2018

Strategies for Natural Disaster Financial Recovery for Small Business

Gideon Ezekiel Peterson

Walden University

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Walden University
2018
Abstract

Strategies for Natural Disaster Financial Recovery for Small Businesses

by

Gideon Ezekiel Peterson

MS, National University, 2012
BS, National University, 2009

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2018
Abstract

Many owners of small business restaurants lack financial strategies for successful business recovery following a disaster. The purpose of this qualitative, multiple case study was to explore the financial strategies 3 owners of small business restaurants used for successful business recovery following a natural disaster such as Hurricane Katrina in New Orleans, Louisiana. The conceptual framework for this study included theories of reasoned action, planned behavior, and vested interest. Historical evidence of past practices supported semistructured interviews with 3 owners of small restaurant businesses. Yin’s 5-step analysis guided transcribing and coding of the participants’ responses. The major themes of this study revealed that strategies such as communication, having funds on-hand, flood deterrents, and disaster planning helped owners prepare for a natural disaster. The owners’ actions related to preventing restaurant closures and unemployment, and to supporting community stability, family unity, job opportunities, and economic growth. All owners of small restaurant businesses were successful in planning after disaster created opportunities for increased employment for those who wished to return and rebuild. The findings from this study may contribute to positive social change by supporting strategies including positive attitudes and disaster preparedness to prevent business closing and contribute to the local economy.
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Dedication

This research study is dedicated foremost to my wife, Anna Borihane Peterson, for her continuing support and dedication to the progression of my education, her unconditional devotion to our family and her support during my many deployments. She has been my rock and has been the stabilizing force behind my military career and the future our small family. My wife has been there when times were hard, when the nights were long – she pushed me when I felt like giving up. She has been my inspiration over the years. I would also like to thank my father, Doctor Reverend Joe James Peterson, who has supported me throughout my life and guided me spiritually and mentally. Also, I would like to send a very special dedication as well to my deceased mother, Mary Merl Peterson. She was a tireless advocate in the field of special education and was one of the few pioneers in autism awareness. Her commitment and dedication inspired me and gave me the strength and mental fortitude to continue my educational journey. She was the one who laid the foundation so that I could have the opportunities she never had. I continue to miss you daily.
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Section 1: Foundation of the Study

Background of the Problem

Hurricane Katrina’s ongoing impact on small businesses in Louisiana, Mississippi, and Alabama represents a concern to commercial enterprises, area residents, and policymakers. From 2005 to 2016, the recovery process continued (Hiramatsu & Marshall, 2017). In the state of Louisiana, small businesses comprise the majority of all employers, employing over half of the state’s private workforce (U.S. Small Business Administration [SBA], 2008). Small businesses are also major contributors to the state’s export revenue (World Trade Center of New Orleans, 2015). According to Marshall, Niehm, Sydnor, and Schrank (2015), small businesses are job creators for the local community. Josephson, Schrank, and Marshall (2017) suggested that while large businesses have better resources to create and implement planning for possible future disasters, small business leaders remain limited in their resources and knowledge of how to plan. Small business leaders lack knowledge about disaster planning even though the importance of preparedness in hurricane-prone areas of the United States was discussed in both popular and trade literature, and was readily accessible on the internet (Josephson et al., 2017).

Problem Statement

After Hurricane Katrina, the U.S. government provided $2.6 billion in SBA disaster loans to individuals and businesses (Federal Emergency Management Agency [FEMA], 2015). Basker and Miranda (2016) found a low survival rate for small
businesses after Hurricane Katrina. In this study, the general business problem was that small business restaurants have a limited rate of recovery after major disasters, which results in loss of profitability and could lead to loss of the business. The specific business problem was that some small business restaurant owners lack financial strategies for successful business recovery following a major disaster.

**Purpose Statement**

The purpose of this qualitative, multiple case study was to explore the financial strategies small business restaurant owners used for successful business recovery following a major disaster, such as Hurricane Katrina. The targeted population consisted of three small business restaurant owners from three restaurant organizations that used financial strategies which resulted in successful business recovery after Hurricane Katrina and whose businesses remain sustainable in New Orleans, Louisiana. Restoring and strengthening the resilience of small businesses could provide economic opportunities for individuals and families who wish to return and rebuild their neighborhoods and their communities after a traumatic natural event. Additionally, third-party vendors who supplied these businesses with goods and services could also benefit.

**Nature of the Study**

The goal of this research study was to explore small business recovery to better understand successful business strategies. According to Elo et al. (2014), the qualitative methodology can be used for data collection and to analyze qualitative data. Thus, I used the qualitative methodology in this study. Therefore, the quantitative methodology was
not the appropriate method to use for this study because it primarily involves mathematical models and statistics to analyze the data (Yilmaz, 2013).

Mixed methods research is a combination of both qualitative and quantitative methods (Ramlo, 2015). Using mixed methods research in exceptional cases for gathering additional information to test validity is important to lending additional credibility to a research study (Brannen, 2017). The drawbacks to mixed methods are twofold: mixed methods are not easy to carry out and they can be very time-consuming (Charalampidi & Hammond, 2016).

In a multiple case study, one engages in cross-case analysis, which is a comparison between measurable characteristic cases (Ketokivi & Choi, 2014). In this research study, the conceptually related case study approach highlighted the different methods and processes planned and implemented (both properly and improperly) by the sample size of successful small businesses chosen as study participants. Thus, multiple case study design led to the conclusion.

The multiple case study design met the needs for this study more than ethnography, narrative, phenomenological, or grounded theory designs because the events in the study did not rely on the ethnography design, which involves the study of culture, the narrative design, which involves the study of the participant’s perspective, the phenomenological design that involves trying to understand the universal experience, or the grounded design, which involves the construction of theories.

Ethnographic design is when the researcher proceeds beyond observation and
actively engages with people in the field (Baskerville & Myers, 2015). According to Wagstaff and Williams (2014), phenomenological design researchers use semistructured interviews to access participants’ views and experiences. According to Pringle (2016), narrative design requires the researcher to take an idea or a thought within an environment with characters, conflicts, and goals. The grounded theory can be used to identify causal and intervening factors (Lewis, 2015). For this study, the case study design was the best option because a conclusion could be drawn using the experiences of the participants.

**Research Question**

The research question for this study was as follows: What financial strategies do small business restaurant owners use for successful business recovery following a major disaster?

**Interview Questions**

1. What financial strategies did you successfully implement before Hurricane Katrina?
2. What financial strategies did you successfully implement during Hurricane Katrina?
3. What financial strategies did you successfully implement after Hurricane Katrina?
4. What financial strategies did you find worked best for business recovery following a major disaster?
5. What occurred within the business following your use of financial strategies used
for business recovery following a major disaster?

6. What additional information would you like to share about successful financial strategies for business recovery following a major disaster?

**Conceptual Framework**

The conceptual framework for this qualitative multiple case study included the theories of reasoned action, planned behavior, and vested interest. Fishbein and Ajzen developed the theory of reasoned action in 1967 (Ajzen & Fishbein, 1980). Ajzen went on to develop planned behavior theory in 1985 (Ajzen, 1991). Crano developed vested interest theory in 1997 (Crano, 1997). According to Montano and Kasprzyk (2015), the theories of reasoned action and planned behavior focus on theoretical constructs concerned with individual motivational factors as determinants of the likelihood of performing specific behaviors. According to Crano (1997), vested interest is the special interest in an existing system, arrangement, or institution for particular personal reasons. In this case, the owners of the businesses had a vested interest in navigating through a successful recovery after a natural disaster such as Hurricane Katrina.

The small business restaurant owners’ reactions aligned with reasoned action and planned behavior theories. According to Lee, Marshall, Niehm, Sydnor, and Schrank (2016), it is not easy for a small business in New Orleans to prepare or plan for a possibility that a storm may make landfall, especially if the business just started out and has experienced false alarms. Annually, Louisiana and the surrounding areas focus their attention on surviving hurricane season (Lee et al., 2016).
Operational Definitions

*Climate change adaptation*: Climate change adaptation refers to the innovative actions that stop or limit the onset of anticipated extreme weather change risk from manmade or natural catastrophe changes in the atmosphere (Matzenberger, Hargreaves, Raha, & Dias, 2015).

*Natural disasters*: Events of catastrophic proportion that cause extreme environmental results, such as floods, tornadoes, hurricanes, volcanic eruptions, earthquakes, heat waves, and landslides (Lamanna, Williams, & Childers, 2012).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are beliefs without supporting evidence (Marshall & Rossman, 2016). Pagell and Shevchenko (2014) stated that while it is sometimes possible to criticize simulations and analytical models for oversimplifying assumptions or for a general lack of credibility, this is challenging. The primary assumption in this study was that small business owners would be truthful in sharing their experiences about what happened before, during, and after a major disaster. The second assumption was that many small business owners assumed their employees and suppliers would continue to be available during a state of emergency. The third assumption was that small business owners would disclose all of the procedures and processes that allowed their businesses to be successful after a disaster.
Limitations

According to Sarmiento et al. (2015), limitation refers to a researcher’s biases towards the outcome of a study. The first limitation was that the small sample size might be too specific to one geographical area (Venkatesh, Brown, & Bala, 2013), and so the research may not apply to larger or broader populations. The second limitation would be participants’ biases towards parts of the study that cannot be overlooked. Noble and Smith (2015) indicated peer debriefings references and articles would uncover biases.

Delimitations

A substantial portion of case study research is defining the delimitations or bounds of the investigation (Merriam & Tisdell, 2016). Yeh (2017) indicated that delimitations are the study’s boundaries, which narrow the focus of the study. According to Yeh, it is critical to state the delimitations before the research starts to determine where the borders exist.

Significance of the Study

The goal of this study was to explore financial strategies used by small business restaurant owners for successful recovery following a major disaster.

Contribution to Business Practice

The findings of this qualitative case study could be valuable to small businesses: It could help guide them to discover and adopt successful financial strategies in the aftermath of a natural disaster. This study and its results may offer financial practices and procedures for small businesses to implement before and after a major disaster, which
may expedite their recovery. In addition, these findings may assist not only local businesses in New Orleans but also other small businesses around the world facing similar situations. According to Burton (2015), no place that people live is immune from natural hazards and disaster, and despite investments in disaster risk reductions, losses from damaging events continue to increase in monumental proportions. Disasters in the United States such as Hurricane Sandy and Hurricane Katrina provided examples of impacts where the economic, environmental, and social ramifications are widespread and long lasting (Burton, 2015).

**Implications for Social Change**

According to Cajaiba-Santana (2014), social innovation is a driver of social change. In this study, social innovation referred to supporting the success of other businesses and keeping communities stable and intact after a traumatic event. Also, this research could contribute to social change by highlighting those characteristic practices employed by small restaurant owners who remained financially stable after Hurricane Katrina. The results from this study will be shared to benefit other small businesses in similar situations. Other small business that experience similar events will be able to implement the successful procedure into their operations. By adding or modifying procedures used by the participants, other small businesses will be able to recover faster and also become sustainable. Better training tools, communication devices, funding, and constant educational training, small businesses will be better prepared when the time comes to implement these procedures.
Frequent, naturally occurring events such as storms require societies to work closely together to meet the challenges (Toya & Skidmore, 2014). By working together in the community, small businesses will keep a robust workforce employing local people who will benefit from a small business recovery. Toya and Skidmore (2014) stated that while natural disasters can devastate humans, the economic benefits through disaster exposure could initiate innovations. By concentrating on improving processes and skills, a small business should be able to adjust and adapt to changes situations. When small businesses invest in and support their community, the community will invest in their small businesses (Cutter, Ash, & Emrich, 2014).

A Review of the Professional and Academic Literature

The focus of this study was to explore financial strategies used by small business restaurant owners for successful recovery following a major disaster. I supported the interrelationship between the constructs of this study and the research problem. Scholarly, peer-reviewed journal articles, books, and electronic media supported the relationship between natural disasters and small business recovery across multiple disciplines.

Organization of the Review

The following academic databases sources were used in search of peer-reviewed journal articles: Business Source Complete, ABI/INFORM, ProQuest, EBSCOhost, Science Direct, ABI/Inform Global, Academic Search Complete, and Google Scholar. The following keywords were used: natural disaster, disaster planning.
community resilience, preparedness, recovery plan, reasoned action, planned behavior, vested interest theory, and small business recovery. The goal of this review was a credible and comprehensive review of themes and topics in the literature on avoiding permanent business closure after a major disaster. The literature review provided a framework and guide that illustrated how small business owners could better their chances for a return to normalcy after a disaster.

To ground the research, I incorporated concepts relevant to the subject of study. The foundation for this study emerges through the synthesis of data obtained after an organized analysis and interpretation of published literature on the topic. The data focused on the financial strategies that small business restaurant owners used for successful business recovery following a significant disaster. A review of the literature included the foundation on the following three elements: (a) critical analysis and synthesis of the conceptual framework, (b) critical analysis and synthesis of literature and themes, and (c) analysis and integration of the research of additional topics. The literature review will conclude with a summary of ideas related to small restaurant business owners in New Orleans, Louisiana who remained successful after a natural disaster.

**Strategy for Searching the Literature**

Throughout the literature review, included were peer-reviewed published articles to provide validity to the study and to offer justifications for using different small business practices before, during, and after major disasters. Each article included was carefully chosen to aid the research methodology. I identified and evaluated more than
600 and included 246 relevant studies in this literature review, which included 217 peer-review articles published between 2014 and 2018. There were 29 articles published in 2013 or earlier. In this study, 88% of the source literature were published between 2014 and 2018, which met the 85% peer-reviewed requirement set by Walden University.

The information extrapolated from the articles provided a rich background into different procedures, practices, and leadership traits that aid in the recovery and sustainability of small businesses. The eight areas focused one were (a) the conceptual framework theories, (b) leadership roles, (c) the role of employees, (d) planning before a disaster, (e) new procedures, (f) the right location, (g) tourism, and (h) sustainability. The two themes central to this research inquiry included determining best procedures and viability after recovery. The concluding points essential to the investigation is the future of small businesses after major disasters and the identification of best business practices to enhance recovery.

**Critical Analysis and Synthesis of the Conceptual Frameworks**

The purpose of this qualitative multiple case study was to explore what financial strategies small restaurant business restaurant owners used for a successful business recovery following a major disaster. Miller, Adame, and Moore (2013) indicated several fundamental questions exist in social science relevant to the relationship between disaster preparedness attitudes and the actual behaviors required to prepare adequately to include:

1. What is the relationship between attitudes and attitude-relevant behaviors?

2. What is the nature of those attitudes linked to behaviors?
3. What are the psychological dimensions or mechanisms influencing those who hold such attitudes?

The implications for positive social change from this study may include a better understanding of how natural disasters affect the community and small businesses. The finding from the study may benefit: new business owners, small business restaurants outside of New Orleans, businesses with disaster plans and disaster readiness agencies. The conceptual framework included reasoned action, planned behavior, and vested interest theories. Cajaiba-Santana (2014) stated a need for a conceptual framework to allow the ability to understand one’s surroundings and the direction(s) to take towards social innovation, created by the actions and the organization, to articulate a model in which the process of social change occurs in a mutual action/structure scheme. Reasoned action, planned behavior, and vested interested theories served as a means for understanding how small restaurant business owners survived after Hurricane Katrina. I used reasoned action, planned behavior, and vested interested theories by illustrating supporting and contrasting views related to the literature.

**Critical analysis and synthesis of the theory of reasoned action.** Hagger, Polet, and Lintunen (2018) indicated that direct and indirect past behaviors are examples of the theory of reasoned action (TRA) processes through social cognitive variables. Yzer (2017) stated that the theory of planned behavior is an extension of the theory of reasoned action. The intention to perform a behavior follows a reasonably but rationally specific belief that people have on their behaviors and attitudes towards their plans when they
have the required skills when situational factors do not stop their performance (Yzer, 2017).

The TRA determined how the small restaurant owners’ attitudes and behaviors changed *before, during, and after* a major disaster. Their ability to create opportunities and innovative plans to confront tragedy was largely representative of their behaviors and attitudes. The responsibility of the owner was to initiate well prepared disaster plans that allowed for a successful return to operational status after any disaster. The TRA gauges the participants’ attitudes and intentions on disaster-related behaviors, such as the loss of their business (Wong & Chow, 2017). The participant’s intentions were clear before Hurricane Katrina in that they were ready to rebuild and continue operations soon as the storm cleared using their disaster procedures.

**Critical analysis and synthesis of the theory of planned behavior.** According to Yzer (2017), the theory of planned behavior (TPB) is an extension of the reasoned action theory. So, it would be logical to think that both would be similar. The TPB uses a personal norm and past experiences and behaviors as a predictor of future outcomes (Han, Meng, & Kim, 2017). Intentions to better prepare for disaster by using a disaster plan prompts a positive feeling of being in control (Sánchez–Medina, Romero–Quintero, & Sosa–Cabrera, 2014). Han et al. (2017) also stated that past behaviors influence future perspectives and behavioral intentions. In 2015 Montano and Kasprzyk stated that both the theory of TRA and TPA focused on individual behavioral factors.

Small restaurant owners in a location such as New Orleans and the surrounding
areas continuously live in fear of hurricane season because most owners lack the funds to sustain operations after a disaster, which affects behavior (Corey & Deitch, 2011). Those businesses owners who experienced years of disasters and false alarms have built-up emotions towards future disasters, which affect planning (Corey & Deitch, 2011). TPA comes into play through the business owner’s experiences and how they handled different situations and their attitudes at the time. Because many small businesses do not have sufficient finances or insurance coverage to stay operational, most merely plan to ride out the storm and hope for the best (Sydnor, Niehm, Lee, Marshall, & Schrank, 2017), which affects their behavior before, during, and afterward. Past experiences with false disaster alarms and lack of insurance have small business owners behaving complacently toward future disaster planning or mitigation techniques (Sydnor et al., 2017). Leung and Chen (2017) stated that the planned behavior theory includes the ability to explore intentions and in the case of this study, the small restaurant owner’s intentions to adopted new innovative policies and their interest in using these policies and new technologies when faced with disaster. Because many small businesses owners in New Orleans experienced past storms and lived through them, the expectation does not change.

**Critical analysis and synthesis of the vested interest theory.** According to Adame and Miller (2016), self-efficacy refers to a person’s belief in their ability to generate change or innovation. Adame and Miller also stated that vested interest is when a person has a stake in something and something to lose. By understanding the awareness of a disaster situation, the gained understanding will increase self-efficacy (Adame &
Miller, 2016). Johnson, Siegel, and Crano (2014) indicated when an individual is affected by an issue it is considered the vested interest theory (VIT).

People who live in areas prone to high-risk disaster areas similar to New Orleans include a higher likelihood to develop healthy attitudes towards danger and the results (Johnson et al., 2014). The people of New Orleans who experience yearly disasters feel indifferent because of the many false alarms compared to actual hurricanes making landfall. The participants have stake in the future of their restaurants being successful and not failing.

**Supporting and contrasting views on theory of reasoned action and planned behavior.** Icek Ajezn extended the theory of reasoned action in 1985 into the planned behavior theory by including a control factor (as cited in Strang, 2014). However, Strang (2014) indicated that control was not a predictor of behavior during a disaster scenario. TPA is different from the TRA in that the effects of perceived behavioral control are most vivid when the behavior presents some problems with respect to control (Strang, 2014). The TPA included one additional construct that reason action did not, perceived control over performance of the behavior (Montano & Kasprzyk, 2015). When an individual has planned something, it means that there is a scheduled event, which means there is a certain degree of control being forced to happen (Montano & Kasprzyk, 2015).

**Supporting and contrasting views on theory of vested interest.** The simple differences between VIT, TRA, and TPB is stake and intentions (Donaldson, Siegel, & Crano, 2016). The role of VIT motivated individuals to act on beliefs relevant to the goal
(Donaldson et al., 2016). VIT moderates the attitude or behavior between the object and the person (De Dominicis et al., 2014). De Dominicis et al. (2014) specified VIT or stake also refers to the individual’s perceptions of gain or loss consequences of a particular attitude of an object.

**Major Disaster and Business Recovery**

For this research study, the goal was to explore the financial strategies small business restaurant owners used for successful business recovery following a major disaster. I started this study by exploring possible recovery practices, which may or may not have been in place before Hurricane Katrina and the potential contributing factors that could add to operational success. Throughout this review are the key problems associated with business failure after Hurricane Katrina. In addition, the study also included procedures that contributed to successful disaster planning and recovery.

