

SMALL BUSINESS MANAGEMENT AND EMPLOYEE

PERCEPTIONS OF DISASTER IMPACT

by

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Abstract

This is a case study of three small businesses that uncovers management and employee reactions to natural or mechanical disasters and the recovery processes. The study explores Weick's Theory of Sensemaking to determine managers' and employees' perceptions of job changes post crisis. It also looks at managers' and employees' beliefs of learning following the disaster. The qualitative interpretive research is done through open ended personal interviews with the data open coded and triangulated for analysis.

Dedication

I dedicate this dissertation to my loving husband Ron and our son Austin who have stood by me throughout this process and encouraged me to continue.

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I would like to first thank my parents for their support throughout my academic journey. Also, for my mother, a special thanks for ensuring I received a quality education and for providing me with the support and tutoring necessary to overcome my learning disabilities. To the number of teachers, tutors, and mentors that have supported me along the way – from elementary, through graduate school. I would be amiss if I did not provide a special thank you to Dr. Jeddeloh, Dr. Scott Yorkovich, and Dr. Mohammad Chiachian, my Capella mentor and committee members who have taught and led me in the right direction to get this completed. Most importantly, to my loving husband and son who have endured the stressful nights and weekends, weathered the storms of crisis during the interviews and transcriptions; kept me grounded when I thought it was all ready to collapse. Their love and support has been what I needed to obtain this accomplishment.

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CHAPTER 1. INTRODUCTION

Introduction to the Problem

The stress level after a disaster can be high for both management and employees. The objective of this study was to explore the recovery of three businesses after crises, examining the reactions of employees after a disaster and the ways organizational members made situational sense. Weick's (1988) theory of sensemaking provided a basis for managers' and employees' interpretations of the recovery experiences as they tried to understand the events and to determine the actions needed to overcome the disaster. Previous research on disaster management has primarily focused on prevention and case studies of individual disasters. Runyan (2006) suggested that research in the area of crisis management and planning was scant and recommended that researchers explore this area during and after an event. This study was a response to that recommendation, seeking to explore the perceptions of managers and employees about the disaster, the rebuilding process, and learning after the event.

Three small businesses in Iowa were devastated by crises in 2008 and 2010 that affected their buildings and supplies and caused a long recovery. The research focused on ways managers used employees during the recovery process to alleviate personal stress levels. Lanzetta (1955) revealed stressful situations encourage a democratic method for managerial decision making processes, yet many employees seem to have

preferred a less democratic approach at that time. This research was an examination of employee attitude changes after the crisis, as well as an exploration of whether managers and employees felt learning could take place following a disaster.

Small businesses are not always able to rebuild to overcome the devastation of a disaster. Unlike larger companies, small ones may not have as many resources during recovery or may rely heavily on employees during the recovery process. The three businesses in this study were unique in that each of them had rebuilt. Interviews with employees helped explore how often and in what ways they provided support to the business during the recovery process.

Company 1 a funeral home, was devastated by a flood in 2008. The funeral home dealt with the loss of a downtown building and all of its contents, including several vehicles. Forced to relocate for several months to another funeral home in the same city, insurance provided funding that allowed rebuilding within a few miles of the destroyed location. The new building included the upgrade of an events center alongside the funeral home. The focus of this study was on the perceptions of managers and employees after the disaster, recovery, and rebuilding processes.

Company 2 chosen for this study was a chapel and community center that was devastated by a faulty sprinkler system that flooded the entire building, destroying all event materials stored in it and requiring a complete remodel. Company 2 performed weddings or funerals within the chapel, while the community center offered a catering service and space for receptions, parties, or corporate events. The disaster had an impact on management, employees, and customers, as the recovery lasted several months while cleanup and rebuilding took place.

Company 3, a small grocery store, burnt down by a fire destroying the building and all its contents in November of 2008. The company relocated to a smaller location while rebuilding. The fire's destruction had impacts on management, employees, and many loyal customers in the small Midwestern town.

The focus of this study was on the recovery processes of all three businesses, and findings revealed differences between widespread, highly publicized natural disaster recovery during which many local organizations helped business owners, and smaller, localized non-natural disaster recovery. The findings determined differences resulting from location, as two of the businesses were situated in a small town, while one was in a larger city. Company size may affect the reactions of employees, as fewer employees may mean less support during the rebuilding process.

Background of the Study

Mitroff, Shrivastava, and Udwardia (1987) defined disasters as events “precipitated by people, organizational structures, economics, and/or technology that cause extensive damages to human life and the natural and social environment” (p. 283). Leadership and change management continue to be a focus of many disaster researchers. As one kind of change management, disaster management addresses the ways businesses deal with crisis and what they can do to prepare for it.

While one can find a vast array of research on leadership skill in dealing with change, little research has focused on small business leaders' skills in the recovery process. Turner (1976) was among the first researchers to determine that disaster recovery is a process. Turner found crisis events tended to be cumulative in nature and

problems happened due to management failing to comply with regulations, disregarding complaints from outsiders, minimizing dangers, and having rigid beliefs. Literature on crisis management is primarily focused on management decision. The current research addressed functions beyond just management, exploring the roles of employees and the ways their responses helped during the recovery process.

The literature on disaster management has described the phenomena and individual responses, but has lacked a clear overview of the employee and management roles in the recovery process. Runyan (2006) revealed research in the area of crisis management and planning was scant and recommended researchers explore these areas during and after a crisis event. Therefore, the intent of this study was to look at the organizational environment of small businesses following disasters to determine how sensemaking, response, and learning supported recovery.

