs because female entrepreneurs were less confident about expanding operations than male entrepreneurs. However, the Arroyo et al. study drew no conclusions about whether these low expectations influenced business performance or affected the entrepreneurs' ability to secure funding. Previous studies have cited growth potential and longevity as factors that investors consider when deciding if they will support entrepreneurial ventures (Mack et al., 2020). Thus, female entrepreneurs' hesitation to pursue growth and development of their companies could be a deterrent for potential investors.

A closer look at the link between age of firm and entrepreneurial funding showed that firms operating 6–10 years were 20.1 times more likely to receive funding to meet financial challenges than firms operating 0–2 years. Prior research has noted a connection between company longevity and funding. Bonini et al. (2019) found that during the COVID-19 pandemic, traditional lending institutions decreased entrepreneurial investments but continued to invest in established businesses.

The effect of COVID-19 on entrepreneurial funding is the socioeconomic condition examined in this study. Statistical analysis showed that there is a relationship between COVID-19 and entrepreneurial funding, although not a statistically significant one. Firms that experienced a moderate negative effect of COVID-19 were .626 times more likely to receive funding than those firms that experienced a large negative effect or little to no effect of COVID19. Of the 309 firms analyzed, 120 experienced a large negative effect, 91 experienced a moderate negative effect, and 98 experienced little to no effect. Previous research has shown that socioeconomic conditions can affect entrepreneurial funding. Gonzalez-Pernia et al. (2018) noted a drop in entrepreneurial investments during recessionary periods as entrepreneurs and investors sought to curtail risk-taking behaviors. Pisani and Morales (2020) found that education and levels of acculturation determined if Latino entrepreneurs formally registered their businesses or not. Of the 4,024 Latino-owned firms surveyed, most were not formally registered with Mexican entrepreneurs (95.9%) and Puerto Rican entrepreneurs (54.1%) being more likely to operate informally. It was not clear whether the failure to register a business formally was a deterrent for potential investors. Further research is needed to explore the relationships between socioeconomic conditions, gender of owner, and entrepreneurial funding. This research contributes to the body of knowledge on entrepreneurship by providing statistical evidence of a relationship between these variables and entrepreneurial funding. Previous studies considered these variables separately but not in tandem; therefore, the current study findings give entrepreneurs and investors new tools to promote entrepreneurial success.

Limitations of the Study

The goal of this study was to explore the relationship between certain demographical characteristics, socioeconomic conditions, and entrepreneurial funding. The study focused on SMEs primarily because the Global Entrepreneurship Monitor (2021) identified most entrepreneurial firms in the United States as SMEs. The focus on SMEs meant, however, that there was no substantive examination of how entrepreneurial funding affects large firms. The focus on the two demographic identifiers, gender of owner and age of firm, was another limitation of the study because other identifiers, such as race and ethnicity, may affect entrepreneurial funding. Similarly, the study included firms from across the United States, but there was no analysis of whether the size or geographical location was linked to entrepreneurial funding. These may all be worthwhile topics of future research. Finally, the use of secondary data was a limitation of the study because it relates to socioeconomic conditions. The SBCS data set used in the study provided comprehensive data on the effect of COVID-19 on entrepreneurial funding in 2019 and 2020. However, this study may have been enhanced by examining real-time data on the relationship between entrepreneurial funding and current socioeconomic conditions, like government tariffs. These limitations do not diminish the value of this study's findings because entrepreneurial funding remains a critical topic of interest for business leaders.

Recommendations

Because entrepreneurship is a global phenomenon, more academic research is needed to understand the challenges of entrepreneurial funding. To gauge the economic impact of entrepreneurship worldwide, the World Bank monitors governance indicators, like political stability, government effectiveness, regulatory quality, and education standards (Abegaz et al, 2023). By exploring the relationship between owner demographics, like gender of owner and age of firm, socioeconomic conditions, like effects of COVID-19, and entrepreneurial funding, this study provides additional insight into the challenges of entrepreneurial success. The findings of this study show that owner demographics and socioeconomic conditions can impact entrepreneurial funding and should be considered by entrepreneurs and investors as they plan for business startup or expansion. Collaborations between key stakeholders including entrepreneurs, investors, business leaders, and consumers, are highly recommended in order to identify the most pressing challenges to entrepreneurship. These collaborations could determine future research topics, making sure that research findings would be relevant, timely, and useful not only to scholars but to business practitioners as well. If entrepreneurs knew what goods and services consumers truly desire, their businesses would stand a better chance of becoming viable and turning a profit for investors.