**Critical Analysis and Synthesis of Literature and Themes**

The focus of the literature to discuss throughout this section is lessons and procedures taught by small restaurant businesses owners who survived Hurricane Katrina. The main concentration was on researchers whose solutions guided how small restaurant businesses mitigated closure after a natural disaster by using the conceptual framework. Disaster recovery and planning are one of the first steps to disaster preparation (Epstein & Khan, 2014). The emerging themes related to the small restaurant business owners and how they recovered from Hurricane Katrina. An extensive review of other internal and external effects that could affect the recovery process of a small
business will be conducted. Additional literature reviews revealed common themes included: (a) insurance, (b) employees, (c) housing, and (d) location. The last major theme was small business leadership styles and natural disasters.

**Before the disaster.** According to Corey and Deitch (2011), New Orleans and surrounding areas had poor planning procedures in place for small businesses before Hurricane Katrina. Per Gotham (2017) before Hurricane Katrina, tourism was a $5 billion dollar industry. Tourism is a positive development in the recovery of New Orleans that helped bolster small businesses specializing in the tourist trade and food industry (Gotham, 2017). Corey and Deitch demonstrated how an existing underlying problem in management before Katrina contributed to organizations performing worse after the disaster. Every year, New Orleans and the surrounding area live in continuous fear of the next disaster because of their vulnerable location (Corey & Deitch, 2011).

Hurricane Katrina is a classic example of what not to do for just about everything involved in planning. According to Olshansky, Hopkins, and Johnson (2012) natural disasters force capital replacement, such as homes, businesses, and other infrastructures. Many of the less fortunate areas affected were rural areas and areas with lower social classes (Olshansky et al., 2012). In other parts of the United States and the world, community leaders use plans to fight disaster with prevention (Olshansky et al., 2012).

In areas prone to annual disasters, it is expensive for smaller firms to continue operations because of funding and breaks in the supply chain (Park et al., 2014). Per Saenz, Revilla, and Acero (2018), a natural disaster can severely impact the supply chain,
causing a ripple effect. According to Saenz et al., supply chain management gained attention after the September 11 terror attacks, when disruption caused havoc to the transportation system, revealing how fragile many companies are being reliant on just-in-time practices and offshore production. Saenz et al. also argued that the supply chain management system faces another major disruption with the possible closure of the boarder because of international immigration tension and terrorist attacks, which will limit transportation of goods resulting disruptions down the economy system.

According to Park et al. (2014), the supply change management system directly related to the global supply chain mechanism. To overcome supply shortages, and disruptions, the operators of the supply change management system and the global supply chain must focus on addressing the primary problem to be successful (Olshansky et al., 2012). The primary problem is to overcome natural disaster disruptions in the supply chain impacting small and large businesses. Companies working together around the world must be able to develop and implement a supply chain management process capable to cost reduction versus responsiveness (Saenz et al., 2018). Saenz et al. (2018) continued that local and global suppliers must be part of the company plan and scenarios for a cohesive process. Olshansky et al. (2012) found time compression in recovery processes plays a crucial role in recovery as well. A speedy recovery and focusing on the primary cause will facilitate progression to operational status. Saenz et al. (2018) also focused on a proposed closed-loop framework that integrates the close relationships between the supply chain design and building a resilience dynamic setting. Supply chain
design remains capable of opening and closing to allow movement in different directions, meaning that when a disruption happens, movement can flow a different direction with no problems.

Marshall and Schrank (2014) stated that because most small businesses operate out of the home, the inability to recover affects the economic viability and well being of both the family and the business. Post-disaster research is vital to small businesses because leading to increased preparedness and strategies for those controlled areas (Marshall & Schrank, 2014). According to Marshall et al. (2015), businesses' pre-disaster preparedness will determine the results of their sustainability after a disaster. Marshall et al. also pointed to how the existing infrastructure and economy before catastrophe plays a significant role in most small businesses before any disaster occurs. Being prepared before a natural disaster is critical for communities similar to New Orleans.

Per Sydnor et al. (2017), business continuity remains influenced by internal and external disturbances and weaknesses. New Orleans is well known for its lack of resources for the middle to lower class residents (Marshall et al., 2015). There are internal and external forces playing against the businesses in New Orleans, yearly hurricanes and their preexisting lack of disaster planning. Two categories of business’s demise are endogenous and exogenous (Marshall et al., 2015). Natural disasters affect small firms directly with structural damage or drastically affect supportive surrounding companies and the community.

**Endogenous.** Undercapitalization, the timing of the launch and lack of experience
are all examples of endogenous demise (SBA, 2008). Per Walsh (2016), when undercapitalization is one of the reasons for small business failure, a lack of adequate capital exists to support continuous operation. Undercapitalization becomes a severe problem and a significant factor when continuing services depend on its members or patrons to pay its bills (Walsh, 2016). Time is crucial to many small businesses returning to normal operations. Time means lost revenue, which most small businesses cannot afford.

For instance, launching a soft opening of a small store in conjunction with a holiday or big event can be positive and also negative. During a holiday, consumers are more aware of advertisements and new items. According to the U.S. Bureau of Labor Statistics (2016), 5 out of 10 startup businesses fail and can be linked to timing and location. Lack of experience on all levels can cause serious problems when a need exists for a quick response to recovery after a major disaster. Staniewski (2016) stated professional and managerial experiences through educational advancement are forms of human capital, which means the person becomes a bankable asset. Staniewski also stated business knowledge is one of the most important tools an owner can have to remain successful. Being knowledgeable can trigger innovation and new ideas, which can enable the owner to seize opportunities not available to others in the same field (Staniewski, 2016).

**Exogenous.** Exogenous is an uncontrollable external factor outside of the business owner’s power (SBA, 2008). According to Sydnor et al. (2017), the initial shock
and damage brought-on by Hurricane Katrina were exogenous because of the disastrous event. Losses and delays in reopening after a major disaster that occur to small business because of loss of life or other factors out of their control causes the income streams to slow (Sydnor et al., 2017). Disasters are unpredictable external forces. Monllor and Murphy (2017) illustrated how disasters and other external factors motivate individual negative behavior. Negative behavior causes individuals to make mistake resulting in severe problems in the flow of operations (Monllor & Murphy, 2017). Physical and catastrophic damage to businesses and homes can impact the continuity of businesses reopening (Sydnor et al., 2017).

When something becomes routine, people begin to take it for granted, which is one of the reasons so many people stayed in New Orleans despite hurricane warnings prior to Hurricane Katrina (Corey & Deitch, 2011). Also, Corey and Deitch (2011) stated small businesses often lose revenue they cannot recoup after evacuation, so many choose to stay behind and play the odds. When located in areas where mandatory evacuations occur, and the storm does not make landfall, small business suffer because of the loss of revenue (Corey & Deitch, 2011). Drabek (2014) stated that many people not financially stable continue to struggle, fall into a denial category, which often happens when people do not truly understand the warnings with experience in past disasters. Per Corey and Deitch, learning from past experiences not only helps individuals, experience helps the community as a whole. According to Drabek, processing threat warnings is not an individual effort. Threat warnings are a highly complex social process because most
people are with someone else or a group to comprehend the process (Drabek, 2014). Consequently, it is groups of people, not individuals, which process most disaster warnings incorrectly (Drabek, 2014). As with everything else people confront, rarely anything is done immediately (Drabek, 2014). It is clear that prior planning is critical; careful consideration to future disasters should not be ignored.

Additionally, many small businesses relied on different agencies to inform them of their choices and, in many cases, the information was wrong (Olshansky et al., 2012). For instance, those who chose to stay during Hurricane Katrina emphasized interdependence, strength, and faith (Olshansky et al., 2012). Because of past events and experiences dealing with natural disasters, some residents are in serious denial (Olshansky et al., 2012). When executing hurricane prevention plans for weather models that change, it is vital for planning to be accurate. People in New Orleans practice preventive measures so often that they dismiss them because of fatigue and an overall lack of annual precautionary measure funding (Olshansky et al., 2012). Preventative disaster planning can be characterized by many different collaborative techniques used efficiently within a community at a faster pace (Olshansky et al., 2012). All of these pre-existing problems illustrate how the city lacked preparation to take care of its citizens or small businesses in the aftermath.

Predictive planning. Burton (2015) argued that by creating preventive steps before a natural disaster occurs improves the chances of resiliency and the overall susceptibility, which allows the community to recover faster after a disaster. Howe
(2011) stated previous disaster identified areas of concern could be used to create preventive techniques that better prepare businesses for post-disaster recovery. Both Burton and Howe indicated that preplanning using lessons learned from past disaster would prepare small business to return to normal operations sooner after a disaster.

Drills and exercises are planning tools for disaster training. Per Daramola, Oni, Ogundele, and Adesanya (2016), preparedness response elements are educational, which include business contacts, regular inventories, and stockpiling equipment and supplies. Other elements to predictive planning include alternative work sites for businesses, making arrangement with vendors, and contacting secondary vendor in case of local outage (Medina, 2016). Businesses prone to disasters should also keep their records in two different locations, to include building plans, insurance policies, pictures, supplier lists, inventories, bank account information, and tax returns (Medina, 2016).

According to Ikse and Lengfellner (2015), identifying the probability of a natural disaster in the areas is one of the first steps to recovery. Business owners should know their community and their company’s ability to recovery from a natural disaster (Ikse & Lengfellner, 2015). It is critical for business owners to educate themselves on different steps of disaster recovery. Understanding the different steps of disaster recovery assists small business owners to be more resilient.

Vecere, Monteiro, Ammann, Giovinazzi, and Melo-Santos (2017) noted employees and customers make up the community, and when they find themselves in urgent need of temporary housing, predictive planning mechanism provide them with
alternative housing. The lack of affordable housing after a major disaster can cause social disruptions, which may undermine the recovery efforts (Vecere et al., 2017). Employers should have a firm estimation of how many employees they have, and the community leaders should also have an estimate of the population that will require alternative housing in case of a disaster response (Vecere et al., 2017). Housing employees and having a community where customers have a place to live can impact recovery and the reopening effort.

**Damage to infrastructure.** Based on the results of a survey taken from 1400 businesses in Orleans Parish, Sydnor et al. (2017) suggested that a predictor of businesses reopening was the amount of flood damage to the business. Business that sustained damage because of higher water levels were less likely to reopen than those with lower flood level damage (Sydnor et al., 2017). Corey and Deitch (2011), indicated that factors hindering reopening are as follows: (a) physical exterior of the building, (b) electronics, (c) computers, (d) important paperwork, (e) customer files, (f) records, (g) accounting records, (h) electronic data, and (i) inventory supplies. By contrast, Sydnor et al. argued that physical impacts are considered least disruptive to the buildings, damage to inventory, and to office equipment. When assets and equipment, which are the tools to support the businesses, are damaged, it becomes alarmingly hard to recovery.

**Inventory and equipment.** According to Sydnor et al. (2017), damage to small business, structural damage, damaged equipment, and inventory losses impacts operations. Basker and Miranda (2016) stated that data taken from a Mississippi census
illustrated how a high risk of small businesses closures are because physical damage and loss of equipment and inventory. Brown, Stevenson, Giovinazzi, Seville, and Vargo (2015) recognized that damage to business assets and inventory were sources of business loss and disruption following a natural disaster. Examples of physical loss and disruption following a natural disaster include records, unsalable goods, and contacts with customers, employees, and future sales (Sydnor et al., 2017). Corey and Deitch (2011) determined losses from storm damage by asking for information, which created three variables: (a) physical data, (b) loss of equipment and file, and (b) loss of inventory and supplies.

Some businesses chose to only keep a limited stock of inventory, which means disasters, could severally affect their recovery process (Sydnor et al., 2017). Findings indicated that customer issues, supplier issues, and employee issues following an external and environmental event are impacted (Sydnor et al., 2017). Brown et al.’s (2015) study also indicated that not only what is damaged, but the extent of the damage, impacts business performance. Not only does physical damage to inventory, infrastructure, and other tangible assets affect businesses during natural disaster, there are other factors to consider as well to include: loans for repairs, insurance claims, financing that may be necessary to replaced damage equipment, and employees not returning (Sydnor et al., 2017).

**Financial strategies.** Davlasheridze and Geylani (2017) argued that SBA loans significantly increased the chances of survival and business growth for some. Other small
businesses rely heavily on these loans were those with severe damage and were worse off to begin with (Davlasheridze & Geylani, 2017). Per Hiramatsu and Marshall (2017), small business owners who received SBA loans discovered these loans placed them in more indebtedness. Even if income returned to pre-disaster levels, the small business still suffered because of the additional debt. Many small business owners used their homes and other personal property as collateral, which meant they could face the loss of their assets up to the value of the disaster loan if not successful (Hiramatsu & Marshall, 2017). Rostamkalaei and Freel (2015) linked both growth and size of the business to discrimination of loans. Small businesses routinely are subject to high-risk loans with high interest rates (Rostamkalaei & Freel, 2015). Loans in the small business community are a fragile situation because the loan itself can become the reason the small business does not recovery. For those small businesses owners who can afford repaying disaster loans, the loan may be an additional burden resulting negatively (Rostamkalaei & Freel, 2015).

Per MacLaren, Maloney, Francis, and Phillips (2017), having insurance for recovery is key to a successful return to operations. But insurance is not always a guarantee of solvency; there are some high-risk insurance policies that have specific exclusions or are only available under specialized endorsements or policies, which could lead to more expenses (MacLaren et al., 2017). Ultimately, businesses with access to funding will recover faster than others. According to Olshansky and Johnson (2014), the process of long-term recovery, if done well, can minimize post-disaster disruptions,
address pre-existing problems, and improve the future resilience of a community.

Doern (2016) claimed the need to devise a plan to use existing resources and invest in newly funded procedures to recover from major disasters. Doern also warned against waiting until after a catastrophe to create an operational plan for survival. Investing in the business before the disaster increases the chances of resiliency (Doern, 2016). Consequently, creating a strong business environment and infrastructure before disaster can assist in recovery. Establishing a strong business environment and infrastructure disaster plan and procedures before disaster happens is critical.

**Small business procedures.** The best time to prepare for a disaster is before it happens. Yet, per Rossmiller, Lawrence, Clouse, and Looney (2017), a majority of smaller firms or those just beginning forgoes disaster planning to focus on their current situations. Rossmiller et al. argued many small businesses do not have recovery plans, nor can they afford insurance. Technology and future planning is usually not the primary focus of a minor or start-up business, as most of their time remains focused on daily operations and trying to stay operational (Rossmiller et al., 2017). Marshall et al. (2015) stated information about small business failure, including details about preparation, mitigation, response, and the recovery of small businesses from natural disasters, is unknown. Failed businesses are well documented, and it is likely their stories, and the critical factors in their demise are different in nature or degree from those of recovery businesses (Marshall et al., 2015). Failed small businesses may have been coincidental to the disaster, or at least not entirely attributable to a disaster. Also, many failed businesses
can be linked to leadership and the styles they utilized (Renko, El Tarabishy, Carsrud, & Brännback, 2015).

**Leadership style.** The workplace has many different types of leadership styles. The goal of the small business determines which leadership style fits the organization best (Renko et al., 2015). Per Renko et al. (2015), some small businesses offer several leadership styles within the organization, determined by departmental needs. Despite New Orleans’ climb out of the damage caused by Hurricane Katrina and the levee failures, New Orleans is not resilient (Hobor, 2015). New Orleans will always have a continuing problem with possible disaster recovery, which means resiliency may be hard to obtain (Hobor, 2015). Hobor (2015) concluded by reiterating the importance of leadership in building resiliency, especially in a place more likely than others to experience disasters.

**Communications.** In natural disaster situations, institutions may find it increasingly difficult to operate because of high levels of uncertainty and disruptions in communication channels (Cruz, Degado, Leca, & Gond, 2015). According to Palttala, Boano, Lund, and Vos (2012), another priority is to identify the gaps in communication, specifically, the challenges to stakeholder-specific communication in the different phases of a crisis event and on cooperation within the crisis event and the crisis response network. According to Palttala et al., businesses that do not alter their plans after disasters eventually fail. Crisis communication lessens uncertainty during fast-paced disaster, to enable problem solving faster during critical situations (Palttala et al., 2012). Because
crises are unique one-time events, contextual factors need to be considered when planning message strategies as they vary across crisis situations. Primarily because different crisis threats take different forms, the different scenarios may lead to different expectations regarding communication plans (Palttala et al., 2012). Various message strategies from denial to acceptance exist but knowing useful approaches depend on the implementation in the aftermath of disaster (Palttala et al., 2012).

The aftermath. Corey and Deitch (2011) argued that to maintain the essential functions for operating a business in the aftermath of a disaster is one of the first steps in a successful plan. Relationships and the networking between the business, suppliers, and the community helped prevent business closure in the aftermath of disaster (Chamlee-Wright & Storr, 2014). It is not unusual for thousands of people to lose their jobs and move to other cities immediately following a major disaster (Chamlee-Wright & Storr, 2014). Unemployment and relocated residences have a direct effect on the rebuilding of local small business. Without a sufficient workforce, small businesses do not move forward with rebuilding their establishments and revenue post-disaster. Olshansky et al. (2012) indicated that during post-disaster, people have a shared urgency to recover and to be heard by those who have the ability to help. Olshansky et al. also indicated that by taking the time prior to disaster, build relationships and evaluate possible weak areas of concern with the local community can pay off later in the recovery states. Per Olshansky et al. small businesses need to take the time earlier to ensure all of their processes, procedures, and techniques are accurate before moving forward.
A business interruption refers to breaks in the human operation of businesses, organizations, and instructions (Rose, 2011). As interruptions hamper the functionality of the businesses, they consequently lead to economic losses (Rose, 2011). Disaster disruptions are not always the result of direct physical damage. Instead, delays are often the result of lifeline service damage, off-site problems, or transportation issues, which restricts the movement of goods and services (Lamanna et al., 2012). In a post-disaster scenario, endogenous and exogenous demise plays a vital role in the outcome of small businesses (Marshall et al., 2015). For some small business owners, disaster can indeed be the tipping point in a tenuous business existence, beyond which they either fail or recover (Marshall et al., 2015). Planning for both endogenous and exogenous demise is an important step to becoming successful and sustainable (Lamanna et al., 2012).

**Returning to operations.** Hobor (2015) stated the explanation for recovery suggests economic origins influence elite commitment to and participation in cities, thereby affecting the city’s ability to redefine itself after experiencing an exogenous shock, whether it is a natural disaster, economic crisis, or any other threat. Identifying the vulnerabilities within organizations and understanding and focusing on current processes and procedures can be vital to the process of adopting new paths to successful risk-reduction. Results from analysis by Corey and Deitch (2011) indicated that managers from organizations in New Orleans performed worse compared to pre-Katrina levels and displayed outstanding problems, which indicated a new direction was required.

**New direction.** Per Monllor and Altay (2016), history indicated that disasters and
disruptions have created a climate of innovation. Innovation is a solution for fostering sustainable development, but there remains considerable uncertainty about how new innovations will lead to a more sustainable society (Dahles & Susilowati, 2015). Something new could move an organization in a different direction. Dahles and Susilowati (2015) implied a slow change in operational procedures might result in a more positive outcome. Doern (2016) noted by examining the business and the crises, certain circumstances will dictate what policy contributions for what future direction of the business. Procedures and processes change dramatically after major disasters to confront future crisis situations (Dahles & Susilowati, 2015).

According to Fothergill and Squier (2017), disasters affect everyone indiscriminately, but some groups of people are more vulnerable before, during, and after a natural disaster. Hewitt (2013) examined relations between natural hazards and social conditions in disasters, and the problems of their integration in disaster management. According to Hewitt, poor communities will suffer more after disasters than their richer counterparts. Post-disaster procedures and processes to improve outcomes are available; however, the procedures are specific to the type of business (Hewitt, 2013). Hajra et al. (2017) noted the poorest households can endure more material and human loss following a natural disaster and also become more vulnerable to future risk.

Prior to Hurricane Katrina, African Americans and Caucasians both reported receiving benefits (Alexander et al., 2016). However, Alexander et al. (2016) stated after post-Katrina, African American reported receiving significantly less benefits than
Caucasians. Alexander et al. also stated New Orleans is a densely African American population where education and ability to climb the social ladder all play a significant role in a person’s or family’s ability to return to the area after a major disaster. Adeola (2017) referred to a survey where 42% of Blacks as compared to 16% of White, which lived in New Orleans prior to Hurricane Katrina, stated that New Orleans had not fully recovered to pre-Katrina standards. Demographics did play a role in recovery in some cases. Providing demographic information is important because illustrated how disaster aid was disbursed to community in New Orleans.