Future research could also focus on a new set of predictor variables, such as location of firm, size of firm, race of owner, ethnicity of owner, and entrepreneurial funding. Brown et al. (2020) found race and ethnicity to be factors in the pursuit of business ownership and sometimes in the sustainability of companies. That study, however, did not explore any connections to funding. Similarly, Wenn and Anderson (2020) explored the influence of external socioeconomic conditions, such as location, without any substantive look at the connection to funding. Wright (2017) studied the influence of a company's size, climate, and location on business success. Because the availability of external funding sources can be the cause of whether a business succeeds, the findings of the current study should be built upon. This would create positive social change across the United States by improving the lives of the consumers through more diverse product offerings, enhancing business practice and expanding opportunities for entrepreneurs, and increasing profitability and new clientele for investors.

Implications

The understanding that there is a relationship between owners' demographical characteristics, socioeconomic conditions, and the ability to secure funding for entrepreneurial firms is an additional piece to the puzzle of entrepreneurship, specifically why some firms are much more likely to gain the financial support they need while others are not. The Global Entrepreneurship Monitor (2021) continued to note these concerns in its attempts to explain variations in support for entrepreneurial ventures. My desire is to see this study and its findings published in mainstream trade publications and on websites and social media platforms of similar interest. I plan to seek out opportunities to present it before business leaders and other entities that promote entrepreneurship. The link to my Optimal Resume Portfolio is https://waldenu.optimalresume.com/modules/portfolio/selectSample.php?docid=1076286

Conclusion

The findings of this study showed that the three independent variables of gender of owner, age of firm, and effect of COVID19 had some association with the changes observed in entrepreneurial funding. Age of firm was the only predictor showing a statistically significant relationship with entrepreneurial funding. This suggests that entrepreneurs and investors should focus on longevity as they plan organizational strategies. Profitability matters to all parties, of course; however, the findings of this study suggest that investors will wait for profitability if business owners can stay afloat, generate income, and build a loyal clientele. This is useful information for entrepreneurs and investors planning the startup or expansion of business ventures.

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Appendix: The Small Business Credit Survey Questionnaire

2021 Small Business Credit Survey of the Federal Reserve Banks

Introduction

Thank you for participating in the 2021 Small Business Credit Survey.

This voluntary survey is sponsored solely by the Federal Reserve Banks. **The questions are best answered by an owner or key financial decision maker of your business** and will take about 10 minutes to complete.

Survey responses will be aggregated for research and analysis. The Federal Reserve Banks will not disclose individual or identifiable survey responses except to trusted service providers to prepare aggregated data for analysis under strict confidentiality guidelines or if required by law or legal process. The Federal Reserve Banks may make anonymized data publicly available.

By taking this survey, you agree to this use of your responses.

Business Operations

Is your business currently operating?

○ Yes

○ No, business is not yet started

○ No, business is *temporarily* closed

○ No, business has *permanently* closed or been sold/transferred

[If business is "temporarily closed"]

Why is your business temporarily closed? *Select all that apply.*

☐ COVID-19

☐ Government-mandated restrictions or closures

☐ Labor shortages

- ☐ Supply-chain disruptions
- ☐ Extreme weather event or natural disaster
- ☐ Business is seasonal
- ☐ Lack of demand
- ☐ Cannot secure financing to fulfill contract(s)
- ☐ Owner tending to other matters (e.g., family, medical reasons) ☐ Business is moving, being renovated, etc.
- ☐ Other. Please specify: ____

[If business is "temporarily closed"]
How long has your business been temporarily closed?

○ Less than 6 months ○ 6 - 12 months ○ More than 12 months

Firm Demographics

In what year was your business established? (YYYY)________________

Which state or territory is your headquarters located in?

ZIP code? __________

In what industry does your business operate? ○ Manufacturing ○ Finance or insurance

○ Wholesale trade ○ Another industry ○ Unsure

☐ Check here if your organization is a nonprofit/ 501(c)(3)

Please describe the work your business does. As you type, a list will appear. Select your business's industry or write in your own description.
Note: this screen may take a few seconds to load. If you encounter a connection error message, click 'retry'.

____

[if industry is "Finance or insurance"]
Is your business a lender? (*e.g., equity investment firm, financial institution, etc.)* ○ Yes

○ No

Next, we have a few questions about the approximate size of your business. Does your business currently have any paid employees, excluding owner(s) and contract workers?[1] ○ Yes ○ No ○ Unsure. Please explain:

____

In the past 12 months, did your business use any **contract workers**?[1] ○ Yes ○ No ○ Unsure

*1 A **contract worker** performs specific services for a set rate or pay on a non-permanent basis. The business does not withhold employment taxes on payments to a contract worker.*

[if business has employees]
How many employees does your business have, excluding owners?

	Number **(If none, enter 0)**
Full-time employees *(30+ hours/ week)*	
Part-time employees *(less than 30 hours/ week)*	

How many **owners** does your business have? Only include those individuals who **own a share of the business and/or profits.**

○ 1

○ 2

○ 3

○ 4

○ 5 or more

☐ Check here if any share of your business is owned by another company or entity (e.g., an estate, trust, cooperative, shareholders)

Note: Please exclude the entity/ entities from the number of individual owners. If the entity is the sole owner of this business, please select "1" for the question "How many owners does your business have?"

[if business has one owner and is owned by an entity] Is the entity the sole owner of this business? ○ Yes ○ No

Business Performance

We now have a few questions about your business's performance and challenges.

What were your business' total revenues in 2020? *Please provide your best estimate.* ○ $25,000 or less ○ $25,001 - $50,000 ○ $50,001 - $100,000 ○ $100,001 - $500,000 ○ $500,001 - $1,000,000 ○ $1,000,001 - $5,000,000 ○ $5,000,001 - $10,000,000 ○ More than $10,000,000 ○ Unsure or decline to answer

At the end of 2020, was your business operating at a profit,[1] break-even, or loss?

○ At a profit ○ At break-even ○ At a loss ○ Unsure or decline to answer

1 Profit is the financial benefit when the amount of revenue gained from business activity is greater than business expenses and costs.

The pandemic changed a lot about how we do business. How would you describe your business **revenues now** compared to this time in 2019? ○ Decreased ○ No change ○ Increased ○ Unsure

[if business has employees]
How would you describe the number of **employees** working at your business **now** compared to this time in 2019? ○ Decreased ○ No change ○ Increased ○ Unsure

[if business has employees]
How did the following change over the **past 12 months?**

	Decreased	No change	Increased
Revenue	○	○	○
Number of employees	○	○	○

[if business has no employees]
How did your business revenue change over the **past 12 months**?

○ Decreased ○ No change ○ Increased

[if business has employees]
How does your business **expect** the following to change over the **<u>next 12 months</u>?**

	Decrease	No change	Increase
Revenue	○	○	○
Number of employees	○	○	○

[if business has <u>no</u> employees]
How do you **expect** your business revenue to change over the **<u>next 12 months</u>**?

○ Decrease ○ No change ○ Increase

[if business has <u>no</u> employees]
Do you **expect** your business will add employees over the **<u>next 12</u> <u>months</u>**? ○ Yes ○ No

Has your business experienced any of the following **financial** challenges during the **<u>past 12 months</u>**? *Select all that apply.*

- ☐ Weak sales
- ☐ Paying business expenses (including wages, rent, inventory costs, debt payments)
- ☐ Uneven cash flow (including collecting on receivables)
- ☐ Credit availability
- ☐ Other financial challenge. Please specify: ______________________________
- ☐ **Did not experience any financial challenges**

[if business had financial challenges]
What actions did your business take to deal with the financial challenges? *Select all that apply.*

- ▢ Made a late payment or did not pay
- ▢ Cut staff, hours, and/or downsized operations
- ▢ Used personal funds
- ▢ Obtained funds that must be repaid (loans, debt)
- ▢ Obtained funds that do not have to be repaid (grants, donations, PPP if forgiven)
- ▢ Used cash reserves
- ▢ Other action. Please specify: ___________________________________
- ▢ **No action** ▢ Unsure

How would you rate the **current** financial condition of your business?

○ Excellent ○ Very good ○ Good ○ Fair ○ Poor

Has your business experienced any of the following **operational** challenges during the **past 12 months**? *Select all that apply.*

- ▢ Hiring or retaining qualified staff
- ▢ Supply-chain issues
- ▢ Complying with government regulations (including pandemic-related mandates)
- ▢ Reaching customers/ growing sales
- ▢ Utilizing technology (e.g., website, social media, ecommerce, cybersecurity)
- ▢ Ensuring health/safety of customers or employees
- ▢ Other operational challenge. Please specify: ____________________________
- ▢ **Did not experience any operational challenges**

How would you describe the effect that the COVID-19 pandemic is **currently** having on your business? ○ Large positive effect ○ Moderate positive effect ○ Little to no effect ○ Moderate negative effect ○ Large negative effect

Financial Services and Debt

We have a few questions about your business finances.