**Loss of key suppliers.** Small businesses rely heavily on local suppliers, which have been developed over time (Sydnor et al., 2017). Small businesses that do not keep a well-stocked inventory or do not plan well prior to a major disaster may experience stock shortages, which could result in a spiral of canceled orders, under stocked inventories, and unhappy customers (Sydnor et al., 2017). Stevenson et al. (2014) indicated that longer-term relationships with suppliers could mitigate the impact of post-disaster issues and also provide flexibility on payments. Communicating with suppliers and ensuring that a plan was in place before a natural disaster made landfall is critical to recovery planning process. By working closely with suppliers on disaster planning, disaster recovery will be minimal (Stevenson et al., 2014).

**Local customers.** For small businesses, local customers are vital to sustainability. Per Sydnor et al. (2017), businesses do not operate in a vacuum, but with the community interdependently. Many are not far from permanently closing their doors when their loyal
customers are absent (Sydnor et al., 2017). New Orleans has an early warning system that saves lives but does nothing for the infrastructure (Neumayer, Plumper, & Barthel, 2014). On the plus side, many small businesses also possess the ability to respond and adapt quickly to changing economic climates, primarily because small businesses are often very customer-oriented (Neumayer et al., 2014). Small businesses often have a committed customer fan base. When those customers disappear, the business suffers. Displacement of customers because of a natural disaster causes a ripple effect of a reduced labor supply and dwindling customer base (Sydnor, et al., 2017). Per Ansari and Riasi (2016), trust, perceived quality, and empathy has a significant impact on customer loyalty to any business. Consumer commitment to small businesses allows them to stay afloat during tough times, which can further strengthen local economies by focusing on customers’ likes and dislikes (Taneja & Toombs, 2014). The downside occurs when local customers leave and do not return after a disaster. Per Sydnor et al., displaced customers who cannot purchase from businesses, the businesses suffer losses. After a natural disaster, many people leave and never return, and returnees have to recoup financially and may not be able to purchase anything extravagant.

Per Wang, F, Tang, and Wang, L (2014), the demographics of New Orleans play a role in small business recovery because many of the small businesses hire from the community near their facility. When workers did not return after Katrina, small businesses lost their trained workforce. According to Wang et al., two notable exceptions to this pattern were the majority African American and low-income Lower Ninth Ward
community, which, although close to the Mississippi River, were flooded when the Industrial Canal levee broke, and the majority of the white, high-income Lakeview neighborhood near Lake Ponchartrain did not suffer. Despite these exceptions, residents returned to a neighborhood socioeconomic disaster, flooded areas and housing damage (Wang et al., 2014). Customers are important to recovery, but employees are also critical to a smooth transition after a major disaster.

**Loss of employees.** Employees make a critical component of a small business. Small businesses depend on the local community as a workforce. Natural disasters also create labor-shortages because personal and home related needs, including loss of home, relocation, childcare, and an inability of the employees to travel to work (Sydnor et al., 2017). Sydnor et al. (2017) argued the loss of employees means that businesses have to invest in alternative means with replacements. Loss of employees also means small businesses will suffer loss of revenue when short staffed to operate (Sydnor, et al., 2017). Brown et al. (2015) argued that while natural disaster may be disruptive, employee availability was not the problem. Brown et al. stated during the time of long-term crisis, people look for opportunities to work. Brown et al. also stated that the real problem is the lack of training and trained employees after a disaster, but the location from where the working population is critical as well.

**Location.** Many speculate that location plays an important factor in recovery after a major disaster. According to Day (2014), disaster planning varies by location. Previous techniques created from the lesson learned and implemented successfully in one place
may cause serious ramifications somewhere else. Day also noted that other strategies and systems used in similar events exhibited difficulties in different scenarios. A location plays a significant role when the area is prone to natural disasters like New Orleans. In essence, the scale of populations within hazardous zones and the insured property and economic assets within such areas are both continue to grow over time, enhancing the risks of serious economic disruption as well as risks for population displacement. Per Cutter, Schumann, and Emrich (2014), who researched and compared many disasters against Hurricane Sandy in New York, different factors influence the lack of recovery for many locations. Funding, resources, recovery tools, and equipment are all allocated or linked to prominent spokespeople, by industry, demographics, and the community.

**Community.** Small businesses depend on the local community as patrons and also as a small workforce. Small businesses depend primarily on their local communities (Chandra et al., 2013). Chandra et al. (2013) believed having a preparedness agendas centered on community resilience that would assist businesses in withstanding and mitigating the stressors of natural disasters. Murakami and Wood (2014) suggested community-based decision-making is an effective approach to understanding local needs and enhancing resilience in disaster rebuilding with possibilities for improved outcomes.

The next step is to determine how to build or strengthen community resilience and how to integrate the *whole of community approach* in usual disaster planning activities (Chandra et al., 2013). Chandra et al. (2013) examined previous community resilience studies in the hopes of identifying critical areas such as resilient activities, programs,
procedures and education for members about disasters and disaster preparation. As the community works together, the connectivity of resilience begins to grow between the community and the businesses. Leveraged community partnerships, critical for disaster resilience, are principally those relationships with non-traditional organizations (Shittu, Parker, & Mock, 2018). These non-traditional groups such as neighborhood associations, faith-based organizations, and local businesses, conduct community outreach. Cutter, Schumann, et al. (2014) believed disaster resilience enhances the ability of a community to prepare and plan for, absorb, recover from, and more successfully adapt to actual or potential adverse events in a timely and efficient manner, including the restoration and improvement of essential functions and structures. When a community works together along with businesses after a crisis, it will return to normal operations faster (Shittu et al., 2018).

MacAskill and Guthrie (2015) argued that two competing issues exist within post-disaster recovery: (a) managing the trade-offs between quickly restoring infrastructure services and (b) taking time to consider and consult on alternative options. Wallace and Webber (2017) suggested a good way to approach recovery is to take one step at a time and do not try to tackle too much, too fast. Progressive recovery processes and tactics explains the varying nature of resilient measures, the decision-making processes required to implement them and the constraints, chiefly in funding, that prevent the wider application of such standards (MacAskill & Guthrie, 2015). The hierarchy refers to both the level of damage required to trigger the intervention and the associated significance of
the response (MacAskill & Guthrie, 2015). Funding and technology is a critical factor influencing the ability to intervene with resilience measures and recovery easier and faster (Hasler & Marfe, 2015).

According to Corey and Deitch (2011), the local community depends on small and large businesses, but small businesses support their communities by providing jobs to people who cannot get jobs elsewhere. Per Corey and Deitch, small businesses are critical to the local community because of the job opportunities offered and also other different services. By interpreting the theories in a way that everyone can understand in a classroom setting, practices for disaster planning would provide valuable future knowledge for disaster planning, tools, and preparations for recovery planning opportunities for building back a better small business economy (Kim & Olshansky, 2014). Nelson (2014) indicated most residents often resist relocation and attempt to recreate the city as was before the incident, which is a similar scenario to New Orleans after Hurricane Katrina.

**Delay in reopening/length of closure.** Depending on the severity of the storm, many reasons exist for delaying the reopening of businesses. Sydnor et al. (2017) indicated that physical damage (structural damage, loss of inventory, and equipment) could delay reopening of businesses. Whatever the reason why the business delayed reopening, the impacts on the business could significantly be because the loss of income required for operation after a natural disaster (Sydnor, et al., 2017). High flood levels could leave a business closed longer than those in low flood level areas. Josephson et al.
(2017) suggested disaster recovery can be increased by mandating (surge prone) business
have insurance. Damages to a business externally and internally can have long lasting
disruptions (Sydnor et al., 2017). Per Sydnor et al. (2017), small businesses located in
areas with high levels of damage may have to remain close for longer periods for repairs.
The longer a business remains closed after a natural disaster, the higher the probability to
the businesses’ attrition (Sydnor, et al., 2017). Also, the longer a business is closed, the
more likelihood of the business not reopening caused by a variety of reason such as loss
of customers, employees, and supplier, insurance claim delays, and lifeline disruptions
(Sydnor, et al., 2017). Per Josephson et al. (2017) a business owner’s preparedness for
disaster will determine the time needed to reopen.

**Organization size.** Small businesses, unlike larger firms, lack the proper
equipment for long-term disasters. For many small businesses in Louisiana, hurricane
season is nothing new (Basker & Miranda, 2016). Many small businesses prepare the best
way they can with their community. Unfortunately, some insurance companies do not
provide coverage for high-risk areas or set premiums so high only larger firms can afford
the coverage (Neumayer et al., 2014). For those small businesses owners who can afford
insurance, taking the advice from an insurance agent or expert may mean the difference
in receiving a premium after a natural disaster (Smith & Lougee, 2014). Neumayer et al.
(2014) argued that many small businesses lack insurance and lack government funding
unlike their larger counterparts. The preferred customer of insurance companies is
business located in low-risk flood, hurricane, tornado, and other disaster zones
In the case of Hurricane Katrina, even though people were aware of the storm's approach days in advance, small business owners still did not anticipate the size and scope of the devastation to come. Organizations with an alternative, out-of-area location for conducting business were in a better position to recover. Previous studies also found only a small percentage of businesses carried the relevant type of insurance for a natural disaster (Smith & Lougee, 2014). Small business owners should seek well-priced catastrophic insurance premiums that reduce monetary damage by providing higher benefit payouts (Kaushalya et al., 2014).

**Tourism.** Tourism makes up a large percentage of small businesses on the Gulf Shores, to which restaurants play a major role. Coastal communities with large populations similar to New Orleans are at high risk because of their vulnerability to sea levels rising, flooding, and tropical storms, which impact tourism (Yang & Jahan, 2018). Yang and Jahan (2018) also stated that tourism communities remain more vulnerable than regular communities. According to Dahles and Susilowati (2015), destinations prone to such impacts stay affected across all layers of their economy. When tourism locations encounter disaster, it is a major downfall to the economy especially with a prolonged evacuation period and loss of property (Yang & Jahan, 2018). Tourism town centered near coastal communities include increased susceptibility and sensitive to recovery efforts following a natural disaster because of the deep collaborative relationships among different suppliers and organizations to accelerate the recovery efforts (Yang & Jahan,
Many small businesses depend on surviving hurricane season to Mardi Gras, just to survive through the year (Dahles & Susilowati, 2015). Yang and Jahan (2018) argued that depending on the severity of the storm, recovery processes impacted could become time-consuming, and costly. Dahles and Susilowati (2015) stated although local businesses may largely depend on tourist arrivals, tourism is seldom the only source of income for their owners. After a major disaster and the recovery process start, completion information should be provided to the community or tourist who live there or visit the attractions in a timely manner (Yang & Jahan, 2018). Additionally, there is an importance that exists to track the damage estimates while the impacted tourism locations are recovering so that those areas open for to the public (Yang & Jahan, 2018). By publicly providing information, the goal is to help people understand the damaged areas and when it is safe to enter.

Local people combine a multitude of economic activities within and beyond the local tourism industry to make a living (Dahles & Susilowati, 2015). The tourism industry, a major economic generator for the city of New Orleans, suffered devastation in the months immediately following Hurricane Katrina. Rebuilding damaged homes was the large part of recovery efforts, which accelerated the return to regular operations of tourism and the small business community by bringing back employees (Yang & Jahan, 2018). Tourism is vulnerable to natural hazards because of business owners’ lack of preparedness and knowledge, inadequate place-based hazards and vulnerability
assessments, and tourism’s limited integration with the national disaster management systems (Becken, Mahon, Rennie, & Shakeela, 2014). A report by the Louisiana Recovery Authority (2006) noted that roughly 81,000 businesses suffered a business interruption in 13 Louisiana parishes because of damages caused by Hurricanes Katrina and Rita.

According to Orchiston and Higham (2016), the tourism sector remains vulnerable to the impacts of large disasters. Consequently, businesses reliant on tourism may suffer losses because of fewer visitors, damage to critical infrastructure and negative media attention, the effects of which can resonate within the industry for many years after a disaster (Orchiston & Higham, 2016). Disaster plans for small businesses are often generic, but the lack of detail in capability and resourcing of many small or micro-sized businesses (Jiang & Ritchie, 2017). Mannakkara, Wilkinson, Willie, and Heather (2018) argued as to whether there are effective disaster recovery plans available targeted towards rebuilding and recovering the tourism sector.

Lamanna et al. (2012) indicated hotels face several challenges after a disaster. Hoteliers must prepare for potential physical damage, the likely loss of lifeline services, and the possibility of business closure. One of the biggest challenges, however, is in human resources. Hotel vulnerabilities are complex factors lending risk to the reasons that motivated tourist may visit (Brown, Rovins, Feldmann-Jensen, Orchiston, & Johnston, 2017). Per Assaf and Josiassen (2012), some factors related to safety and stability of the hotel industry such terrorists’ attacks, crime rates, and natural disasters
affect recovery, stock returns, and prices. Because of high reliance on service personnel, disasters sometimes obstruct hotels' core competencies, which are their employees (Lamanna et al., 2012). When employees are unable or incapable of performing their jobs, the difficulty increases to implement an effective disaster recovery process (Lamanna et al., 2012). Thus, disasters cause many businesses in the hospitality industry to lose their functionality, which was the case for many small business hotels in New Orleans during Hurricane Katrina (Lamanna et al., 2012).

**Housing.** Housing plays an important role in small businesses recovery. Without housing for employees to live in, businesses would have a limited employee population. If there are no homes to return to, no workers will be available to work the small businesses. According to Fussell (2018), the destruction left behind by Hurricane Katrina on housing and infrastructure left residents unable to return to their homes for weeks and months, and some returned to nothing at all. Fussell (2015) stated that most remaining residents evacuated only after Katrina’s storm surge breached the levee system and flooded 70% of the occupied housing units in the below–sea level part of the city (FEMA, 2015). Nearly all residents, except for emergency personnel and a few renegades, remained outside the devastated city throughout September 2005. Storm debris on the roadways, lack of utility services, and the presence of floodwater impeded residents’ return (Fussell, 2015). According to Peacock, Van Zandt, Zhang, and Highfield (2014), the housing recovery is highly uneven for different populations groups. Unsurprisingly, the damage had considerable consequences; even after some years, the
effects of wreckage are evident in the rebuilding process (Peacock et al., 2014). Housing affects the community as a whole but also affects disaster recovery on all levels.

**Post-disaster difficulties.** Flooding occurs when a piece of dry land submerges from weather related events (Blöschl et al., 2015). Flooding disruptions can be cause by different ways tsunamis, continuous rainfall, melting snow, or strong winds and high tides combined (Blöschl et al., 2015). Flooding can have a devastating impact on business; especially on small and medium-sized enterprises support other businesses. Hurricanes can lead to storm surges and flooding, which can lead to homelessness, dislocation, and chaos on businesses (Bowen & Friel, 2012). Hurricane disruptions can also affect operations of small businesses in the disaster zone increasingly difficult to locate business owners. Hurricane disruptions also affect a researcher’s ability to assess small-business recovery to gain a better understanding of business demise.

According to Serrao-Neumann, Crick, Harman, Schuch, and Choy (2015), two concepts could offer hope for the implementation of much needed robust planning measures to better deal with the impacts of future extreme weather events and post-disaster planning in the pre-disaster phase. Particularly, changes facilitated by both concepts may include enabling long-term recovery from disaster impacts and reducing the vulnerability of places and their communities to climate risk (Serrao-Neumann et al., 2015). For months after Hurricane Katrina, many small businesses were without power, natural gas, or clean water (Serrao-Neumann et al., 2015). The loss of basic services had detrimental effects on small business (Sydnor et al., 2017). According to Sydnor et al.
(2017) many businesses closed because lack of water, electricity or phone service. The basic services required for everyday conveniences can impact and even prolong a business from reopening.

**Access to insurance.** Access to affordable insurance to small business is important especially in disaster zones. Insurance issues can severely dampen timelines in restoration impeding business reopening (Sydnor et al., 2017). Sydnor et al. (2017) stated that inferior insurance policies claims (wind versus water) delays were significant issues after Hurricane Katrina, leading to thousands of lawsuits against their insurance companies. After Hurricane Katrina, many small businesses found themselves unable to get insurance, increasing the improbability to obtain mortgage funding or to sell their land (Sydnor et al., 2017). The lack of post-disaster insurance coverage may have lead to many small businesses moving to locations where they can obtain insurance or perhaps choose to close the business (Sydnor et al., 2017).

**Alternative simulation.** According to Park et al. (2014), using simulations will enable the user to understand and implement better procedural measures. Per Zuccaro and Leone (2018), vulnerability and impact assessment generated through simulations can decrease impacts of disasters through cost-benefit multi-criteria analyses. By studying disaster simulations, costs of disaster recovery can considerably less. Simulation results from a practiced scenario can reveal the external recovery conditions that negatively impact recovery, enabling a manager to take precautions (Park et al., 2014). Furthermore, having a better understanding of external conditions (the resource supply and lifeline
systems and the work environment) before and after a natural disaster will help managers in restoration planning and help them avoid planning delays (Park et al., 2014). Adapting and understanding the local environment and developing better planning procedures and processes could result in better outcomes for the community.

Sustainability. According to Barkemeyer, Holt, Preuss, and Tsang (2014), sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Well-established institutions are resilient because they enforce regulative, normative, and cultural-cognitive elements, which remain in place even after a disaster (Cruz et al., 2015). McKnight and Linnenluecke (2016) noted that both the businesses and community-based coalitions could create sustainability and resilience.

Per Kim and Olshansky (2014), average monthly sales, past disaster experience, dependency on water, dependency on transportation, personal savings, damage to lifelines, knowing the recovery priorities, support of family and friends, and staff engagement and involvement in the recovery had significant impacts on recovery time. Kim and Hastak (2017) indicated different agencies exist that support disaster recovery, such as local Emergency Operations Centers (EOC), plays a critical role in disaster management by spreading valuable emergency information. According to Kim and Hastak, another critical area for more research involves a better understanding of the planning and disaster management tools and policies related to recovery and when best to apply them. Small business owners need to better understand not just who should be
involved, but how these different agencies can best support and facilitate the recovery process (Kim & Olshansky, 2014).

Keeping small businesses operating and becoming sustainable is not easy. Most businesses are hit by a major shock and fail to recover (Hobor, 2015). Over time, when small businesses’ systems become broken, this brokenness increases the lack of resiliency and larger firms buy out small firms (Hobor, 2015). Rose (2011) posed a dilemma for restoration relating to the balance returning to previous conditions and advancing to a new and better normalcy including being able to withstand future catastrophes. Looking at disasters from a different perspective could offer lessons and opportunities for improvement (Rose, 2011). Disasters tragically affect people and economies, making it imperative for communities in disaster-prone areas understand and learn from past events.

**Sharing information.** For a business to recover from a disaster, small businesses need to work together with other businesses to stay in operation. Sharing is a phenomenon as old as humankind, while collaborative consumption and the sharing economy are born of the Internet age (Belk, 2013). When sharing something between relative strangers or as a one-time act such as providing someone with spare change, it becomes more difficult (Belk, 2013). In 2017, Ndah and Odihi (2017) argued communities suffered or were vulnerable because of limited knowledge, awareness, and motivation among the general population.

**Collaboration.** Collaborating for recovery is vital for areas prone to disasters like
New Orleans, Louisiana. Collaborative relationships in the tourism community are critical for recovery, which required a constant effort between agencies to ensure their highest maintenance and developmental need (Orchiston & Higham, 2016). Even though small businesses provide a large part of employment in New Orleans, those jobs can be taken away in instances after a large-scale event relocates the workforce. New Orleans is known for its tourism industry and one of the main attractions throughout the city is the unique food (Jiang & Ritchie, 2017). The tourism industry depends on travelers visiting the city, also because of local resources; tourism remains vulnerable to disasters (Jiang & Ritchie, 2017). Per Jiang and Ritchie (2017), tourism is the world's predominant industry (Jiang & Ritchie, 2017). Tourism accounted form the $7.2 trillion of the global gross domestic product (9.8%) and also provided 284 million jobs worldwide (World Travel and Tourism Council, 2016).

According to Jiang and Ritchie (2017), communication and trust play a key role in a partnership between companies. The ability to be transparent about procedures and processes is the beginning of establishing trust (Jiang & Ritchie, 2017). Business leaders should form a relationship of with the community and other businesses (Chamlee-Wright & Storr, 2014). Past experiences and relationships can affect growth and recovery after a disaster (Chamlee-Wright & Storr, 2014). In areas similar to New Orleans, it is wise to have a continuous dialogue with small businesses about disaster preparedness and procedural accountability. Disasters can cripple an entire town's and city's tourism industry and with negative aftereffects for years afterward (Jiang & Ritchie, 2017). The
primary goal of the stakeholders requires cross-organizational tasking and communication (established through collaboration) to achieve common interests and benefits and to solve problems and issues created by disasters (Jiang & Ritchie, 2017). Disaster communication alerts all stakeholder of a disaster plan if impended properly (Baba, Watanabe, Nagaishi, & Matsumoto, 2014)

Scarpino and Gretzel (2014) highlighted the importance of multiple groups, small and large, working together to establish focus groups to overcome different problems and obstacles during a crisis by discussing past experiences, critical resources, and the stakeholder relationships. Jiang and Ritchie (2017) believed in ideas to help understand collaboration which are resource-based, relationship-based, and politically based theories. According to McAneney, McAneney, Musulin, Walker, and Crompton (2016), after a significant disaster, reduced resource availability and the emerging demands from the higher-than-average scale of post-disaster reconstruction activity combine to create a situation where total demand can significantly outstrip supply.

Knowing resources available to everyone is essential to recovery, and not everyone will know. Sharing of resources is key to collaboration and success (Pennington-Gray, Cahyanto, Schroeder, & Kesper, 2014). Per Pennington-Gray et al. (2014), understanding what resources are available will set the parameters for how far an organization can go before failure. Because most tourism businesses are small with limited resources, the lack of resources after a natural disaster becomes so severe that small companies are motivated to collaborate with others (Jiang & Ritchie, 2017).
Effective collaborative communication is crucial before, during, and after a disaster. Specifically, Pennington-Gray et al. discussed the importance of collaborative communication as a vehicle to recovery. An effective collaborative communication plan could lead to a resilient community through the collaboration of businesses, partnerships, and integrated networks among multiple stakeholder groups. Furthermore, by directing focus on information communication within the industry, tourism management and collaborative communication, thereby narrow down the problems affecting recovery.

Another viewpoint considered was a review of the relationship-based theory and how a strategy was established at which mutual dependency or closeness of companies were willingly to share information and resources to recover from a disaster (Jiang & Ritchie, 2017). The relationship-based approach developed a resolution by collaborating with others on a shared issue, while taking into consideration what was in the best interests of organizations (Pennington-Gray et al., 2014). Natural disasters usually cause the same type of concerns for all types of businesses, including the tourism industry, which means the physical damages are the stakeholders’ entire problem (Assaf & Josiassen, 2012).

Finally, political-based theory includes exploration of the battle among the powers of the states, groups, organizations, and individuals (Jiang & Ritchie, 2017). Pennington-Gray et al. (2014) argued that whoever has the power to control the resources affecting companies could manage a successful collaboration. According to Howes et al. (2014), government collaboration is essential for building stakeholder tourism disaster
management.

**Violation of trust.** Trust between organizations is essential to success (Proulx, Hager, & Klein, 2014). During a time of disaster, trust is a serious factor in collaboration. Usually, business owners remain reluctant to share the secrets to their success with other competitors. According to Jiang and Ritchie (2017), organizations may experience different levels of disruption after a disaster and may have different levels of need for collaboration, which may conflict with the shared goals. The conflict with the shared goals could interfere with the stakeholder relationship and create a negative impact on collaboration (Jiang & Ritchie, 2017). When conflict happens, recovery depends on un tarnished trust. In many cases giving in can be a sign of weakness, but during times of disaster recovery should be the main goal. Trust repair depends on one sides’ willingness to show vulnerability with the hope of the other side responding with good actions in the future (Yu, Yang, & Jing, 2017). Yu et al. (2017) argued trust repair is a process that makes trust easier to except after a major infraction. In some circumstances, timing and financial constraints can create barriers between organizations, creating an appearance of trust issues and can test participation and long-term collaboration efforts (Jiang & Ritchie, 2017).

**The future.** Cassar, Healy, and Kessler (2016) noted that natural disasters are a persistent threat to the economic welfare of many place particular those areas located in hurricane prone locations. After the disaster passes, most small businesses rebuild and overlook the likelihood of future catastrophe. New Orleans and the surrounding areas do
not have the freedom of ignoring potential emergency situations because these locations are disaster prone (Cassar et al., 2016). Mitigation and preparedness measures can reduce business losses and can also promote sustainability. Small business owners can choose to reinforce and protect their interests through both long- and short-term disaster management processes (Josephson et al., 2017). According to Josephson et al. (2017), there are many different processes and procedures small businesses owners need to be aware of before and after a major disaster. These include taking care of (a) the employees, (b) maintaining a disaster plan, (c) having insurance, (d) having the right leadership style, (e) picking the right location, and (f) collaborating with neighboring small businesses (Josephson et al., 2017). While larger businesses remain better prepared for disaster, small businesses are limited in resources and the ability to plan for the unexpected (Josephson et al., 2017). Having limited access to resources makes it essential to have all the tools necessary to recover. Business owner’s needs may also be different from one another. The preparation needs of business owners in cities may be different from those in rural areas and those in different zoning areas. Preparation may also be varied in residential structures because various zoning laws (Josephson et al., 2017).

**Summary and Transition**

Section 1 included several aspects of this study: (a) foundation of the study, (b) the background of the problem, (c) a general and specific statement of the problem, (d) the purpose statement, (e) the contextual nature of the study, (f) the research question, and (g) the open-ended interview questions. The purpose of this qualitative, multiple-case
study was to explore what financial strategies small business restaurant owners used for successful business recovery following a major disaster in New Orleans, Louisiana. The target population for this study was three small business owners in the restaurant industry in New Orleans, Louisiana, who were able to successfully operate their businesses after Hurricane Katrina by implementing certain practical procedures. For this study, I was the primary instrument of data collection and data analysis and I oversaw the ethical guidelines for the study. Suggested measures for small businesses to remain successful after a major natural disaster are included in the study.

The review of the literature encompassed specific factors that small business owners must address or overcome before, during, and after a major disaster. In the review of the professional and academic literature, I presented critical strategies that small business owners could find helpful in the aftermath of a major disaster. The academic literature provided a critical background and foundation to my study. The academic literature presented different levels of credibility through the research from diverse authors. Each author in the literature review was able to clearly articulate how small business were able to become or remain resilient after a major natural disaster. All steps in the literature review were vital steps that factored into the processes and procedures of successful small businesses that could help other small business owners in the future.

Section 2 includes an explanation of conducting the research study, the mechanics of each role (researcher and participants), research method, research design, population, sampling, ethical concerns, and the steps involved in collecting the data. The study will
also include specifics about the data collection, including data collection instruments, data collection itself, data organization techniques, and data analysis. I will also discuss reliability and validity and describe the plan to ensure the study meets quality standards.

Section 3 of the research study will start with the overview of the study. The discussion in Section 3 will include the presentation of the findings, applications to professional practice and implications for social change. Also, in Section 3, I will present my recommendations for future study, reflections, summary, and study conclusions.
Section 2: The Project

Section 2 includes the research design, methodology, ethical considerations, data collection, and the different collection processes. The role of the researcher, the data organizational tools, and systems used during the study are also covered. Section 3 will then include the presentation of the findings.

Purpose Statement

The purpose of this qualitative, multiple case study was to explore the financial strategies small business restaurant owners used for successful business recovery following a major disaster, such as Hurricane Katrina. The targeted population consisted of three small business restaurant owners from three restaurant organizations that used financial strategies which resulted in successful business recovery after Hurricane Katrina and whose businesses remain sustainable in New Orleans, Louisiana. Restoring and strengthening the resilience of small businesses could provide economic opportunities for individuals and families who wish to return and rebuild their neighborhoods and their communities after a traumatic natural event. Additionally, third-party vendors who supplied these businesses with goods and services could also benefit.

Role of the Researcher

According to Yin (2017), the role of the researcher is to attempt to access the thoughts and feelings of study participants. The researcher’s purpose is to function as the primary research instrument for data collection by using multiple sources of data to strengthen the research results (Yin, 2017). As the researcher, I conducted a qualitative,
multiple-case study. During this process, qualified participants in the small business food industry were interviewed. I then performed document analysis, coded the data, and sought key factors or patterns associated with financial strategies used by small business restaurant owners for successful business recovery following a major disaster. As the primary tool of the collection process, the goal was to gather information to answer the research question. The interviews included methodological triangulation of multiple, rich, in-depth data sources. This approach was borrowed from the Yin (YEAR), who stated that case study data collection requires multiple protocols to ensure valuable data collection. The duty as the person collecting data was to maintain a system of order by correctly tracking all information generated.

In qualitative research, Bailey (2014) stated that research drives a mild obsession to know and understand exact procedures, while contemplating meaning within the context of the topic and participants. The vested personal and professional interest in understanding and discovering the different ways small businesses can become more successful after major disasters, especially after witnessing so many fail after Hurricane Katrina, is important to this research. As a United States Marine, I lived in New Orleans, Louisiana, from 2001 to 2005, with the U.S. Marine Corps. During this time, my responsibility included coordinating and setting up the military Emergency Operations Center. The experience gained in emergency crisis training provided by civilian and military agencies assisted in the preparation of this study. Responsibilities included the movement of military personnel from one location to various places depending on the
direction of the storm or the type of disaster. In this role, I collaborated with civilian agencies, including local businesses that catered to the military. Through personal and professional experience, knowledge obtained in this study, especially because of the many connections that remain in New Orleans in small businesses community.

**Ethical Consideration**

In 1979, the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (NCPHSBBR) highlighted three general principles: respect for (a) persons, (b) beneficence, and (c) justice (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research [NCPHSBBR], 1979). The study included permission to conduct this research study from the Institutional Review Board (IRB) of Walden University before research began. Participants received an e-mailed invitation to participate in the study. While IRB practices seek to minimize harm in research conducted with human subjects, traditional IRB review can introduce new existing ethical challenges when reviewing non-traditional research protocols (Cross, Pickering, & Hickey, 2014). Upon appropriate IRB approval (Approval No. 04-09-19-0397241), I informed the participants of the informed consent form.

All participants received disclosures for their right to confidentiality in the consent form. According to Beskow, Check, and Ammarell (2014), Certificates of Confidentiality are an important tool for meeting the ethical and legal obligations of a research study (as cited in Waycott et al., 2015). The consent forms, signed by all
participants, informed the participants about their role, risk, rights and most importantly the confidentiality of the study (Regmi et al., 2016). By shielding researchers and institutions from forced disclosure of identifying data in legal proceedings, confidentiality agreements include the intent to reassure prospective participants about the security of the information and thus facilitate research on sensitive topics (Beskow et al., 2014). During the consent procedure, participants received all guidelines with time allotted for the participants to respond to any concerns. Participants received all ethical considerations and methods, Walden University’s guidelines, and the Belmont Report guidelines.

There were no apparent issues that might lead to violating any of the regulations of the Belmont Report; however, the study participants have rights and interests, which the research might unknowingly violate, so the possibility of this threat remained significant (Riggio & Saggi, 2017). Any possible violation of the Belmont Report regulations would result in a reevaluation. To minimize the possibility of any violations, the study included the focus on respecting all of the participants, not harming anyone or anything, and ensuring everyone understood the benefits and/or burdens of the research (Tri-Council Policy Statement, 2014). Protecting the participants was vital to the success of this research. There were no violations of the Belmont Report regulations during or after the interview process. Cross et al. (2014) stated it is the researcher’s responsibility and obligation to be concerned with the welfare of participants, which might include physical health, psychological well-being, and social reputation. Consequently, the study
included aliases to identify participants rather than their actual names and personal information.

**Bias**

Per Yin (2017), researchers should not try to simply ignore or avoid their own biases. Instead, reflexivity requires researchers to reflect upon and articulate their position and subjectivities (worldview, perspectives, and biases) to ensure that readers can better understand questions, data gathered and analyzed, and findings reported (Yin, 2017). The direct ties and relationships within the community might introduce a certain degree of bias into the study. Consequently, I reflected on personal potential biases when they arose by clearly stating my position.

Researchers can influence the data process, especially during the interview and if familiar with the topic (Yin, 2017). Smith and Noble (2014) stated research bias is important for several reasons: (a) first, bias exists in all research, and across research designs and is difficult to eliminate; (b) second, bias can occur at each stage of the research process; and (c) third, bias impacts the validity and reliability of study findings and misinterpretation of data can have important consequences for practice. As a U.S. Marine assigned to the Emergency Operations Center during many weather-related disasters in New Orleans, firsthand knowledge included information and experience about the effects natural disasters have on the community and its local businesses, which assisted in the research process. Therefore, awareness of verbal tones and body language while conducting the interviews prevented any misunderstandings. In addition, written
notes recorded possible biases during the interview and revisited later.

The study included attempts to minimize bias by interviewing participants without personal connections or knowledge. Bias can occur at any phase of research, including the study design, data collection, and data analysis phases (Smith & Noble, 2014). Attempt to avoid bias included keeping the questions neutral and asking questions directly from the interview protocol (see Appendix).

**Interview Protocol**

Castillo-Montoya (2016) identified a four-phase process in the interview protocol, which included: (a) ensuring interview questions align with research questions, (b) constructing an inquiry-based conversation, (c) receiving feedback on interview protocols, and (d) piloting the interview protocol. Before the initial interview began, the goal was to ensure the research questions aligned with the topic. During the interview process, I asked questions directly from the interview protocol (see Appendix). The interview protocol included a series of open-ended probing questions and asking for a response in a calm manner (De Ceunynck, Kusumastuti, Hannes, Janssens, & Wets, 2013). In the interview protocol, an interviewer must ask a series of open-ended probing questions (Castillo-Montoya, 2016). Per De Ceunynck et al. (2013), the participant could mention each consideration that came to mind and the participants’ answers are then coded using an extensive pre-defined list of variables. The interview protocol also extends to the procedural level of questioning and includes a script of what to say before the interview and a script for the conclusion (see Appendix). The interview protocol
includes instructions for the opening statements to the participant, the key research questions and any imminent probing questions. Participants’ received disclosure regarding privacy and confidentiality rights, potential risks, benefits, and the data analysis and data storage methods. Certification of completion from the National Institutes of Health Office or Extramural Research certified completion of the Web-based training course, Protecting Human Research Participants, prior receiving IRB approval to conduct interviews.

**Participants**

Inclusionary criteria are necessary for research, considering certain factors and potential candidates. New Orleans is a diverse community of people with a distinct cultural food industry (Agyeman, Matthews, & Sobel, 2017). Because of personal familiarity with the area and the community, there were fewer barriers to finding adequate participants. I understood the landscape, built a level of trust through the role as an Emergency Operations Specialist with the U.S. Marines, and had a deep understanding of the community’s culture. Kaiser, Thomas, and Bowers (2016) argued researchers often do not reach recruitment goals for hard-to-reach participants such as racial and ethnic minorities and people with low income. Reasons for low recruitment include mistrust of research, perceived risks, and lack of culturally appropriate information about opportunities to participate in research as well as burdens such as time commitment and lengthy questionnaires (Kaiser et al., 2016). Recruitment was not a problem during this study. Participants were forth coming and all three were eager to provide information.
My connection with the community and the narrow scope of this study increased the ease in which to gather study participants. Only business owners who maintained positive business growth and continuity after Hurricane Katrina participated. Because small businesses make up a majority of the employment opportunities available to the workforce in New Orleans, Louisiana, sufficient business owners existed from which to draw the required research data.

Operating in a military capacity in New Orleans while working with the Emergency Operations Center, I had access to military and public officials of both large and small businesses. For this study, visitation to many local restaurants in New Orleans assisted with determining which locations met the study criteria. Because New Orleans is a tourism community and restaurants play a significant role, contacts included multiple small restaurant owners willing to open their doors to the interview process who seemed more than willing to contribute to bettering their community and their businesses.

After obtaining permission to conduct this study from the Institutional Review Board (IRB) of Walden University, the interview process began. During the interview process, I attempted to make the participants feel comfortable. The environment was relaxing and neutral, to ensure that participants would feel more comfortable answering questions honestly. Doody and Noonan (2013) stated the researcher should first explain the type of interview to be conducted, its nature and the general format the interview will take. Establishing a trust is essential between the participants and the researcher through interpersonal communication and assurance of proper data collection. Interviews can be
intimidating to some; consequently, building a relationship of trust with the participants as soon as possible was necessary.

The goal was to remain complete honesty and transparency with participants at all times. To accomplish, timeliness for the interview was important as was the need to be professionally groomed and dressed, and to speak as openly as possible. During the interview, the researcher needs to show empathy, listen actively, and maintain eye contact throughout (Doody & Noonan, 2013). It is crucial to be empathetic by listening to everything the participants said using a non-threatening posture.

**Research Method and Design**

For this study, the study included the qualitative methodology. According to O’Reilly and Parker (2013), the qualitative research method is an investigative methodology described as ethnographic, naturalistic, anthropological, field, or participant observer research. This research project involved the case study design. Case study research enhances the understanding of complex contextual, cultural, and behavioral factors (Yin, 2017).

**Research Method**

Qualitative work involves using semistructured interview questions to gather detail data to answer the research question (Morse, 2015). Baškarada (2014) suggested using qualitative method when the researcher studies individuals, groups, or issues in depth in their natural setting. This model can also be helpful in testing whether scientific theories and models assist in the real world (Yin, 2017). By understanding the problem,
making assumptions, identifying critical processes, defining the variables supporting sustainability, establishing the relationship between the variables, solving the resultant system, and interpreting and validating the data, creates the ability to formulate a conclusion to help explain how small businesses can achieve positive outcomes after disasters.

Qualitative research relies on measuring the quality of something rather than its quantity (O’Reilly & Parker, 2013). According to Yilmaz (2013), qualitative research uses participants’ observation, in-depth interviews, document analysis, and focus groups. For this study, qualitative research method, I explored the elements of the processes and procedures used during and after major disasters by small businesses. Basic knowledge of the philosophy of science about the differences between positivist and interpretative paradigms is essential to grasp the foundations of qualitative research methods (Malterud, 2016).

Quantitative researchers work primarily with mathematical models and statistics to analyze the data and report their findings in impersonal, third person prose by using numbers (Yilmaz, 2013). Quantitative research can be comparative, expressive, predictive, and correlational (Bezzina & Saunders, 2014). In qualitative research, the selection of participants cannot follow the procedures of quantitative sampling because the purpose is not to count opinions or people but to explore the range of views and different representations of an issue (O’Reilly & Parker, 2013).

According to Hesse-Biber (2016), mixed methods research is an approach
combining quantitative and qualitative research methods in the same research inquiry. For example, interviews, a qualitative data collection approach, can provide depth in a research inquiry by allowing researchers to gain profound insights from rich narratives (Hesse-Biber, 2016). The decision to use the qualitative method instead of quantitative or mixed methods research hinged on my research study’s questions, purpose, and context.

**Research Design**

The purpose of this qualitative multiple case study was to explore the financial strategies small business restaurant owners used for successful business recovery following a major disaster. Researchers conduct case study research to interpret event experiences and to develop an in-depth description of a problem (Yin, 2017). According to Yin (2017), a case study design should be considered when: (a) the focus of the study is to answer a how and why questions, (b) the researcher does not manipulate the behavior of those involved in the study, (c) the researcher does not want to cover contextual conditions because he or she believes they contribute to the experience under study, and (d) the boundaries are not clear from the experience and context.

This study used a multiple case study research design to include exploration of financial strategies used by small business restaurant owners for successful business recovery following a major disaster. Researchers conduct multiple case studies to compare and contrast situations (Marshall & Rossman, 2016). I collected multiple sources of information and evidence through face-to-face semistructured interviews, observation sensing (which is part of the interview process), historical archives, audio
recording conferencing, and member checking. The other four designs - ethnography, narrative, phenomenological, and grounded theory - do not apply to this study for different reasons. Qualitative multiple case design is the best option among the other designs. Provided below are definitions and references for each.