Does your business have an account or use other financial services (including loans, payments processing, etc.) at any of the following? *Select all that apply.*

☐ Large bank

☐ Small bank

☐ Credit union

☐ Community development financial institution (CDFI)

☐ Nonbank online lender/ fintech company (e.g., OnDeck, Kabbage, Paypal, Square) ☐ Nonbank finance company (e.g., mortgage companies, auto/equipment dealers, investment funds)

☐ Alternative financial source (e.g., payday lender, check cashing, pawn shop, money order/ transmission service)

☐ Business financial services company (e.g., payroll processing, merchant services, accounting) ☐ Other. Please specify:

____

☐ **None, business does not use financial services**

Which of these is your business's **primary** source of financial services?

[repeat response options selected in prior question]

[if business does not use either a large bank or a small bank]

You told us your business does not use a large bank or a small bank for financial services. Why has your business chosen not to use a **bank**? *Select all that apply.*

☐ Bank locations are inconvenient

☐ Banks do not offer needed products/services

☐ Don't trust banks

☐ Costs/fees too high

☐ Avoiding a bank offers more privacy

☐ Would not meet bank requirements (minimum balance, documentation, etc.) ☐ Banks don't work with businesses like mine.

☐ Other. Please specify:_____________

[if "banks don't work with businesses like mine"]
In your response to the prior question, you told us banks don't work with businesses like yours. Please explain. ____

Does your business have any debt[1] outstanding?

○ Yes ○ No

○ Unsure

1 Debt is funds borrowed from external parties, including formal borrowing from financial institutions and loans from family and friends. Examples include, but are not limited to, loans, trade credit, leases, cash advances, and credit cards. ***Include financial assistance funding related to COVID-19 if it must be repaid****.*

[if business has debt outstanding]
How much total debt outstanding does your business have? ○ $25,000 or less ○ $25,001 - $50,000

○ $50,001 - $100,000 ○ $100,001 - $250,000

○ $250,001 - $1,000,000 ○ More than $1,000,000 ○ Unsure

Pandemic-Related Financial Assistance

The next series of questions will ask about the financial assistance your business sought in response to the COVID-19 pandemic.

Did your business **APPLY** for a PPP loan? ○ Yes, applied in 2020 ○ Yes, applied in 2021 ○ Yes, applied in 2020 and 2021 ○ No, did not apply

○ Unsure

1 The Paycheck Protection Program (PPP) is administered through the U.S. Small Business Administration.

[if business applied for PPP loan in 2020]
The next two questions ask about the PPP loan your business applied for in 2020.

[if business applied for PPP loan in 2020]
How much of the PPP funding that your business sought **in 2020** did your business receive?

○ All (100%)
○ Most (51%-99%)
○ Some (1%-50%)
○ None (0%)
○ Unsure

[if business received 2020 PPP funds]

Did your business receive forgiveness for the **<u>2020</u>** PPP loan?

○ Full forgiveness

○ Partial forgiveness

○ Pending ○

Loan NOT forgiven ○

Unsure

[if business applied for PPP loan in 2021]

The next few questions ask about the PPP loan your business applied for in <u>2021</u>.

Note: Some businesses were eligible for two PPP loans this year. If your business applied for two separate PPP loans in 2021, tell us about the <u>most recent</u> loan you sought.

[if business applied for PPP loan in 2021]

How much of the PPP funding that your business sought **<u>in 2021</u>** did your business receive?

If your business applied for two separate PPP loans in 2021, tell us only about the <u>most recent</u> loan you sought.