**Ethnography.** Baskerville and Myers (2015) stated ethnography design involves using ethnographic techniques to address the design goals or user requirements might be from the minds and behavior of the people concerned. In the ethnography design, the researchers focus mainly on studying goals and cultural themes. Levitan, Carr-Chellman, and Carr-Chellman (2017) indicated ethnography can also be used to explore past experiences and can contribute to future research. Loh and Loong (2016) illustrated ethnography as being a research method focused on processes and social spaces. Loh and Loong also saw ethnography as a useful tool for collecting data and for thinking about cultural spaces. The goal of the research study was to understand what processes and procedures the business owners used to recover. All three participants knew what their goals were, which were to implement the core process and techniques they all used in the past to recover after Hurricane Katrina. The participants’ past experiences were critical to their successful return to operations.

**Narrative.** The narrative approach reveals additional themes as represented by students’ reflection and reconciliation of the meaning and value of the simulation experience within their academic processes (Shorten & Ruppel, 2017). When dealing with the narrative design, the prevailing culture can arise becoming significant enough to
disrupt what is currently (Wilner & Ghassan, 2017). According to Wilner and Ghassan (2017), New Orleans has a noticeably distinct culture. The research focus is narrow with the intent to explore this cultural context from a broad perspective; therefore, the narrative design is not the best choice for this study. The narrative approach can be seen in this research study because the participants are drawing the past and reenacting the same or modified procedures they used in the past. Disaster planning for the participants is a culture all on its own and become systematic implementation.

**Phenomenological.** Phenomenological researchers use a combination of methods but also rely on participants’ perspectives instead of actual procedures. When using phenomenological design, researchers explore the deficiencies that negatively impact the long-term lived success experiences of a business (Alfakhri, Harness, Nicholson, & Harness, 2018). Smith (2015) referred to phenomenology as an approach in which personal meaning and the lived experiences of a community take center stage. Marshall and Rossman (2016) stated the phenomenology design researcher draws on individuals’ shared experiences to compare and contrast with the goal of identifying differences and essence. Although the phenomenological research would work fine as a design, most some businesses do not share their ideas and procedures with their competitors, especially in a small community where every dollar counts. By using the phenomenological design, there might have been a high probability that participants would disclose false information with the hopes of possible gain in the business community. Even though the participants did not know each other, it is clear that their
experiences and disaster plans are similar. Everyone in New Orleans experiences the same phenomenon and the learned knowledge of the past is what drives the successful return to operations for the three participants.

**Grounded theory.** When using the grounded theory, the researcher focuses on discovering the problems that exist in the social scene and how the participants handle them (Corbin, 2017). Grounded theory continues to evolve and change and is not established prior to the beginning of the research study, which means that the design can be adapted to evolving finding (Corbin & Strauss, 2014). Even though New Orleans has a unique social scene in and around specific areas, the grounded theory design would not be appropriate for this study because this study does not include exploration of the social scene.

**Saturation.** According to Fusch and Ness (2015), methodological triangulation is a method to rich data saturation. Methodological triangulation is the method by which multiple methods analyze different levels of perspectives on the same phenomenon (Fusch & Ness, 2015). Malterud (2016) proposed the concept of *information power* to guide an adequate sample size for qualitative studies. To reach a degree of saturation, participants answered all the questions thoroughly and completely. Data saturation occurs through methodological data triangulation techniques, which includes interviews, audio recording, and member checking (Saunders et al., 2017). I encouraged complete answers to minimize the need for additional follow up questions. Data saturation occurred through the participant's documents and historical artifacts for analysis and the recurring themes.
Population and Sampling

Major natural disasters are a phenomenon of interest that reoccurs seasonally. Thus, purposeful sampling method assisted with the selection of participants. Purposeful sampling is used to recruit participants and gain insight (Yssel, Pak, & Beilke, 2016). Benoot, Hannes, and Bilsen (2016) suggested the logic and power of purposeful sampling rests in selecting information-rich cases for in-depth study. This study included exploration of three small business restaurant owners from three different organizations who used financial strategies for successful business recovery following a major disaster, Hurricane Katrina. The information provided by the participants was important to others and served a purpose.

For this study, three small restaurant business owners were the sample size, which could act as a pilot or sub-study for more in-depth research in the future (Siersma & Guassora, 2015). All three owners positively demonstrated their success in returning to operations after Hurricane Katrina by providing historical and financial records. Many researchers use sound samples in purpose sampling strategy, dividing the research into smaller sub-studies and then analyzing each of their terms before aggregating the findings together (Robinson, 2014). Because small businesses make up a majority of Louisiana’s economy, a small population can be used and still provide enough information to answer the questions posed by this research.

The study used purposeful sampling techniques in this study to gain access to the population (Benoot et al., 2016; Dasgupta, 2015). The sample size along with the number
of open-ended questions relies on data saturation (Tran, Porcher, Tran, & Ravaud, 2017). Data saturation occurred after all three interviews and there were no new data about small businesses recovery after major disasters. According to Tran et al. (2017), the point of data saturation depends on the researcher’s experience and the continuous search for new information.

The questions asked of the participants were clear and concise, not to get to know the participant, but because I wanted to understand how and why they do things (Arsel, 2017). Arsel (2017) suggested digging as deep as possible to get to the background of what happened. Narrowing down the theme and asking concise questions made data saturation more likely. The participants answered the open-ended questions in a way that was fully understandable. The aim was to have participants respond with answers that painted a clear picture of (a) what happened and (b) what preventive measures could be taken to prevent business closure after a disaster.

The participants came from the small business restaurant population of New Orleans and had to meet the following criteria: (a) have been operational for at least 5 years from the date of Hurricane Katrina, (b) be a small business owner in the restaurant industry, (c) maintained business continuity after a natural disaster, (d) implemented financial strategies for recovery, (e) have knowledge or experience related to surviving a natural disaster, and (f) reside in the general locations where the interviews will take place, New Orleans, Louisiana French Quarters. Jones, Ross, Lynam, and Perez (2014) found the location of an interview could prompt visual cues to assist the participant in
providing more accurate information, making the setting critical. The location and
distance from the participants, the phenomena of interest, flexible hours, and ease of
securing access determine the setting where the interviews will take place (Jones et al.,
2014). Selecting the right location for the interview also has an effect on different
expressions than the interview itself (Jones et al., 2014). The interviews for this study
took place in the respective owner’s restaurants during operating hours.

**Ethical Research**

All research studies should strive to maintain and adhere to the ethical norms of
research and protecting the rights of the human subject. According to Kaye et al. (2014),
the consent form is the primary means of recording an individual’s participation in
research. Lewis (2015) emphasized establishing rapport with participants to provide
study access and to yield valid data highlight the importance of a good consent form. In
some cases, participants could be impaired and or disabled, which leaves the question as
to whether consent can be said to have been given voluntarily if the person has cognitive
impairment or disability (Henden & Baeroe, 2015). All of the owners who participated in
this study were of sound mind, over 18, and highly capable of answering questions. I
discussed the informed consent form, coding, the ethical requirements, and procedures
for withdrawing, incentives for participating, confidentiality rights, Walden’s IRB
information and other aspects of participant protection in the following sections.

**Informed Consent**

Spatz, Krumholz, and Moulton (2016) pointed to the well-ingrained ethical-legal
process of informed consent as a fundamental right and support the participant’s right to self-determination (Spatz et al., 2016). To withdraw from the study process, the participant would submit a statement of cancellation. None of the participants canceled. The importance of the consent requirements was to ensure that high-risk research gets the focused attention and the less considerable research proceed at a regular pace (Faden, Beauchamp, & Kass, 2014).

For this study, promptly issued informed consent information allowed participants time to review and process the questions (Spatz et al., 2016). Not understanding or misinterpreting the consent process could undermine the interview and the results (Spatz et al., 2016). For example, informed consent obtained right before the process starts jeopardizes the participant's autonomy and can lead to flawed results (Spatz et al., 2016). Participants could provide false information when not taking the time to fully consider the risks, benefits, and alternatives of the procedure (Spatz et al., 2016). All of the participants were given ample time to respond.

Standards and requirements were used to set the eligibility criteria and assessed all potential participants. According to Carey and Griffiths (2017), those who met the requirements and agreed to participate should receive informed consent documents and all other supporting documentation, detailed instructions on the interview process and the assurance they may withdraw from the study at any time. Only after potential participants decided they would like to participate in the study, and after notification of acceptance, should the researcher approach each participant to arrange a meeting for the purpose of
obtaining informed consent (Carey & Griffiths, 2017). Consequently, for this study, once
the participants signed the consent forms, the participants included discussion of the
following: (a) they were under no obligation to answer any questions they do not feel
comfortable answering, and (b) they could drop out of the study at any time. Each
participant received an identification code known only to the researcher. Coding involved
different labels, tags, letters, and numbers relevant to the research questions and directly
tied to the participant’s assigned symbol. After explaining the coding procedures, the
participants remained eager to proceed with the interview process and no one dropped out.

Confidentiality. According to Petrova, Dewing, and Camilleri (2014), values
associated with confidentiality include autonomy, privacy, and keeping a commitment.
For a minimum of 5 years, data from this study will be in a secure facility using
passwords and locked document file cabinets. The interview was audio recorded and, to
ensure confidentiality, only the researcher has access to the recordings (Petrova et al.,
2014). The recordings will be kept in a safe place along with the other data and will be
destroyed at the end of the 5-year period (Petrova et al., 2014). Study participants
included interviews at the same location but on different days of the week, completed to
minimize contact between participants. Interviewing at different times and days also
ensured confidentiality. Dropbox, an online company, stored and protected data files with
software encryptions and files (Latha, Gowsalya, & Kannega, 2014). The data collected
from the participants will be secured in a private location for a minimum of 5 years to
protect the rights and privacy of the participants. The participants could not view other participants’ data at any time, nor could they review the results with actual names. Symbols or false names took the place of the actual names of the participants.

Coding

Confidentiality remains the only guarantee that each participant’s identity will be protected in front of their peers and the public (Petrova et al., 2014). According to Petrova et al. (2014), there are several methods available for maintaining confidentiality (such as pseudonyms or numerical codes) when analyzing the data. According to Dasgupta (2015), prior codes organize documents and also protect the participants for quick retrieval segments of text for easy interpretation. Coding helps to assign meaning to different ideas, facts, documentation, people and descriptive information compiled during a research study (Dasgupta, 2015). Borrego, Foster, and Froyd (2014) stated the basic procedure is to create mutually exclusive coding categories, categorize the data into these categories, and report frequencies. Ultimately, coding allows for easy access to multitudes of data and protects the participants from possible future research problems (Stuckey, 2015). In this study, all of the coding was hand generated because of the small population. A pad with margins on the side kept record of quick notes and additional comments that later the codes with the categories, which was my guide to find certain data. Because of coding by hand, the study included simple number and letter code during the interviews. I used numbers and letters to identify the participants, which will look like P1, P2, and P3. The locations included the labels as locations 1, 2, and 3, which
by matching up with the participants increased the ease to find among all the data.

**Study Incentives**

Valid concerns exist regarding incentives for research participation. Incentives can be coercive, particularly for lower socioeconomic populations such as those in New Orleans or substance abusing populations. Most U.S. clinical trials offer pro-rated modest amounts per study (Rodgers, Meisel, Wiebe, Crits-Christoph, & Rhodes, 2016). According to Barnato, Moore, Moore, Kohatsu, and Sudore, (2017), rewards or financial incentives can promote immediate action and can influence participants to join the process. The subsequent reward can be monetary but does not have to be (Watson, Robinson, Harker, & Arriola, 2016). This study did not use incentives to encourage participation. Because of no incentives for this research study, there was a reimbursement for time in the form of a $10 gift card.

**Rules of the IRB**

According to Karlberg-Granlund and Furu (2016), the action of the academic researcher’s practices entails multifaceted ways of working to accomplish different and somehow contradictory objectives, yet at the same time enacting democratic working methods. The U.S. federal Common Rule, which governs the conduct of research with human subjects, specifies the criteria and procedures by which IRBs should review such research (Babb, Birk, & Carfagna, 2017). Without knowledge of the actual decision-making processes of IRBs, any modification of the IRB system risks missing the target. The Walden IRB approval number was 04-09-18-0397241.
**Data Collection Instruments**

In this qualitative research study, I was the primary collection instrument. Along with asking questions via a semistructured interview process, observations of participants and their mannerisms were conducted. According to Kennedy-Clark (2013), using a rich source of data include identification of subtle shifts in dynamics while employing persistent observation will allow the researcher to identify what is relevant to the study. In addition to face-to-face, semistructured, open-ended questions during the interviews, data came from the small business owner’s organizational and archival documentation.

**Instruments**

Fusch and Ness (2015) claimed the researcher is the data collection instrument in qualitative research, increasing the difficulty for the researcher to separate entirely from the research. Per Kennedy-Clark (2013), researchers use multiple forms of data and feedback instruments to build moderations and validity into their studies. On location, I requested 5 years’ worth of historical/archival documentation, which added to the semistructured interview data to make this research study stronger. All three participants provided more than 5 years’ worth of historical/archival documentation, which lent credibility to the research. Audio recording and note taking stored participants’ responses and my notes, respectively. The member checking method provided the necessary additional clarification on the last day in New Orleans.

**Audio Recording**

According to Noble and Smith (2015), if the researcher uses audio recording data
collection, then the recordings must be transcribed verbatim before data analysis can begin. It took approximately 8 hours to transcribe one 45-minute audio-recorded interview, a process that would generate 20–30 pages of written dialogue (Noble & Smith, 2015). Noble and Smith stated semistructured audio-recorded interviews allow for a repeated revisiting of the data to check emerging themes and remain true to participants’ accounts. Per Spelten, Martin, Gitsels, and Pereboom (2015), audio recording enables the assessment of communication performance or intervention fidelity as well as the confirmation of best practices or answers to questions. Audio recording provides feedback on work habits by assessing communication during the interview (Spelten et al., 2015). To obtain the observational data of the participants’ actions and behavior during the interview, I used an audio recording conferences device (Thackray & Roberts, 2017). According to Thackray and Roberts (2017), there is no universal right amount of audio data to collect. Each interview ranges from 30 minutes to an hour depending on how excited the participants were in providing information. The amount of audio data required by the researcher's approach and questions is a matter of time and resources. After listening to the audio recordings, familiar themes and thoughts were transcribed and coded (Thackray & Roberts, 2017).

Note-Taking

Note-taking during an interview assists with the coding later during data analysis. It is vital to ensure that accurate accounts align with the audio conferencing data. Note taking also provided side notes and reminders to revisit certain pieces of information.
According to Doody and Noonan (2013), note-taking can be distracting for participants and can interfere with the interview process. Note-taking can also distract the researcher from recording accurate information and impairs the ability to carefully listen to the participants to probe for vital responses. Taking notes during an interview did not interfere with the participants' thought processes or providing information. Balancing the ability to take notes with other types of data instruments is essential. During the interview, note pads and Post-it notes served as additional data collecting instruments.

**Member Checking**

After each interview, I thanked the participants for their time and asked if there was anything else they would like to add. Per Harvey (2015), during the initial interview stages, the researcher will have a clear idea of the interview questions but must expect additional questions to arise after transcribing. Member checking is the final stage of the interview process to provide participants with an opportunity to reflect on their experience based on a review of the transcripts (Harvey, 2015). According to Yin (2017), participant’s consent for final interpretation can be requested after additional clarification occurs in the interpretation process. Ultimately, member checking is the final time the researcher can expect to gain clarification and understanding directly from research participants (Yin, 2017).

The interview protocol is a document, which illustrates the sequence of events to the participants (see Appendix). After providing the participants in the study with the interview protocol, and confirmed they were comfortable and understood the process, the
interview phase began. During the interview, open-ended questions technique explored the participant’s views, choices, and decisions made. Efforts for close observation notes recorded the participants’ mannerisms, facial gestures, and body language.

**Data Collection Technique**

Data collection included face-to-face semistructured interview technique and historical archives. Per Baggio et al. (2014), whatever philosophical standpoint the researcher takes and whatever the data collection method (e.g., focus group, one-to-one interview), the process will involve the generation of large amounts of data. Participants received explicit instructions on the interview process and protocol, prior to the interview (see Appendix).

Semistructured, face-to-face interviews and observation sense affords participants the opportunity to voice any comments or concerns about: (a) the interview process, (b) their privacy, (c) data handling, and (d) who will view the results in real time (Waterworth, Raphael, Parsons, Arroll, & Gott, 2017). While conducting the face-to-face interviews, participants agreed to future contact via the Internet and audio to ensure another opportunity for clarification. In the event a participant was hard to reach for follow-up questions or did not feel as comfortable with face-to-face interactions on a second occasion, audio conferencing was an alternative. After the completion of the interview was completed, there were no follow-up questions required.

**Semistructured, Face-to-Face Interviewing**

The semistructured face-to-face interviewing technique is a valuable tool when
relying on physical and emotional data. Per Wilson (2016), the semistructured interview allows for more flexibility with guided questions. Although audio conferencing was preferred, findings indicate significant differences across the two conditions, with audio conference interviews coded as having higher indices of content relevance, process effectiveness, and message control, but lower content focus, compared to face-to-face interviews (Fischer, Collier-Meek, Bloomfield, Erchul, & Gresham, 2017). According to Purvanova (2014), their published interview with virtual team members revealed humans prefer the human touch afforded by face-to-face communication, supporting the use for semistructured face-to-face communications in this study. In traditional humanist qualitative research, words in interview transcripts and field notes are primary data, collected as they are in face-to-face encounters in the presence of participants in their natural setting (St. Pierre & Jackson, 2014). With face-to-face interviews, no time delay between question and answer exists, which means the interviewer and interviewee, can immediately react to what the other says (St. Pierre & Jackson, 2014). The face-to-face interviews were audio recorded with the permission of the interviewee, which Brinkmann (2014) stated allows for a more accurate account than just writing out notes during the interview process.

Observing. According to Ritchie, Lewis, Nicholls, and Ormston (2013), observing or recording evidence of deprivation of affluence was important, but lacked sufficiency for a full understanding of people’s lives. Context is a fundamental aspect of research phenomenon and experiencing the research phenomenon in its real setting is
critical to understanding; thus, observational data may also be required (Ritchie et al., 2013). Observing participants during the interview process can also be critical to the reliability of a study. Following the participant’s emotional changes and body language enables one to describe existing situations using the senses in real time. For example, interviews with the combination of observation provide an understanding of how events or behavior arise, as well as to reconstruct perspectives on their occurrence (Ritchie et al., 2013). Observing the participants was one of three data collecting techniques.

**Historical Archives**

Because of new digital technologies from fields as diverse as library science and communications, an unprecedented amount of qualitative data is archived for future researchers to pull information from (Bail, 2014). According to Bail (2014), Google alone already created digital copies of nearly every single book ever written in collaboration with more than 19 million libraries worldwide. Academic databases such as LEXIS-NEXIS or ProQuest contains digital copies of most of the world’s journals, newspapers, and magazines.

After completion of the interview process on location, participants’ submitted business historical archives show their status before and after disasters. Each participant provided documentation, photos, and historical data as proof of successful operations prior to Hurricane Katrina. Baker (2016) stated most archival data stored at the public library or available online. During the interview process, all three participants felt proud of their contribution to the community’s history, which was evident in the historical
photographs and financial records. Historical archives are relevant to a researcher, and can also be valuable for a more substantial and non-specialized audience. By obtaining historical archived documents capable of narrating social change such as pictures, newspapers articles, audiovisual clips, and interviews, a story about such places, people, and events are shared (Goy, Magro, & Rovera, 2015). These records showed evidence of the study participants’ business success for two years prior to Hurricane Katrina. The records kept should be based on the type of businesses, industry, events, and location, which in this case is the restaurant industry affected by a natural disaster.

**Advantages and Disadvantages**

Data collection techniques have advantages and disadvantages. I strived to enumerate the pros and cons of each data collection technique. Conducting interviews has advantages because of being in person, allowing for dialogue more conducive to the context of the topic, communication capabilities, attention span, limited verbal skills, language, and or lack of motor skills of a participant (Wiseman & Harris, 2015). The interviews enabled the participants to describe how the disaster affected their businesses and how they overcame the challenges.

The disadvantage to interviewing participants is bias. Because of the passion of the topic, careful consideration to not introduce my point of view when interacting with the participants was critical. Due to the participant's busy schedules, it would be difficult to arrange another visit that would accommodate both of our availabilities, which is why it was critical to complete all interviews thoroughly and efficiently. Additionally, my
work schedule only allows me to certain times of the year for vacation, which falls close
to hurricane season. The participants stated that majority of the year, small businesses in
New Orleans are preparing for hurricane season. The participant’s time is generally spend
training and ensuring that daily operations is successful stated the participants. Per
Baggio et al. (2014), face-to-face interviews could deter participants because of the
transportation requirements and expense, supporting the importance to pick the right
location.

Historical data to include photographs and funding documents can be useful for
recognizing possible previous interventions (Quagliairi, Clini, & Ripanti, 2016). Reviewing historical archives is relatively inexpensive, which is an advantage, providing
an excellent source of background information on disasters, especially because New
Orleans and surrounding areas face the threat of a hurricane season annually. The
research study participants could also provide historical information others may not know
about. By reviewing historical documentation, changes over time could be noted
(Quagliairi et al., 2016). Relying solely on historical reviews can present a risk because
this information may be destroyed during a natural disaster (Quagliairi et al., 2016).
Also, if the information is abundant, collecting, reviewing and analyzing data can become
time-consuming. The historical documentation and artifacts requested from the restaurant
owners were basic financial proof of success. Old pictures illustrated proof that the
business was operational and successful.

Ritchie et al. (2013) asserted the possibility of a future observation proving to be
an exception to the rule. When using observation, I did not have to rely solely on people’s willingness to provide information. Small business owners may only allow the researcher to see what they want them to see and observation alone may not increase the understanding of learning about business decisions made to accomplish sustainability. During the interviews, the participant’s body language illustrated that they were passionate about their businesses and wanted to remain resilient.

**Member Checking**

From this point forward, member checking became part of the continuing process to identify and confirm participants’ experiences and to collect any information they did not share during the interview (Wilson, Onwuegbuzie, & Manning, 2016). Per Birt, Scott, Cavers, Campbell, and Walter (2016), once the transcript review is in the final stages and the data interpretation completed, participants should be allowed to review the data provided to determine if they may have left out vital information. The data interpretation and transcript review stage included member checking in the initial process.

When there is a possible miscommunication or confusion during the interview process, participant elaboration will reinforce the credibility of the results (Birt et al., 2016). While compiling data and before finalizing the information, member checking allowed the participants to validate their data in person during a secondary interview. Per Harvey (2015), member checking is a back and forth dialog between the participant and researcher where additional clarification is obtained through questions. Allowing the participants to review their results provides more credibility (Birt et al., 2016). Not only
is member checking used as a tool for the accuracy of a participant’s accounts, but one also uses the strategy to determine whether participants recollected the same information provided during the interview (Thomas, 2017). According to Thomas (2017), evidence provided by the participants during the member check can improve the research outcome.

**Data Organization Technique**

In the study, face-to-face semistructured interviews, historical archives, audio recording conferencing, observation sensing, and member checking techniques were implemented to enhance the quality of this study. According the Yin (2017) after collecting the data from the interview process, the decision-making stage began, which determines how to keep track of data vital and critical to the accuracy of the research findings. During the interview, data collection included research logs, annotated notes, consent forms, document request letters, and data trackers (Yin, 2017).

**Research Log**

The research logs included details regarding everything that needed to occur from the interview completion to the destruction of the data after the period of safekeeping expired. According to Zentz and Whalen (2013), by documenting the research using a research log worksheet and narrative, which included a reflection on the search process, evidence appraisal, and strengths and weakness are important. Although the research log worksheet provided structure, specific problems including uncoordinated group searches, inadequate articulation of evidence selection, and limited reflection about strengths and weaknesses (Zentz & Whalen, 2013). Research logs can be as simple as writing notes
down to keep track of the steps conducted before, during, and after the interview. A reflective journal kept track of my thought process during the interview. The journal was used to showed different obstacles, aspects, and interactions that occurred as well. The reflective journal was used to documented successful and unsuccessful ideas, implementation and illustration.

Yin (2017) stated tests applied throughout the case study process during design, data collection, data analysis, and reporting would lend additional credibility. Also, data management is one of the core areas of a research study and affects the validity of the research if not held to a high standard (Yin, 2017). It is equally important to ensure that confidentiality of the data, which is why coding is important. Names, all material collected, including audio conferencing recordings were coded. All material is locked in a secure location for 5 years. All data will be stored in a secure location once organized. Storage includes lockable filing cabinets and encrypted storage hard drives. A lockable storage container will contain all the files, paper, audio, and hard drive for 5 years. To ensure the privacy of the participants, I will destroy all data after 5 years by shredding in an approved shredding device or burning in an industrial disposal device.

Data Analysis

In this study, methodological triangulation was used to analyze data. Triangulation is the way in which one explores different levels and perspectives of the same phenomenon (Fusch & Ness, 2015). According to Noble and Smith (2015), triangulation is whereby different methods and perspectives help produce a more
comprehensive set of findings. Methodological triangulation is the best method for this study because of including the proper data collecting methods to answer the problem accurately (Noble & Smith, 2015). The different research methods used in the research study to reveal results were face-to-face interviews, historical archives, audio recording conferencing, and member checking. The combination of the methods provided validity and substance to this research study. The participant’s experience was captured through the lens of my study, which requires real in-depth interviews, accurate transcriptions, and unbiased reporting.

This qualitative study relied on various methods for systematizing, organizing, and analyzing the data collected, to include basic NVivo for Mac version 11, Microsoft Word, and Microsoft Excel. NVivo was used for coding information and statistical data (Edhlund & McDougall, 2017). According to Edhlund and McDougall (2017), using Microsoft products removes the need to learn new software programs because most people use daily. Excel also integrates easily into other Microsoft Office software products.

**NVivo for Mac, Version 11**

The study included the use of NVivo on a small scale to organize and analyze interview information, textual sources, field notes, and other qualitative data to include all media obtained. NVivo allows the ability to collect, organize, extract themes, access coded material, and analyze these varied data types (Min, Anderson, & Chen, 2017). NVivo software can be used on interview transcripts, accesses already coded material and
notes and it will transcribe verbatim into English qualitative data analysis software (Min et al., 2017). NVivo minimized the time to transcribe the interview and other notes manually. Woods, Paulus, Atkins, and Macklin (2016) determined that coding with NVivo offers a unique advantage of creating an indexing system of data categories (called nodes), which provides a visual guide to the analysis and integration of coding. Consequently, by opening a node, one can view the data in any given category in its entirety (Woods et al., 2016). According to Houghton, Casey, Shaw, and Murphy (2013), NVivo can locate all the passages that match the criteria and queries by locating matching data. Researcher use of NVivo helps ensure any issues described in the findings are not the perception of just one person, but rather confirms many participants held the same opinion. Qualitative data analysis software ideally supports the analysis of texts, as well as of media file (audio recordings) and other types of documents as well. NVivo was used in the research study to help analyze the interview information and notes. NVivo was an essential organizational tool that made it easy to pull the information needed at any given time.

**Microsoft Word**

Microsoft Word was the main tool used in the qualitative data analysis process to generate and safely keep the note logs. Spell checker is an important part of Microsoft Word, but frequently suffers from false positives, particularly with proper nouns and unusual names (Bernstein et al., 2015). There other tools within Microsoft Word that allow for easy sorting, structuring, and analyzing of large amounts of text or other data
and facilitate the management of the resulting interpretation and evaluations (Bernstein et al., 2015). In addition to the traditional textual data storage, analysis of image files and audio materials were safely stored.

**Microsoft Excel**

When using Microsoft Excel, the program uses data entry, manipulation, and presentation of numerical data provided by the business owners (Bree & Gallagher, 2016). According to Bree and Gallagher (2016), conducting an entire interview process requires valid and reliable data collection and analysis procedures to be established. An interview generates a massive amount of data, which must be coded and analyzed thoroughly and professionally (Bree & Gallagher, 2016). Excel processed descriptive statistics and capture focus group data (Bree & Gallagher, 2016). Microsoft Excel is important to this study because the software organized some of the data provide for easy access.

**Themes Development**

Per Dasgupta (2015) theme development should happen naturally. Theme development should occur without manipulation or prejudice by a researcher (Dasgupta, 2015). The theme directly relates to the conceptual framework, which consists of reasoned action, planned behavior, and vested interest theories. The theme is what financial strategies small business restaurant owners used for a successful business recovery following a major disaster. In this study, I used the reasoned action theory to explore the participant’s attitudes towards recovery planning and sustainability. Dasgupta
indicated that there is a correlation between planned behavior and participants’ lack in planning skills to plan for disasters.

All small restaurant business owners have a vested interest in how to obtain financial strategies to remain successful and to recovery after a major disaster. Themes are patterns in research data important to the conclusion of the study; they describe the phenomenon and are directly related to the research questions (Woods et al., 2016). I focused on the different components that made up the theme by reviewing the received information/data to look for similarities and differences. This content analysis software is appropriate for theme development because data processing involved retrieving theme from audio, note taking, observations, and coded interviews data (Woods et al., 2016). The analysis involved reviewing notes, viewing and listening to audio, and coding the interview data.

**Reporting Case Study Research**

There are many different ways a researcher can present their findings (Yin, 2017). The goal of the foundational inquiry was to discover: (a) what financial strategies small business restaurant owners used for successful business recovery following Hurricane Katrina and (b) explore how they employed these strategies to ensure financial continuity. I obtained data related to this study using a narrative method to explore and include discussion of the participants’ personal experiences of Hurricane Katrina. Also included was a summary of data from the transcribed interviews documenting everything provided by the participants, which served as part of their financial recovery procedures.
after a natural disaster.

Reliability and Validity

Reliability and validity of the data are one of the most important parts of a research study. During the interview process, member checking and historical documentation provided additional credibility and reliability to the research study (Houghton et al., 2013). Reliability and validity, which are sometimes known as rigor, can be achieved by outlining the decisions made throughout the research process to provide a rationale for the methodological and interpretative judgments of the researchers (Houghton et al., 2013). Reliability means consistency or the degree to which a research instrument measures a given variable consistently under the same conditions with the same subject (Yilmaz, 2013). Revicki, Jin, Wilson, Chau, and Viswanathan (2014) stated validity refers to the extent the object, instrument, or procedure is measured by the intended measurement. The reliability extends to both the study and researchers. According to Lee et al. (2016), reliability means yielding the same or compatible results in different experiments or statistical trials. Reliability is an important concept in practice because of the ability to reduce errors during diagnostic evaluations, during the analysis or responses to questionnaires, and during different procedures. In the following sections, reliability and validity will be explained in detail.

Reliability

A qualitative researcher’s role is to ensure credibility, dependability, and confirmability of a study (Miles, Huberman, & Saldaña, 2014). Per Harvey (2015), the
member checking process involves back and forth conversations with the participants to obtain information missed during the initial interview phase. Before the conclusion of this research study, member checking was utilized to increase study reliability. Researchers establish the quality of a study through ensuring reliability and validity (Houghton et al., 2013). Scholarly references on the subject also provided additional credibility and reliability to the study.

**Dependability.** Dependability refers to the stability of data over time and under different conditions or setting to establish validity (Klenke, 2016). According to Birt et al. (2016), the credibility of the results depends on member checking. The goal of this study was to ensure credibility by allowing participants to review their submissions multiple times. Participants often remember something of importance later, which is why it critical to offer additional time for clarification.

Simpson and Quigley (2016) argued for allowing participants to continuously shape and re-shape their responses and for seeing these insights as an ongoing process and partnership between participants and researcher. I cross-referenced any additional information received from participants with other data collected to ensure correlation. When inconsistencies arose, additional information and clarification was provided. Member checking was done during the interview and throughout until the conclusion of the study to both increase credibility and dependability to ensure maximum accuracy.

**Member checking.** After the completion of interviews and transcripts, a final member checking clarified the last of interpretations with the participants. At this stage,
participants reviewed the data and results for accuracy and resonance with their experiences (Birt et al., 2016). Birt et al. (2016) said member checking, also known as participant or respondent validation, is a tool used to examine the credibility or reliability of results. The member checking process also allowed the participants to visually see and interpret what they said in the interview. The participants used additional time to review their responses to ensure they could acknowledge and respond to their words (Houghton et al., 2013).

Generally, participants will agree to whatever asked (Harvey, 2015). When requesting additional information or clarification, the researcher should never volunteer any conclusions or direct the conversation a certain way. Harvey (2015) pointed to a personal experience of member checking where participants responded to any text with a broad agreement. One or two very conscientious participants would respond by making a few corrections, perhaps if they had made some performance slip in the interview, but this process never generated any deeper opinion or reflection (Harvey, 2015). During the interview, the participants were confident in their responses.

**Data Interpretation.** The goal of this study was to ensure that data interpretation was accurate; the participants were given up to 30 minutes to review their responses. During the member checking process, the participants assisted in the understanding of materials and data not initially clear. Participating in additional sessions helped to clarify information they shared earlier and to provide additional information they hadn’t already mentioned (Wilson, 2016). Simpson and Quigley (2016) believed that using member
checking to check the data interpretation is essential. During the participant transcript, reviewing participant responses, and referring to notes to ensure that the information written was accurate safeguarded the procedures was critical.

Validity

The trustworthiness of a qualitative content analysis is represented by using terms such as credibility, transferability, conformability, dependability, and authenticity (Elo et al., 2014). The validity of this research study depends on accurate interpretation of the data, objective observations of the participants, and on whether supportable data exists in previous research or setting (Houghton et al., 2013). Multiple external analysis methods concerning the same events and the validity of the process may be enhanced by multiple sources of data (Fusch & Ness, 2015). I tested the validity or trustworthiness of the data provided through triangulation in evaluating the data to control bias and to establish valid propositions.

According to Cope (2014), the credibility of researchers rests on verifying the truthfulness of the research findings. To maximize truthfulness and accuracy, the study used multiple tools to collect data from the research participants and to provide the environment and opportunities for them to answer all questions completely and accurately. According to Cope, to support credibility when reporting a qualitative study, the researcher should demonstrate engagement, methods of observation, and audit trails. Once completing the interviews, and after collecting all the data, I reached out to the participants to arrange a second visit. The second visit allowed participants to review the
data provided to determine if the information was accurate. There were minor changes and a small amount of additional information provided by the participants as clarification about the history of their organizations.

**Transferability.** Transferability refers to the findings used in other settings or groups (Houghton et al., 2013). Results used by different organizations can open a wide range of possibilities and challenges (Bohner, Weeber, Kuebler, & Steinhilper, 2015). In this qualitative research study, the results may benefit other small and large businesses by giving business owners and managers information on procedures that expedited business recovery after a major disaster. Per Cope (2014), a qualitative study meets the requirements of transferability if the results have meaning for individuals not involved in the study and readers can associate the results with their own experiences.

**Confirmability.** Confirmability refers to the extent of which results are verified to other resources regarding readability and credibility, not the researcher’s opinion of bias (Miles et al., 2014; Yin, 2017). Confirmability is the systematic record keeping of all methodological decisions, such as a record of the sources of data, sampling, decisions, and analytical procedures and their implementations (El Hussein, Jakubec, & Osuji, 2016). The researcher can demonstrate confirmability by describing how to establish the conclusions and interpretations, and exemplifying the findings was derived directly from the data (Cope, 2014). As the researcher, I ensured confirmability by only using the data provided by the participants who depicted their situation post-disaster, and the procedures and practices used to confront the challenges the disaster posed for their businesses. Per
El Hussein et al. (2016), confirmability of research findings can be achieved through recorded evidence, which another individual can logically follow to the conclusions provided.

**Data saturation.** Data saturation occurs in qualitative research when the researcher no longer observes new information and adding more data offers no further value to the analysis (El Hussein et al., 2016). Fusch and Ness (2015) stated qualitative researchers account for multiple sources of data and perspectives to ensure their study results demonstrate validity through data saturation. A detailed description of the in-depth data analysis and repeated review of the transcripts, providing a process to achieve data saturation and breadth of understanding of the phenomenon validated the criticality and thoroughness of the data (Cope, 2014). I reached saturation by choosing layered, intricate, and detailed data. Once the amount of data started repeating and new perspectives and explanations were no longer coming from the data, saturation occurred.

**Summary and Transition**

Section 2 began with restating the purpose statement, which provided direction for the study. The role of the researcher section offers detailed guidelines as to what the researcher will accomplish throughout the study process. The role of the researcher is a critical component in the section because it not only a guideline, it explains in detail the steps of how the researcher will conduct the research. A description of the criteria and expectations of the participants established their role in the study. The research method, research design, methodology, ethical considerations, data collection, and the various
types of collection processes were used to establish results for future research. Last, the researcher developed the attributes of the study by ensuring reliability and validity by using different methods that lent additional credibility to the study.

Section 3 will include the interviews, data analysis, and results. I will also focus on any additional variables that might cause business failure to determine the best procedures used successful small businesses after a major disaster. At the conclusion of Section 3, the goal is to discuss implications for social change, researcher recommendations, and reflections.
Section 3: Application to Professional Practice and Implications for Change

**Introduction**

The purpose of this qualitative, multiple case study was to explore financial strategies small business restaurant owners used for successful business recovery following a major disaster, such as Hurricane Katrina. The study consisted of small business restaurant owners from three organizations who used financial strategies that resulted in successful business recovery after Hurricane Katrina and whose businesses remain sustainable today. The findings focused on the attitudes of the small restaurant business owners who survived Hurricane Katrina and how their attitudes before, during, and after the disaster—and with specific practices and policies—contributed to recovery. Their attitudes towards financial recovery and the procedures, practices, and policies used were critical to their businesses and the community. All three participants had a positive outlook on their practices prior to Hurricane Katrina and also towards any disaster they may face in the future. A review of peer-reviewed journals served as the groundwork to connect the research question with the study’s conceptual framework, providing support and credibility.

According to Swamy, Kang, Batta, and Chung (2017), when a hurricane makes landfall, flood and winds damage most transportation and infrastructure assets, which is why communication is vital. This study included exploration of how communication after a natural or manmade disaster relates to business recovery. Swamy et al. argued that effective communication of the evacuation orders from U.S. government bodies is crucial.
to saving lives. Communications and the other techniques used had a positive effect on disaster recovery.

Section 3 includes the following: (a) the introduction, (b) the presentation of the findings, (c) applications to professional practice, (d) implications for social change, (e) recommendations for action, and (f) the conclusion. Each one of these sections contains subsections with recommendations, reflections, and additional information related to recovery and suitability of small businesses.

**Presentation of the Findings**

The overarching research question required following specific guidelines. The following research question guided the study: What financial strategies do small business restaurant owners use for successful business recovery following a major disaster? The case study design included in-depth interviews with three small restaurant business owners. Articles on the topic collected from peer-reviewed journals provided the foundation for connecting the research question to the conceptual framework. Additionally, I also reviewed historical documentation and photos related to the business owner’s resiliency in the recovery planning process.

This qualitative, multiple-case study consisted of three small business owners in the restaurant business in New Orleans, Louisiana. The three owners were successful after Hurricane Katrina. Based on the inclusion criteria, the owners must have been operational in the local area for 5 years before Hurricane Katrina. The three participants’ years of business experience ranged from 21–40 years (see Table 1). All three
participants were male. The average interview lasted approximately 30 minutes.

The six questions developed and included in the interview protocol were the same questions presented to each small restaurant owner (see Appendix). Reviewing the interview recording, notes, and member checking revealed each owner had similar recovery plans (only slightly unique to their organizations) that allowed them to remain successful. All three participants focused on their employees and their welfare during and after Hurricane Katrina, which assisted in the recovery process. Although the three restaurants were successful businesses, the owners could not maintain a sustained line of communication with their employees because of power outages and downed phone services during, before, and after Hurricane Katrina. All three owners used innovative means to contact their employees, including driving and or flying.

A Review of the Theme Creation

In the semistructured interviews, the participants responded to the open-ended questions and provided an in-depth understanding of the reasons they continued operations after Hurricane Katrina in New Orleans Louisiana, avoiding permanent closure. I analyzed each participant’s response to each question separately and coded each response for recurring themes. The primary emergent themes that assisted in the recovery of the small business owner’s restaurants were (a) preparing a disaster plan, (b) maintaining adequate affordable insurance coverage, (c) maintaining an evacuation plan, (d) developing an employee communications plan, (e) ensuring payroll was met, (f) creating an after-actions plan, and (g) preparing a future forecast plan.
The most common phase was the employee’s safety and planning because of the communication issues and damaging effects in the wake of a natural disaster. Experience and employee welfare may be the key survival strategies in the aftermath of a natural disaster like that of Hurricane Katrina. The most command keywords developmental phrases from the data analysis appear in Table 2.