○ All (100%) ○

Most (51%-99%)

○ Some (1%-50%)

○ None (0%)

○ Unsure

[if business applied for PPP loan in 2021]

Where did you apply for the **<u>2021</u>** PPP loan? *Select all that apply*

- ☐ Large bank
- ☐ Small bank
- ☐ Community development financial institution (CDFI)
- ☐ Online/ fintech lender (e.g., OnDeck, Kabbage, Paypal Working Capital, Square)
- ☐ Credit union
- ☐ Finance company (nonbank small business lender)
- ☐ Other lender. Please specify:_________

[if business applied at multiple sources for 2021 PPP loan]
At which source was your PPP loan application processed or most complete? *Select one.*

[repeat for each source business applied to for 2021 PPP loan]
Did your business have an existing relationship with the `{Source}` prior to submitting your PPP loan application? ○ Yes ○ No ○ Unsure

[if 2021 PPP loan fully or partially approved]
Has your business qualified, or do you expect your business will qualify, for PPP loan forgiveness for **the 2021 PPP loan**? ○ Yes, full forgiveness

○ Yes, partial forgiveness ○ No

○ Unsure

[if business has no employees]
Did any owner of this business, as a self-employed individual, collect unemployment insurance benefits **in the past 12 months**?[1] ○ Yes ○ No ○ Unsure

1 *The CARES Act and the Consolidated Appropriations Act gave states the option of extending unemployment compensation to independent contractors and other self-employed workers who are ordinarily ineligible for unemployment benefits.*

Other than any PPP loan applications, what type(s) of pandemic-related financial assistance did your business apply for **in the past 12 months**? *Select all that apply*

☐ SBA's Economic Injury Disaster (EIDL) **loan**

☐ SBA's Economic Injury Disaster (EIDL) **advance**

☐ Shuttered Venue Operators (SVO) **grant**

☐ Restaurant Revitalization Fund (RRF) **grant**

☐ **Loan** from state/local government fund

☐ **Grant** from state/local government fund

☐ **Grant** from a nonprofit or foundation

☐ Other. Please specify:___________

☐ **Did not seek assistance through these programs**

1 The Paycheck Protection Program (PPP), Economic Injury Disaster Loan (EIDL), Shuttered Venue Operators (SVO) grant, and Restaurant Revitalization Fund (RRF) grant are administered through the U.S. Small Business Administration.

[if business did not seek any pandemic-related financial assistance]
Why did your business not seek pandemic-related financial assistance in the past 12 months? *Select all that apply.*

☐ Could not find a program to fit my business needs

☐ Programs too confusing or time-consuming

☐ Did not think business would qualify

☐ Other reason. Please specify:____________

☐ **Business did not need funding**

[if business sought any financial assistance, excluding PPP]

Other than any PPP loans, how much of the TOTAL pandemic-related financial assistance that your business sought **in the past 12 months** did your business receive? ○ All (100%) ○ Most (51%-99%) ○ Some (1%-50%) ○ None (0%) ○ Unsure

Demand for Financing (Excluding Pandemic-Related Financial Assistance)

For the following questions about your business finances, EXCLUDE any governmentprovided financial assistance related to COVID-19 you already told us about.

Did your business **APPLY** for any financing in the past 12 months?

Borrowing, leasing, or requesting equity investments, excluding financing provided by owner(s) of business and applications for PPP, EIDL, and other pandemic-related government loans/grants.

○ Yes, completed at least one application

○ Started credit search or application process but didn't complete ○ Did not apply

○ Unsure

[if business is a nonapplicant, meaning they did not apply for financing] Why didn't your business apply for financing? ○ Not needed; had sufficient funding ○ Needed funds, but chose not to apply ○ Unsure

[if business is a nonapplicant that needed funds but chose not to apply] What was the **primary** reason your business chose not to apply? ○ Did not think application would be approved ○ Did not want to accrue debt ○ Credit cost was too high ○ Application process was too difficult or confusing

○ Other. Please specify: ____

[if business is a nonapplicant that did not apply because application would not be approved] What were the likely reasons your business would not be approved? *Select all that apply.*

☐ Weak business financials (low credit score, too much debt, weak sales, etc.)

☐ Lender requirements too strict

☐ Missing documentation

☐ Was denied financing previously

☐ Lenders do not approve financing for businesses like mine

☐ Other. Please specify: ____

☐ Unsure

[If "lenders do not approve businesses like mine" is selected]
You told us that lenders do not approve financing for businesses like yours. Please explain. ______________________________

Financing Applications

[for firms that applied for financing in the prior 12 months]

For what purpose(s) was your business seeking financing? *Select all that apply.*

☐ Meet operating expenses (including wages, rent, etc.)

☐ Expand business, pursue new opportunity, or acquire business assets

☐ Replace capital assets or make repairs

☐ Refinance or pay down debt

☐ Other. Please specify: ____

How much **TOTAL** financing was your business **SEEKING** in the last 12 months?

○ $25,000 or less ○ $25,001 - $50,000 ○

$50,001 -
$100,000 ○
$100,001 -
$250,000 ○
$250,001 -
$1,000,000 ○
More than
$1,000,000 ○
Unsure

How much of the **TOTAL** financing dollars that your business sought in the last 12 months did you obtain? ○ All (100%) ○
Most (51%99%)
○ Some
(1%-50%) ○
None (0%)
○ Unsure

Why did your business not obtain all of the financing sought? *Select all that apply.*

- ☐ At least some of the financing was not approved
- ☐ Application(s) pending or incomplete
- ☐ Business did not accept some or all of the approved financing
- ☐ Other. Please specify: ____

[If "at least some financing was not approved" is selected]
What were the reasons your business was not approved for the full amount of financing it sought? *Select all that apply.*

- ☐ Low credit score
- ☐ Insufficient collateral

- ☐ Too much debt already
- ☐ Weak sales
- ☐ Lender requirements too strict
- ☐ Missing documentation
- ☐ Lenders do not approve financing for businesses like mine.
- ☐ Other. Please specify: ______________________________
- ☐ Unsure

[if "lenders do not approve businesses like mine" is selected]
You told us that lenders do not approve financing for businesses like yours. Please explain. ______________________

In the past 12 months, what types of financing did your business **apply** for? *Select all that apply.*

- ☐ Loan or line of credit
- ☐ Merchant cash advance
- ☐ Credit card
- ☐ Trade credit
- ☐ Home equity line of credit
- ☐ Equity investment
- ☐ Factoring (sale of accounts receivable)
- ☐ Lease
- ☐ Other. Please specify: ______________________________
- ☐ Unsure

Recent Credit Applications

[for firms that applied for a loan, line of credit, or cash advance in the prior 12 months]

Now, we'd like to ask about your business's loan, line of credit, and/ or cash advance applications submitted in the past 12 months.

In the past 12 months, how many total **loan, line of credit, and/ or cash advance** applications did you submit?________

Beginning with your most recent application, tell us about each loan, line of credit (LOC), and/ or cash advance your business applied for in the past 12 months. If your business submitted more than three applications, tell us only about the three most recent.

Note: 'Online lender' refers to lending institutions that operate solely through a website or app.

	Product	Source (see below for examples)	Share approved
	SBA loan/LOC Business loan Business LOC Personal loan Mortgage Auto/equipment loan Merchant cash advance Home equity LOC Other product	Large bank Small bank Credit union Online lender CDFI Finance company Other source	All (100%) Most (51%-99%) Some (1%-50%) None (0%) Pending Unsure
Most recent	▼	▼	▼
2nd most recent	▼	▼	▼
3rd most recent	▼	▼	▼

*"**LOC**" refers to a line of credit.*
*"**SBA**" refers to a loan or line of credit, often obtained from a bank, which is partially guaranteed by the Small Business Administration.*

***"Online lenders"**, also called fintech lenders, are nonbanks that lend online. Examples include: OnDeck, CAN Capital, Paypal Working Capital, Kabbage, etc.*
***"CDFI"** refers to community development financial institutions.*
***"Finance company"** includes nonbank lenders such as mortgage companies, equipment dealers, insurance companies, auto finance companies, etc.*
Large banks operating in your area include: *[display list for respondent's state]*

*[repeat question series for **two** most recent loan/LOC/cash advance applications]*
All of the questions on this page pertain to your {most recent | second most recent application}**, the** {Product 1 | 2}.

[if source is "Online Lender"]

From which type of nonbank online lender did you obtain the {Product 1 | 2}? ○ Retail/payments processor (e.g., Paypal Working Capital, Square Capital, Amazon Capital Services) ○ Merchant cash advance lender (e.g., RapidAdvance, CAN Capital, Credibly) ○ Direct lender (e.g., OnDeck, Kabbage, Fundation, Blue Vine) ○ Other. Please specify lender:__________

[if source is "Other source"]
Please specify the **type of lender** for your {most recent | second most recent application}, for the {Product 1 | 2}:________________

[if product is "Other product"]
Please specify the **other product** of your {most recent | second most recent application}, from the {Source 1 | 2}:___________________

Did your business experience any challenges in applying for the {Product 1 | 2} at the {Source 1 | 2}? *Select all that apply.*

- ☐ High interest rate
- ☐ Unfavorable repayment terms
- ☐ Long wait for credit decision or funding
- ☐ Difficult application process
- ☐ Lack of transparency
- ☐ Other challenges. Please specify:______________

☐ **Experienced no challenges**

Overall, was your business satisfied or dissatisfied with the {Source 1 | 2} where you applied for the {Product 1 | 2}? ○ Satisfied ○ Neutral ○ Dissatisfied

Final Demographics

Last, we have a few general questions about your business and the characteristics of the owner(s).