Table 1

<table>
<thead>
<tr>
<th>Codes</th>
<th>N</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy: Continual strategic planning</td>
<td>20</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Strategy: Flood insurance</td>
<td>10</td>
<td>1,2</td>
</tr>
<tr>
<td>Strategy: Planning experience</td>
<td>23</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Strategy: Preventive damage control</td>
<td>10</td>
<td>1,2</td>
</tr>
<tr>
<td>Strategy: Paid employees</td>
<td>40</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Strategy: Employee welfare</td>
<td>25</td>
<td>1,2</td>
</tr>
<tr>
<td>Strategy: Immediate response</td>
<td>22</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Strategy: Employee housing</td>
<td>19</td>
<td>1,2</td>
</tr>
<tr>
<td>Strategy: Employee communication</td>
<td>41</td>
<td>1,2,3</td>
</tr>
<tr>
<td>Strategy: After action plan for the future</td>
<td>15</td>
<td>1,2,3</td>
</tr>
</tbody>
</table>

In Table 3, seven different types of historical documentation and artifacts provided credibility to the interview questions. Each piece of historical documentation provided additional credibility to the research. If the elements assisted the majority of the organizations in remaining successful, then it is more likely other small businesses could benefit after a major disaster as well.
Table 2

*Top Six Historical Documentation Retrieval*

<table>
<thead>
<tr>
<th>No.</th>
<th>Groups and Keywords</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Employee records</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Historical artifacts</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Yearly income</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Employee living/general location</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Disaster plan</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Employee communication plan</td>
<td>3</td>
</tr>
</tbody>
</table>

In Table 4, the phrases included division into the number of times occurring words or group related to context. This process allowed the ability to determine what key element(s) assisted in the recovery process. If the element assisted two of the participants in remaining successful, then it is more likely other small businesses could benefit after a major disaster as well. All of the commonly posted phrases were coded and counted.
Table 3

*Top Nine Frequently Occurring Words and Groups Related to Content and Context*

<table>
<thead>
<tr>
<th>No.</th>
<th>Groups and Keywords</th>
<th>Theoretic Ideas</th>
<th>Theme</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Planning experience</td>
<td>No experience</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>Employees</td>
<td>Paid and happy</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Customers</td>
<td>Return and keep returning</td>
<td>3</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>Insurance</td>
<td>Avoid business closure</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>Cash on hand</td>
<td>No cash on hand</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>Housing</td>
<td>Returning home</td>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>8</td>
<td>Communication</td>
<td>Employees and supply chain</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>9</td>
<td>Strategies business may enact</td>
<td>Protect entrance and exits</td>
<td>3</td>
<td>9</td>
</tr>
</tbody>
</table>

In Table 4, the phrases included division by participant. The process determined who benefited from the same financial procedures. If the procedure assisted the majority of the organizations in remaining successful, then it is more likely other small businesses could benefit after a major disaster as well.
Table 4

Subjects Mentioned Most Frequently by Participants

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>Frequency</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning experience</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Insurance</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Returning to operations</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Employee relations</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Communication</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Customers relations</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Building damage</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cash on hand</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Accurate cellphone list</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Employee housing</td>
<td>Y</td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Employee pay</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Theme 1: Disaster Plan

Per Participant 1 (P1), disaster planning is crucial to success in any disaster scenario. Daramola et al. (2016) suggested that disaster strategies are a critical component of the recovery process. Per P1, by knowing the employees, customer base, community, and community culture, an organization can improve its chances of returning
to operations faster. Participant 2’s (P2) establishment is in an area where the storm severely damaged the entire community. The location of this establishment is directly in the middle of a working-class neighborhood, which also brings in enormous revenue. Because of the area, it is essential to have a plan in place for not just the staff, but also their families. P2 also stated the building includes the location in a mostly outdoor location, increasing the level of difficulty to secure everything from floodwaters. Before the hurricane, bread was their number one product; an earlier storm destroyed the ovens (P2). Without ovens, the restaurant started purchasing their bread from outside vendors (P2). The most significant change in the plan was their decision to make sandwiches (P2). This strategy allowed the business to cut-costs on different ingredients and focused on the essential ingredients, thereby increasing sales and revenue.

According to Dahles and Susilowati (2015), the area where livelihoods could be disrupted by crisis or disaster, entrepreneurial activity, contrastingly, may thrive. Participant 3 (P3) noted the storm did not severely affect the building, allowing the ability to continue distributing products to affected restaurants. Those small restaurants that could not return to operations did cut into the bottom line of their business (P3). Planning is crucial during hurricane season for P3’s business, which is why the owner has alternate locations to set up operations and also acquired 40 hotel rooms for employees and their immediate family members. All three owners confirmed the boarding up of their buildings; cracks were sealed and secured sandbags in critical flooding areas that could have caused their business damage. Daramola et al. (2016) stated that education and
knowledge on natural disaster risks, financial planning, and other resource constraints would strengthen the adaptive capacity to natural disasters, supporting these findings by P3. Predictive planning assisted the participant’s recovery faster because using innovative procedures to reopen.

New Orleans includes a history of disasters and many near misses. The community is well aware of the importance of keeping historical documentation as a lesson learned. All three participants provided historical documentation in the form of old evacuation and disaster plans. P1 stated that their disaster plans continuously updated and when a new employee is hired. P1 provided 10 years of disaster planning documentation. P2 stated that he updated his disaster plans monthly because of their employees rarely turnover. P2 also provided 10 years of disaster planning documentation. P3 provided 5 years of disaster planning because during one of the storms, his local facility flooded, and he lost everything in storage.

The old disaster plans bridged the gap between the interviews and the results. The plans indicated clearly that their constant revisions better prepared them for disaster and their preservation of documents or preservations of being in business. The conceptual framework applies to disaster planning in that the participants had a reason to act, their attitudes towards planning and vested interests in their businesses to recover.

Ajzen (1991) noted intentions do not always materialize in people’s behavior because there are missing factors involving the outcome. The participants illustrated how they were able to overcome disaster by taking on unusual roles and responsibilities that
were normally not part of their daily operations. Hagger et al. (2018) indicated that Direct and indirect past behaviors also provided additional reasoned processes through rational thinking, which all the participants were able to accomplish in the post-disaster Hurricane Katrina.

The TPB uses a personal norm and past experiences and behaviors as a predictor of future outcomes (Han et al. (2017) indicated that past experiences and behaviors could predict future outcomes, which is why participants illustrated strong feelings towards recovery planning. The participants and the communities have a lot to lose when dealing with different disaster scenarios, which is why it is critical to understand and prepare for the unforeseen. Planned behavior also played a key role in their successful recovery. Continuous planning throughout the year enabled the business owners to stay prepared with little to no effort when disaster did strike.

Adame and Miller (2016) stated that when someone has a stake in something, they have a vested interest in it. The participants benefit in an expedient recovery; the community also helped in job recovery, which means they have a stake in recovery. Johnson et al. (2014) also indicated that vested interest is when an issue affects someone. The participants explained in detail how they are affected by weather years and how the weather sets off a sequence of events that can be unaffordable for many small businesses.

**Theme 2: Damage in the Aftermath**

Schrank, Marshall, Hall-Phillips, Wiatt, and Jones (2013) argued that small business owner’s personal experience might impact the outcome of a natural disaster
recovery process. All the participants suffered from damages ranging from $50,000 to $150,000 from Hurricane Katrina (P1, P2, & P3). P1 noted that secondary destruction caused by fire from electrical outlets and looting caused the majority problems. P1 relocated to a different location and reopened sooner than he would have had he stayed. P2 suffered the most, $150,000 in damages. P2’s entire restaurant submerged under water, but once waters subsided, it rebuilt and opened to service the public. P3 suffered $85,000 in damages, but opened two additional operational warehouses, soon operating at normal capacity.

The damages in the aftermath relate to the body of knowledge in that it is essential functions are critical in reopening in the wake of a disaster, which is one of the first steps (Corey & Deitch (2011). The participants established relationships with their employees, stakeholders, customers, and their suppliers as part of their disaster planning procedures. Chamlee-Wright and Storr (2014) noted the importance of creating an enduring relationship with the employees, customers, and community is crucial to the longevity of the business especial the aftermath of a disaster. The loss of jobs affects not only the employees; it affects the business, the community, and the economy.

All three participants stated preparing for natural disasters is scheduled every day. Reasoned action and planned behavior both in combination played a role in the recovery process in the aftermath of Hurricane Katrina. The participants’ behaviors and attitudes towards their pasted experiences are what links this study to the reasoned action and planned behavior theories. Their intention to perform or to recover from a disaster is what
follows a reasonably but rationally specific belief that their behaviors and attitudes towards their plans prevented them from failing. Investing in disaster prevention significantly reduced their recovery process. Pathak and Ahmad (2016) suggested that all small businesses should invest in natural disaster planning processes especially in areas prone to disaster, clearly supported by these findings. The participants had a vested interest in being empathetic towards damage mitigation deterrents. By using the business owner’s past experiences, they overcame severe damages, which could have resulted in long-term closure.

**Theme 3: Employee Welfare**

Training and education is critical to keeping good employees. Per Baruch, Wordsworth, Mills, and Wright (2015), business owners should do everything they can to ensure their employees have the resources they need. P1 stressed that their employees come first. When a storm is forecasted to make landfall, minor or severe, P1 did not threaten the employees to go to work. The restaurant owner halted all deliveries until the storm cleared and then resumed normal operations after making repairs. P1 also stated that he was aware of other restaurant owners threatening their employees with the loss of their jobs if they did not come in. Instead, P1 found treating his employees with respect and accommodating their families resulted in higher productivity.

P2 also stated their employees come first. According to P2, unhappy workers tend to be slower and less efficient, which means requiring additional staff to complete the work. P2 noticed when employees were happy, they tended to stay longer and work more
efficiently. Most of the team members at P2’s location is part of the family, for more than
10 years or more. P3’s staff initially started with family members, but as time went on
and the business grew, additional needs existed for more support staff.

P3 also understood that to keep good help required supporting the employee’s
wellbeing. Baruch et al. (2015) also noted that if employees have high self-efficacy and
remain satisfied with their own work ethic, they would probably not decide to leave their
employment after a natural disaster, supporting the importance of involvement in the
employee’s wellbeing. All three participants went well beyond the requirements of a
business owner by reaching out to their employees and their family members to make
sure they were out of harm’s way. Randolph (2015) noted the main goal of emergency
management planning was to protect employees and business owners, clearly supported
by these findings.

Because all three participants stated that having happy employees were critical
factors in their recovery process, I asked if they could show proof. P1 showed calendars
where he implemented family fun days and employee of the month awards. Historical
data was essential to bridge the past with the present climate of his restaurant. Most of his
employees have worked for the business for at least 5 years and receives benefits (P1),
which in turn equates to happy employees and higher productivity. P1 explained that he
does not have to train anyone new and the local customer base knows they receive a
quality product from someone who is happy and has been with their company for a while.

P2 also has an award program of incentives for his employees dating back 10
years. All P2's employees earn well over minimum wage, receiving promotions promptly, and adequate time off for rest. P3's employees are mostly family members. P3 has an organized sports team that gets together monthly for sports and awards. P3 provided pictures and news clippings to show the longevity of the employees, which also showed in their work ethic. Taking care of employees ensuring that they have what they need to do their jobs is a leadership strategy that all three participants had and implemented. Sydnor et al. (2017) indicated how small businesses operate jointly not only the employees but with the employees and the community.

The participants have a reason to continue to make sure they have adequately trained employees. The reasoned action theory draws on past experiences, and the participants explained how in the past, properly training and paying their employees better prepared them for the future. The reasoned action theory also gauged how the employee's attitude and intentions on returning to the business before and after Hurricane Katrina (Wong & Chow, 2017). Both the owners and the employees have a vested interest in the recovery of the business. If the employees do not return to work, the business will suffer. If the business does not reopen, the employees suffer.

**Theme 4: Communication**

According to Stubbe, Emmerik, and Kerstholt (2017), having an effective risk communication plan before an event occurs and a crisis communication plan afterwards significantly improves the recovery process. P1 stressed how crucial it was to communicate with all employees. When a new employee starts work on the first day, the
person must take a photograph; provide a phone number for the employee contact list, and friend the restaurant’s Facebook page. The new employees receive training on business’s disaster plan. P2 also ensured all of the management team had everyone’s phone numbers and that everyone else had at least the management team’s phone numbers. P3 explained how everyone is part of the same network plan and pushed to have *direct access* to each other in management, which is a walkie-talkie feature. The managers have a direct line of communication with their teams. Renn (2015) suggested effective communications between stakeholders is a critical before, during, and after a natural disaster, clearly supported by these findings.

Communication serves an essential role in disaster planning because of the ability to reduce the negative impacts of disaster disruption through sharing of information (Jiang & Ritchie, 2017). While reviewing the participant's historical disaster plans, I noticed communication played an important factor in a smooth transition back to operational status. P1 stated that having current phone numbers allowed the ability to recall his staff after an event to serve the public expeditiously. P2 also asserted that throughout the years, communication had been a concern because of past power and cellphone tower outages, which is why he purchased the push to talk radios with extended life batteries. P2 used walkie-talkie technology for the past 5 years to continue to stay in contact with his employees. P3's historical had 6 years of communication plans that allow him to stay in touch with his employees. P3 also housed everyone in the same location during major events.
Continued communication before, during, and after a natural disaster can significantly increase the chances of recovery. Jiang and Ritchie (2017) suggested that consistent open communication with all stakeholders builds trust and understanding, clearly supporting the findings from this study. Reasoned action, planned behavior, and the vested interested theories all apply to communications before, during, and after a major disaster. Attitude and behavior towards communication planning were strong with all the participants. Establishing a communication plan is a critical vested interest of the community as a whole in a post-disaster scenario. All three participants actively sought better ways to communicate with their customers and employees as a disaster mitigation tool.

**Theme 5: Customers**

Sydnor et al. (2017) noted a local customer base is important human capital asset developed, nurtured, and cultivated over time essentially to survive. Schrank et al. (2013) claimed the biggest problem after Hurricane Katrina was the lack of customers and a loss in sales. P1 remarked how vital it is to understand their customers. Usually, it is the local customers who are faithful even when similar locations are not too far away. By serving customers quality food and treating them respectfully, this strategy created loyal customers who will return (P1). P2 stressed the importance of understanding the local culture, by meeting with the people in the local community to find out what they want in their establishment. In addition, P2 stated a restaurant has to know when to raise prices or face closure. By raising rates yearly by minor increments, customers will hardly notice,
but if one increases costs all at once, customers will take their money somewhere else (P2).

P3 has always had a loyal customer base; the patronage of that base continued after Hurricane Katrina. During the storm, the Chief of Police needed supplies; P3 gave the keys to the chief and told him they would settle up later, which showed trust on both sides. After Hurricane Katrina, the city continued doing business with P3. When P3 returned, local small restaurant owners lined up in the parking lot waiting to get supplies because they knew P3 would not price gouge. Per P3, trusting customers built a lasting bond. The survival of the business depends on the customer base. Clay, Colburn, and Seara (2016) stated devoted customers are the critical component to assisting small businesses to recover after natural disasters supporting the findings indicated for this study.

Both planned behavior and reasoned action theories can be explained in that the customers that have lived in New Orleans have experiences false alarms and actual disasters for many years (Neumayer et al., 2014). According to Sydnor et al. (2017), the displacement of customers because of a natural disaster or other calamities causes a ripple effect of reduced labor for business, which means that owners and employees have a vested interest. Customers are essential to small businesses and community recovery (Wang et al., 2014), which means that everyone has a stake in recovery.

**Theme 6: Lessons Learned**

Natural disaster experiences are critical components in predicting future outcomes
and greatly impacts the disaster recovery process (Guo & Li, 2016). I recommend small business owners continue to learn from the past. One of the key takeaways from the past was the ability to pay employees. All three participants paid their employees before evacuating, which assisted the restaurant owners in reopening later. P1 specified having additional funds to pay staff and the utilities and to purchase products was critical to a successful reopening. Cash-on-hand to pay staff what their earnings cultivates an environment where employees want to stay and work harder, stated P1.

Before Hurricane Katrina, P1 was prepared with cash to support all three locations. P1 was the first to open after Hurricane Katrina. P1 fed first responders while residents started arriving. P1 stated they did not price-gouge and only served hot sandwiches, chips, and drinks for $5 dollars, which at the time was the only meal available in the area. P2 knew his locations would be affected, but to what extent he did not know. However, he still ensured funds were on hand to pay employees and suppliers once allowed to return. P2’s location was under 8 feet of water, but the business reopened 3 months after Hurricane Katrina. P2 accepted change and implemented innovations by narrowing the menu to roast beef sandwiches, chips, and drinks, which are simple to make. The funds on hand allowed P2 to purchase simple ingredients, which allow him to open his location to support the community.

P3 at the time was a smaller business that supported the local small restaurants and grocery stores in addition to having a small restaurant operation. Despite P3 being stretched thin, P3 returned to warehouses where everything spoiled recovered quickly by
purchasing other locations to reopen sooner to support the community. After months of fighting the insurance company for spoilage, P3 turned the Hurricane Katrina disaster into something positive by acquiring unoccupied locations for warehouse space. All three participants received SBA loans, which could have put a strain on their business because of the added expense of a loan and the possibility of customers not returning. All three participants pushed through by implementing new menus, hours, and locations to provide quality services to the community.

Past experiences proved to the participants that having cash on hand is critical to operations before, during, and after a natural disaster. The participants stressed the importance of acquiring funding before a mandatory evacuation. The participants illustrated the challenges of securing money from the banks during and after a significant event with their historical data. During a significant event, it was almost impossible to get funds and after proved more difficult. Having funds on hand to pay employees and also outside vendors was a successful technique. Having cash on hand provided additional critical support and also illustrated a predictive planning process that assisted the participants in their recovery process.

Applications to Professional Practice

Small restaurant owners might apply the findings from this study on many different levels. Renko et al. (2015) indicated that leadership styles could be linked to business failure. The participant’s leadership styles were exceptionally utilized in making their business successful. The three participants contributed to professional restaurant
businesses practices related to the literature on the survival of small restaurant businesses in New Orleans after Hurricane Katrina. The small restaurant business owners provided opportunities and better pay for workers, supported the success of other businesses, and kept communities stable and intact after a traumatic event. Renko et al. (2015) stated that by knowing the right leadership style, businesses would be better repaired for future problems. In addition, this research may contribute to improving business practices by highlighting those particular business practices employed by small restaurant owners, which ensured their financial stability post-Hurricane Katrina.

The participants learned that working together with the community allowed them to keep a robust workforce of people employed, which benefitted both the business owners and the local community. Burton (2015) noted that by enhancing a community’s resilience to natural hazards would improve their capacity anticipate and possibly recovery faster to adverse impacts. When consumers notice how small businesses support their community, they pay attention and spend their money locally. When small businesses invest in their community, the community will also invest in their small businesses (Ansari & Riasi, 2016). Per Ansari and Riasi (2016), trust, has a significant impact on customer loyalty to any business especially after a disaster. Consumer commitment to small businesses allows them to stay afloat during tough times, which can further strengthen local economies by focusing on customers’ likes and dislikes (Taneja & Toombs, 2014). The results of this study may also support improvements to business practices by showing other business owners the benefits of engaging with their
communities, maintaining local employment strength, supporting employees’ families, and providing job opportunities for those who wish to return and rebuild the community after a major disaster. Business professionals can apply the findings from this study to improve their business practices through (a) disaster planning, (b) communication planning, and (c) survival factors and measures.

**Disaster Planning**

Henly-Shepard, Gray, and Cox (2014) acknowledged that understanding the relationships between procedures and disasters is often difficult, given the lack of methods available to the community to explore anticipated risk and adaptation of strategies relative to recovery. Some of the major strategies of disaster planning are in having accurate cellphone numbers for employees, sufficient funds on hand, and flood prevention. By understanding the risks, business owners can adequately assess the procedures (Henly-Shepard et al., 2014). Everyone has a cellphone, which makes this device an important management tool for directly communicating with employees. In case of a power outage or nonfunctioning tower, push-to-talk radios were one of the best alternatives. If possible, having home phone numbers to contact employees with their statuses is an additional step. One of the steps that the three participants incorporated into the disaster planning was to suggest to their employees in the initial stages of employment is to obtain a cellular phone, if they did not already have one. The participants also went a step further and provided Motorola radios to those who did not have cell phones in the before harsh weather made landfall. Per the literature, predictive
planning incorporates many different types of techniques from communication devices, quick reference phone lists, and verbally speaking with employees before bad weather.