You previously indicated that your business has {Number of owners} owner(s). What is the race and ethnicity of the owner(s)? *Please complete the entire table.*

	Ownership share of business	Ethnicity		Race[1]					
	Enter a percentage in every box: (0-100)	Hispanic or Latino	Not Hispanic or Latino	White	Black or African American	Asian or Pacific islander	American Indian or Alaskan Native	Middle Eastern or North African	Other race
Owner #1		○	○	○	○	○	○	○	○
Owner #2		○	○	○	○	○	○	○	○
Owner #3		○	○	○	○	○	○	○	○
Owner #4		○	○	○	○	○	○	○	○

If there are more than four owners, tell us about the four persons with the ***greatest ownership share****.*

1 According to the US Census Bureau, people of European origin (including Spain and Portugal) are racially 'white.'

[if "other race" is selected]
Please specify the 'Other race' of the owner(s).________

[if "American Indian or Alaskan Native" is selected]
Is your business headquartered in a Native American reservation?

○ Yes. Please specify the reservation:_________________________________ ○ No

[Display note for businesses that are entity-owned]
If your business is wholly owned by an entity or another company, please consider the primary financial decision maker for this business when responding to questions about the primary owner.

Does your business rely on a business credit score or does it use an owner's personal credit score?

○ Business score ○ Owner's personal score

○ Both business score AND personal score ○ Unsure or neither

[if business uses a business credit score]
What would you say is your firm's **business** credit score?

○ 80-100 ○ 50-79 ○ 0-49 ○ Unsure

[if business uses a personal credit score]
What would you say is the **primary owner's personal** credit score?
*If owners have equal ownership shares, select the credit score of the owner that is the **primary financial decision maker**.* ○ Above 760 ○ 720-760 ○ 680-719 ○ 620-679 ○ Below 620 ○ Unsure

What is the age of the primary owner of this business?
*If owners have equal ownership shares, please respond for the owner that is the **primary financial decision maker**.* ○ Under 25 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65 or over

○ Unsure

[if business has <u>no</u> employees]

Is your business **legally incorporated**?[1] ○ Yes ○ No

○ Unsure

*[1] **Legally incorporated** refers to businesses that are legal entities separate from the owner(s).*

[if business has <u>no</u> employees]

Which best describes the primary owner's work at this business?

*If owners have equal ownership shares, please respond for the owner that is the **primary financial decision maker**.* ○ This business is the owner's only job ○ Owner has more than one job, this business is the main job ○ Owner has more than one job, this business is NOT the main job ○ Owner does not regularly work at this business

[if business has <u>no</u> employees]

Would the primary owner consider the work done for this business to be "gig"[1] work?

○ Yes ○ No

○ Unsure

*1 A **gig** is a single project or task for which a worker is hired, sometimes through a digital marketplace, to work on demand. Examples include: Uber driver, freelancer, etc.*

[if business has <u>no</u> employees]

Does this business work as an independent contractor for other businesses or agencies?

○ Yes

○ No

Within the past 12 months, did your business sustain direct or indirect losses from a natural disaster **<u>other than COVID-19</u>** (e.g., hurricane, wildfire, earthquake, etc.)?

○ Yes ○ No ○ Unsure

Do you have any comments about the availability of business financing or general business conditions? ____

Business name: ____________________

Email address (used only for survey-related purposes). You will receive a copy of the final report once it is released. _______________

Thank you for your valuable input. The information you provided will bring small business issues to the attention of policymakers.

Based on your responses, we would like to ask you a few additional questions. Please select **Continue** to answer questions on special topics; this should take 2-3 minutes to complete. Or you may select **Submit** to complete the survey now.

○ Continue *[if selected, continue to special topic questions]* ○ Submit

Special Topic 1: Impact of Natural Disasters

[for firms that sustained losses due to a natural disaster]

Now, we're going to ask about the natural disaster that affected your business. Please exclude the effects of COVID-19 on your business when responding to these questions.