Having sufficient funds on hand is also critical to operations during a disaster. Being able to pay employees encourages them to not only to work harder, but also shows them that management and the owners care about their well-being. By lowering job dissatisfaction, employers can yield increased job satisfaction, which can lead to employee retention (Bell, Sutanto, Baldwin, & Holloway, 2014). A slush fund during and after a disaster is critical when working with repair agencies. Before, during, and after a major disaster, many organizations are first come, first served with banks with access to quick funds. Being able to open a restaurant is excellent, but if they do not have any employees to operate, the daily business can cause other serious problems. When customers want to have a hot meal and they have to wait a long time, they may consider a different venue next time. Having currency on hand to pay the employees and suppliers is essential to daily operations and even more so after a major disaster. Having a current disaster plan may significantly reduce the impacts of natural disasters and increase the progress of disaster recovery. Implementing strategies to reduce employee turnover or just not returning after a disaster increases business’ survivability and sustainability (McManus & Mosca, 2015). Predictive planning to include, disaster plans and extra funds increased the participant’s chances of recover. Predictive planning comes in all forms, providing advances in the way of currencies has shown to assist in the recovery of the small business owned by the participants. Each participant ensures that their
employees could afford food and was to return to work after the disaster.

The take-away from the participant’ interviews were to know your employees. Also, it is critical to improving disaster plans, processes, and procedure continuously (Sánchez–Medina et al., 2014). The participants illustrated the importance of explaining the different disaster process and planning during the orientation process when hiring employees. Using lessons learned from past disaster is vital for a successful recovery.

**Communication**

Per Houston et al. (2015), communication is an essential component of disaster planning, response, and recovery. Effective disaster communication may prevent a disaster or lessen its impact, whereas ineffective disaster communication may cause a disaster or make its effects worse (Houston et al., 2015). P1 and P3 brief their staff weekly on weather, new steps for preparedness, and family status during hurricane season. P2 also has weekly meeting on evacuation points, secondary communication steps, and any other problems that could affect or harm someone. Houston et al. also stated that it is vital that employers maintain or develop an effective communication process; this process should also be a priority of the organization, community and all local citizens.

In addition, P1, P2, and P3 all use social media to keep their employees informed of the status of their organizations. Houston et al. (2015) stated social media could be accessed from most computers, laptops, cellphones, or tablets. Social media is part of most large and small firms emergent from networks in which large numbers of users find
a particular platform or service useful for their industry (Houston et al., 2015). Many social media platforms offer a variety of content, images, games, audio, and video that is used for different purposes to inform employees of any required information.

Having different communication devices available is an essential takeaway I learned from the participant interviews. During a major disaster, communication is a critical component to recovery (Bennett, Phillips, & Davis, 2016). By knowing the status of the employees, suppliers, and the community, improves the chances of the business to recover faster.

**Survival Factors and Measures**

Implementing new and innovative techniques can also assist small businesses in returning to operations sooner. Small business owners have to think outside of the box when dealing with major disasters. Business leaders and stakeholders who gain knowledge about new natural hazards and procedures may have a better understanding of the need to plan for disasters (Kantur & İşeri-Say, 2015). P1, P2, and P3 all stated that Hurricane Katrina was something no one could prepare for, including FEMA. FEMA lacked adequate preparation to handle the magnitude of destruction Hurricane Katrina caused and severely hampered the disaster recovery process (Farber, 2018).

In addition to preparations, creating and implementing flood barriers with sandbags, concrete blocks, or rubber tires were different strategies the participants also used to protect their businesses. Using anything available and at their disposal is what they did to better their chances of mitigating storm damage. The participants also
admitted using every opportunity to work together with other small businesses within the community, which increased their chances of a successful recovery. By pooling their resources, the local businesses community could feed people hot meals. Establishing community and social learning after disasters fosters adaptation to environmental changes, builds trust, and offers opportunities for individuals to challenge, negotiate, and propose new policies and procedures (Henly-Shepard et al., 2014).

A significant takeaway that I learned from the participants was to be flexible and able to adapt to different situations (Neumayer et al., 2014). By understanding the problem, different techniques can assist in the recovery faster. Also, by experimenting with different techniques, new innovated solutions can be implemented for future situations (Shockley, 2015).

**Implications for Social Change**

Social change implications for small restaurant business owners include being behaviorally responsible for better disaster preparedness. Behavior before a disaster is the key successfully continuing operations after a natural or manmade event. The business owner’s actions relate directly to preventing restaurant closures, unemployment, and in supporting community stability, family unity, job opportunities, and economic growth. After Hurricanes Irene and Sandy, political and social change efforts increased toward saving the environment (Howe, Boudet, Leiserowitz, & Maibach, 2014). All small restaurant business owners who plan ahead of time are successful after a disaster, which can create opportunities for employment for those who wish to return to rebuild. Social
innovation can foster new ideas for social change and solve evolving challenges brought on by disaster (Shockley, 2015).

The participates illustrated how they were able to adapted and overcome disaster on different occasions after Hurricane Katrina. Their innovative procedures were successful and allow their businesses to be sustainable. The findings from this study may contribute to social change through an exploration of the positive attitudes and innovative strategies employed by the study participants, which sustained their established businesses after Hurricane Katrina. Carrington (2016) noted a more cohesive relationship between management and employees can result in a more competitive business. Employee and customer assistance produce additional disaster recovery through collaboration and individual innovations. Friends and family also assisted in the disaster recovery effort. Friends and family can fill in as a temporary workforce, they can talk to the local community, and also pass the word to other potential customer. The study’s possible contribution to positive social change rests on the assumption that information from other business owners’ successes may provide the insights and information other small business owners need to keep from failing in the aftermath of a disaster. The results of this study may contribute to positive social change by offering a possible blueprint strategy for better planning via the following: (a) passing on knowledge, (b) the application of better practices, and (c) the practical and analytical advantages made possible through the communication of lessons learned from Hurricane Katrina.
Recommendations for Action

The purpose of this qualitative, multiple case study was to explore the financial strategies small restaurant business owners used for successful recovery following a major disaster. I recommend that small business owners maintain an active disaster plan that includes safety measures for the employees, management, and their customers. Small restaurant owners plan and try to determine which processes and procedures would better their financial goals and avert possible damages when preparing for natural disasters (Yang, Kajitani, Tatano, & Jiang, 2016). After listening to each participant, and reviewing their historical documentation, all participants demonstrated successful preparation for Hurricane Katrina. The results of this study will serve as a tool for other similar businesses if the future. Business owners can use the results from this study to better prepare their businesses and their community for possible future disasters. The following recommendations were crucial factors that enabled these three small businesses to remain sustainable.

Recommendation 1: Disaster Plan

Cole, Elliott, Okubo, and Strobl (2017) believed pre-disaster planning such as alternative transportation and adaptive supplier network increases positively effects on post-disaster outcomes. An active disaster plan is a work in progress and must be continually updated with new ways to secure business facilities, including flood barriers, sandbags, and flood water deterrents. Roosli, Nordin, and O’Brien (2018) argued individuals who are in charge of policies and plans for disaster readiness tends to forget
about the people affected and who will be the end user of any established services, which is an important factor to consider. It is critical to involve not only the employees but also the community in the disaster planning. The study participants believed prior planning prevented floodwaters from destroying more of their property, which is my recommendation that additional measures be implemented in the form of senior based training and disaster drills. Lessons learned from Hurricane Katrina point to using a well thought out disaster plan to increase the chances of an earlier opening after a disaster.

**Recommendation 2: Damage in the Aftermath**

Additional recommendations include small restaurant business owners keeping funds on hand for expedient repairs, supplier payments, and employee pay in the aftermath of the natural disaster. In many cases, receiving disaster aid is determined by how damaged a facility receives (Cole et al., 2017). It is important for organizations to know their local government aid procedures as part of their disaster planning (Cole et al., 2017). It is recommended that small business owners acquire and stage extra material locally. Staging lumber to board up windows for example would save time when disaster strikes. It is also recommended that small restaurant owners work with local disaster agencies on their disaster plans and requirements.

**Recommendation 3: Employee Welfare**

The third recommendation is for small business owners to do everything within their means to continue paying their employees while continuing to work locally. Bennett et al. (2016) indicated employees should participate in evacuation drills, have
communications plan, and a reunion plan. It is important that the employee is well trained and knowledgeable on the different strategies implemented by the firm. Additionally, recommendations include that owners seek out those employees who evacuated during a pay cycle to give them wages owed. The three study participants believed in paying employees monies owed, which allowed them to return to work sooner. Not having funds for daily living expenses can cause serious ramifications, not only for the employees, but also for the small business owners if these trained employees do not return. Training someone new takes time and results in an initial loss of revenue.

**Recommendation 4: Communication**

The fourth recommendation includes that communication is critical on all levels and that small business owners implement an effective communication plan using any means necessary. McClelland, Amlôt, Rogers, and Rubin (2016) indicated an effective communication plan plays a key role in mitigating some of the problems brought on by a natural disaster. Small business owners should start as soon as an employee begins work by having their cell phone number added to the company phone database, having them accept a friend request or friend the business on Facebook, and save the business page on Yelp. Bennett et al. (2016) suggested by maintaining open communication and direct contact is important since progress and communications technology is ever evolving. Recommendations include that every employee have a phone list on his/her phone. Knowing an employee’s whereabouts and status should be on the mind of all small business owners, not just for business purposes but to show concern and care. Reopening
and serving the public is not only important to the owner, but also to the employees and to the local community, supporting the essential need to communicate with employees and to provide them with adequate support. Without employees to run the business, everyone suffers. The future is ever evolving and with the new technology and the breakthrough in drone technology, there will be improved future benefits to disaster planning (Crowe, 2015; Dougherty, 2015; Smith, 2014). As technology changes, business should adapt to new innovations to survive.

**Recommendation 5: Customers**

Additionally, recommendations include that small business owners get to know their customers and the culture of the local community. The participants believed that a customer’s acknowledgment is essential to keeping a loyal returning customer base. For first time owner, choosing the right locations to maximize customer patronage is critical to longevity. Gutierrez and Mutuc (2018) stated the center of gravity for customer patronage is to locate a facility where it reflects equality of distance and demand volume. A significant reduction of transportation cost will also mean a significant reduction in response time and delivery of relief goods after a natural disaster when choosing the best locations (Gutierrez & Mutuc, 2018).

**Recommendation 6: Lessons Learned**

Finally, recommendations include that small business owners have a disaster fund on hand. When there is a forecasted storm approaching, time is a factor in acquiring banking assistance. Before a storm, hard currency becomes a necessity not only to the
business, but also to the employees. Liquidity allows the owner to continue paying employees and local suppliers to resume operations before, during, and after a major disaster. The participants proved that having cash on hand contributed to reopening sooner. Cole et al. (2017) stated by having an extensive supply chain, it can negatively affect recovery through the higher probability of networking with all the different agencies causing disruptions. The participants could purchase goods to supplement the salvageable supplies, helping them through the storm to reopen to feed the first responders and the local population. I also recommend that businesses should keep their records in two different locations, to include building plans, insurance policies, pictures, supplier lists, inventories, bank account information, and tax returns. It is also recommended that the small restaurant community pose past experiences, lessons learned training in group meetings, conferences, and training events that can be held locally.

The results of this study can also be used as a learning tool and added to current literature for training and conferences held by the small business community. The results of this study can be disseminated through word of mouth, e-mail, message board, and mandatory paid training events. Staniewski (2016) argued the importance of sharing the result with other small business through educational advancement courses or stages in a business. Rewarding employees for completing planning processes can show a successful return in the aftermath of disaster (Staniewski, 2016). The results can also be implemented on a case-by-case basis to determine if the strategy would work. Not all successful techniques will work for other businesses (Day, 2014). According to Day
(2014), the determination of a successfully implemented procedures, it would yield fruitful operations

**Recommendations for Further Research**

The literature on the survival of small restaurant businesses in New Orleans after a natural disaster is limited. Recommendations include that further qualitative studies be conducted to better prepare New Orleans and surrounding areas. Additional studies could assist small businesses facing the same or similar situations. More studies may help refine other financial processes and procedures not covered in this study. Conducting additional research is a critical component for development. The additional research adds to the body of knowledge and propels the idea and topic even further lending supplementary credibility. Business restaurant owners who focused on small business recovery, in general, had a better chance of surviving a natural disaster through the use of disaster literature.

**Reflections**

My reflections on this study changed drastically throughout the process. During this research process, I learned much more about New Orleans and their small business community. The participants interviewed were persistent and aggressive about serving the community. Their determination can be seen in the procedures and processes they utilized to remain successful through many natural disasters. Adame and Miller (2016) indicated that behavior related to surviving natural disaster contributed to response and self-efficacy. Many small business owners, not only in New Orleans, who fear natural
disaster yearly, do not have the necessary tools for continued operations. New small business owners need all the help they can get to boost their local economies to provide jobs to the local community. The data collection process demonstrated the need to understand how small business owners think, feel, and appreciate their paths towards becoming successful. Their attitudes and behaviors also played an essential role in preparing for the aftermath of a natural disaster.

Bias was a challenge to overcome in this research study because of personal passion about New Orleans and the community, particularly as one of the city’s Emergency Operations Control operators. To eliminate personal biases, familiar small restaurants businesses were selected and followed the interview protocol (see Appendix). Using the interview protocol with all three participants helped to decrease the probability of bias.

To add additional validity, the study included the coding process to protect the participants. After transcribing the recorded interviews, participants checked their responses for accuracy. I ensured data saturation occurred after the interviews to ensure there was no new information. Member checking also played a critical role in providing validity to the study.

My development as a researcher increased throughout the involvement with the participants whose businesses face disaster yearly and the ways they successfully return to operations. The data collected during the interview process highlighted the problems many small business face during a crisis. Their knowledge and experience assisted this
study with the findings. The participants felt excited to know that I was a local resident during many hurricane events and experience similar situations. The doctoral process, working with the professors, students, and the participants has better prepared me for the future.

**Conclusion**

The financial strategies small business restaurant owners used for a successful business recovery following a major disaster such as Hurricane Katrina may prevent unemployment and the ability to continue to support the local economy. The successful strategies may also contribute to community growth, employment strength, maintaining family units, and providing job opportunities for those who wish to return and rebuild their neighborhoods after a major disaster. The strategies that the participants used at times were simple but effective. Making simple changes and continuously adopting and focusing on the changing situations were critical to operations. What I learned and takeaway from these experiences is that embracing change and becoming more adaptive is important to success. For other small restaurants owners in similar situations, the recommendations are tools to assist in disaster conditions.

The small restaurant owners of New Orleans, Louisiana may continue to prevent business failure from natural disasters with the strategic disaster plans and strategies already implemented. Social change through their small business natural disaster preparedness may be perceived through the effects on the community. Small business recovery provides jobs for the local residents, which in turn continues the positive affect
on the community economically. Other small business leaders may implement the same procedures enabling their ability in becoming significant contributor to their local economy after a natural disaster.
References


Bail, C. (2014). The cultural environment: Measuring culture with big data. Theory and


Basker, E., & Miranda, J. (2016). *Taken by storm: Business financing and survival in the*


Charalampidi, M., & Hammond, M. (2016) How do we know what is happening online?:
A mixed methods approach to analyzing online activity. *Interactive Technology
and Smart Education, 13*, 274-288, doi:10.1108/ITSE-09-2016-0032

Clay, P. M., Colburn, L. L., & Seara, T. (2016). Social bonds and recovery: An analysis
doi:10.1016/j.marpol.2016.04.049

disaster aid: Examining the impact of the great East Japan Earthquake.

doi:10.1080/17439760.2016.1262614

CA: Sage.

*Journal of Personality and Social Psychology, 72*, 485-491. doi:10.1037/0022-
3514.72.3.485

from http://www.emergencymgmt.com/disaster/Texas-Flood-Tests-Drones-
Emergency-Responders.html

Cope, D. (2014). Methods and meanings: Credibility and trustworthiness of qualitative


Hagger, M., Polet, J., & Lintunen, T. (2018). The reasoned action approach applied to health behavior: Role of past behavior and tests of some key moderators using


Hewitt, K. (2013). Environmental disasters in social context: Toward a preventive and


intention to adopt mobile TV. *Telematics and Informatics, 34*, 1638-1649.
doi:10.1016/j.tele.2017.07.010


doi:10.1177/1524839915580941


doi:10.1080/10286608.2015.1022728


Journal, 27(1), 29-54. Retrieved from


Monllor, J., & Murphy, J. (2017) Natural disasters, entrepreneurship, and creation after


doi:10.1177/1049732315588501

doi:10.1080/14649357.2014.902909

National Commission for the Protection of Human Subjects of Biomedical and
Behavioral Research. (1979). *The Belmont Report: Ethical principles and*
guidelines for the protection of human subjects of research. Washington, DC:
U.S. Department of Health and Human Services. Retrieved from
http://hhs.gov/ohrp/humansubjects/guidance/Belmont.html

and options for vulnerability-based disaster risk reduction. *International Journal
of Disaster Risk Science, 8*, 208-223. doi:10.1007/s13753-017-0125-x

resettlement options in post-hurricane Katrina New Orleans. *Journal of the
American Planning Association, 80*, 426-437.
doi:10.1080/01944363.2014.988167

Neumayer, E., Plumber, T., & Barthel, F. (2014). The political economy of natural
disaster damage. *Global Environmental Change, 24*(1), 8-19.

*Evidence-Based Nursing, 18*(2), 34-35. doi:10.1136/eb-2015-102054

doi:10.1061/(ASCE)NH.1527-6996.0000077

Olshansky, R., & Johnson, L. (2014). The evolution of the federal role in supporting
community recovery after U.S. disasters. *Journal of the American Planning
Association, 80*, 293-304. doi:10.1080/01944363.2014.967710


Pringle, R. (2016). Narrative, design, and comprehension: Connective technologies and their terms of service agreements. *Institute of Electrical and Electronics Engineers Technology and Society Magazine, 35*(1), 7-10. doi:10.1109/MPOT.2016.2569672


Environmental management in small and medium-sized companies: An analysis
from the perspective of the theory of planned behavior. *Public Library of Science
One, 9*(2), e88504. doi:10.1371/journal.pone.0088504

Duran, L. R. (2015). Private sector and disaster risk reduction: The cases of
Bogota, Miami, Kingston, San Jose, Santiago, and Vancouver. *International

Saunders, B., Sim, J., Kingstone, T., Bakers, S., Waterfield, J., Bartlam, B., . . . Jinks, C.
(2017). Saturation in qualitative research: Exploring its conceptualization and
operationalization. *Quality & Quantity, 52*, 1893-1907.
doi:10.1007/s11135-017-0574-8

Scarpino, M., & Gretzel, U. (2014). Conceptualizing organizational resilience in tourism
crisis management (Ed.), *Tourism crisis and disaster management in the Asia-
Pacific* (pp. 15-32). Oxfordshire, UK: Centre for Agriculture and Bioscience
International.

business demise and recovery after Katrina: Rate of survival and demise. *Natural

synergies between disaster risk reduction and climate change adaptation: Potential


Appendix: Interview Protocol

**Actions** | **Script**
---|---
Introduction and explanation | Hello, my name is Gideon E Peterson, I am currently a student working towards a doctorate in business administration (DBA) at Walden University. Thank you for participating in my research on successful recovery practices and procedures entitled: “Recovery Procedures for Small Business Following Natural Disasters”. The interview should take no more than 10 minutes. This interview is recorded to assure your responses are correctly taken. After the interview, and if required, I will request an additional visit with you to review your transcript submission for member-checking, a means for you to check the accuracy of the information transposed. Do you have any questions you would like to ask me before we get started? (Answer questions if any are asked then move on with the interview)

### Interview Questions

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<td>a.</td>
<td>Write down nonverbal cues</td>
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<td>b.</td>
<td>Pay attention to the participant</td>
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<td>Actions</td>
<td>Script</td>
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<td>c. Ask follow-up questions to obtain more meaning if needed</td>
<td>3. What financial strategy did you successfully implement after Hurricane Katrina?</td>
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<td>4. What financial strategies did you find worked best for business recovery following a major disaster?</td>
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<td>5. What occurred within the business following your use of financial strategies used for business recovery following a major disaster?</td>
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<td>6. What additional information would you like to share about successful financial strategies for business recovery following a major disaster?</td>
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