What was the cause of the damage or losses? *Select all that apply.*

☐ Hurricane/ tropical storm

☐ Flood

☐ Severe thunderstorm/ tornado (including wind, hailstorm)

☐ Winter storm or freeze

☐ Wildfire

☐ Drought/ Heatwave

☐ Earthquake or other geological event (tsunami, volcano, landslide) ☐ Other. Please specify:

____

Did your business temporarily close because of this natural disaster? ○ Yes ○ No ○ Unsure

[if business temporarily closed]
How long was your business closed?

○ Less than 3 months ○ 3 – 6 months ○ 6 – 12 months ○ More than 12 months

What is the estimated value of your business's losses as a result of the natural disaster?

○ $10,000 or less ○ $10,001 - $25,000 ○ $25,001 - $50,000 ○ $50,001 -

$100,000 ○ $100,001 - $250,000 ○ More than $250,000 ○ Unsure

Which of the following sources of funding did your business rely on to cope with these losses? *Select all that apply.*

☐ Insurance

☐ Federal disaster relief funds (e.g., FEMA, SBA, USDA)

☐ State/ local government disaster relief funds

☐ Donations, crowdfunding, or nonprofit grant funds

☐ Debt/ loans (other than government loans)

☐ Other. Please specify:__________________ ☐ **Business did not rely on external funds**

How much of your business's losses were covered by the funding you obtained?

○ All (100%) ○ Most (51%-99%) ○ Some (1%-50%) ○ None (0%) ○ Unsure

Has your business been affected by a similar natural disaster in the past?

○ Yes ○ No

○ Unsure

In the past 5 years, have you taken any of the following steps at your business to address natural disaster risks? *Select all that apply.*

☐ Relocated business

☐ Altered supply chain/ business logistics

☐ Purchased insurance

☐ Invested in physical assets (e.g., purchased generators, retrofitted buildings)

☐ Other. Please specify:

____________________ ☐ **Made no disasterrelated business changes**

How much does the risk of future natural disasters factor into your business planning? ○ A great deal

○ Somewhat ○ Very little ○ Not at all ○ Unsure

Special Topic 2: Workforce Challenges

[for firms with employees]

How difficult has it been for your business to retain employees in the past 12 months? ○ Very difficult ○ Somewhat difficult ○ Not difficult

Has your business attempted to hire in the past 12 months? ○ Yes ○ No

[If business attempted to hire]
In the past 12 months, how difficult has it been to fill jobs? ○ Very difficult ○ Somewhat difficult ○ Not difficult

[If very/somewhat difficult to fill jobs]
What about the applicant pool or hiring environment has made it difficult to fill jobs? *Select all that apply.*

☐ Too few applicants

- ☐ Competition from other employers
- ☐ Applicants lack job-specific skills, education, or experience
- ☐ Applicants unable to pass background check, credit check, or drug test
- ☐ Difficulty retaining newly hired workers
- ☐ Other. Please specify: _________
- ☐ Unsure *f very/somewhat difficult to retain workers or fill jobs]*

What changes has your business made **IN RESPONSE** to the difficulty hiring or retaining workers? *Select all that apply.*

- ☐ Increased wages or monetary incentives
- ☐ Made hiring requirements less strict
- ☐ Increased workload for employees/owner
- ☐ Offered remote work/ flexible scheduling for employees
- ☐ Invested in labor-saving technologies
- ☐ Enhanced benefits or non-wage compensation
- ☐ Reduced operating hours/services, turned down work, or temporarily closed business
- ☐ Increased efforts to find applicants (through agencies, job fairs, advertising, etc.)
- ☐ Other. Please specify:_________
- ☐ **Made no changes**

Special Topic 3: Business Networks

[for all firms]

The next two questions are about your business contacts, networks, and resources.

When faced with a business problem (e.g., financial, legal, staffing), what resources does your business rely on for advice and services? *Select all that apply.* ☐ Paid professional services (accountant, lawyer, consultant, etc.)

☐ Personal contacts (friends, family)

☐ Professional contacts (mentor, other business owners, etc.)

☐ Online resources

☐ Business/ industry trade associations

☐ Community/ nonprofit business support organizations

☐ Resources inside the business (owners, employees)

☐ Other. Please specify:_____________ ☐ Unsure

Thinking about your response to the previous question, how confident are you that those resources will be able to provide the advice and services your business will need in the next 12 months? ○ Very confident ○ Somewhat confident ○ Not confident

Thank you for your valuable input. The information you provided will bring small business issues to the attention of policymakers.

Please click the '**next page**' button to submit your survey responses.