The exploration of each area emerged from individual and group interviews to provide in-depth discovery. Group interviews consisting of employee pairs enabled them to expand on others' ideas and collectively support or reject themes. Merriam (1988) revealed the validity of such a case study can be gained via several methods, including triangulation, member checks, long-term observation, and peer examination. Observation and triangulation among managers and employees provide validity for this study.

Statement of the Problem

This study represented an examination of the ways managers and employees reacted to and made sense of crises. Stein (2004) revealed sensemaking can cause

shock to organizational members following a disaster with the sudden loss of the previous world reality and uncertainty about organizational members' abilities. The mixture of emotions may impact decisions and actions during the recovery process.

Huy's (1999) multilevel emotional capability theory explored how emotions impact changes, linking mental processes with actions and learning. The theory suggests changing environments requires leaders to adapt to meet the needs of group members. The current research provided insight into the emotions of participants as a result of decisions and actions taken during rebuilding.

Managers with flexibility and openness toward new ideas seem to help organization dealing with unstable situations or events (Rizzuto & Maloney, 2008). Managers adept at change and active in delegating new tasks may encourage collaboration in rebuilding. Companies which are successful with change tend to be more flexible or create simple action plans (Ghoshal & Bartlett, 1996). Creating a plan of action and learning from each decision may encourage faster recovery and preparation for future events. Learning from each action or decision is exposed through in-depth interviews with managers who directed employees during recovery.

Nathan and Kovoov-Miras (2002) recommended continuing research into crisis learning, as it has not been well understood in the past. Learning is a central part of small business operation (Van Gelderen, Van Der Sluis, & Jansen, 2005). Research on learning from a crisis may ensure positive outcomes after a disaster. Learning from recovery decisions within this study may provide lessons for other organizational leaders. Not all organizations learn from crisis, and some organizations may learn the wrong lessons from a disaster (Kovoov-Misra & Nathan, 2000).

Managers need to understand the importance of information and coordination in supporting recovery and rebuilding. Boin and Lagadec (2000) indicated organizational leaders should have a personal interest in learning from disasters. The more knowledge obtained by managers, the higher is the probability of recovery, especially in small businesses. The findings of the current study added to extant crisis research by presenting small business reactions to crisis events.

Purpose of the Study

The purpose of this qualitative case study was to clarify current theory on the recovery process through the eyes of small business managers and employees as they made sense of the disaster and learned from the recovery process. The study required application of both a theoretical understanding and applied research to determine reactions, actions, and learning that can take place after extreme situations. Interviews of both managers and employees within three small companies that had undergone recovery after major disaster events supplied the data for the study. The research findings may supply future researchers and practitioners with new insight into small business disaster recovery and organizational learning following crisis events. The study findings may even guide leaders in how to utilize employees in the recovery process and in understanding actual disaster recovery processes in small companies.

The broader purpose behind the study was the desire to help management understand the perceptions of employees after disaster in order to improve the ability to work with employees during recovery and to share knowledge gained post-disaster. Managers need to understand the impact of crises on employees and to determine if

employees are able to help in recovery and rebuilding. The findings in this research provide guidance to business leaders about decision making during the recovery process.

Rationale

Researchers into disaster management and recovery continue to focus on crisis planning, decision making, and learning. Researchers using case studies have looked at the impact of management decisions during recovery, the impact on employees' perception of job duties, and the atmosphere of the organization (Iloff, 2009; Kelly, 2006; Parker, 2007). The case study method is used when the researcher does not have control over the events or behaviors of participants (Yin, 2009). Using a case study approach enabled in-depth understanding of the changes that took place after a disaster for employees and managers of three small businesses.

Research Questions

The research questions originated from the continuing need of small business owners to overcome obstacles and stemmed from Weick's (1995, 2001) theory of sensemaking. The sensemaking theory helps explore employees' and managers' abilities to accept and respond to the change, as well as the learning that can take place following the rebuilding process and how much management should utilize employees in the decision making process. The current case study allowed management to describe the experience of rebuilding after a disaster and enabled employees to voice their own perceptions of the disaster and the rebuilding process. Small business owners

were encouraged to describe the retrospective experiences of the crisis and what they learned from the analysis. The research questions guiding the study follow.

1. How does the sudden imposition of a disaster alter employees' and managers' ability to accept and respond to change post-disaster?
2. How can small businesses learn from their disaster situation?

Significance of the Study

The current literature on disaster recovery described the phenomena, how to plan and prepare for future disasters, but a lack of research continues concerning small business reactions. Roberts and Lajtha (2002) and Runyan (2006) mentioned crisis management research is in its infancy and researchers lack access to crisis data. Individual responses to crises and post-traumatic stress have been studied, but not within a small business environment. Many small businesses may deal with disaster, but only rarely are companies able to successfully recover.

Definition of Terms

Case study. As defined by Creswell (2009), "Case study research involves the study of an issue explored through one or more cases within a bounded system" (p. 73).

Learning organization. This is an organization that focuses on the knowledge gained in daily work by evaluating decisions and actions to improve functions (Senge, 1990).

Rebuilding Process. The rebuilding process within this study relates to the activities surrounding the rebuilding, cleanup, and potential relocation of the physical structures of an organization.

Sensemaking. Sensemaking is the perceptions of the world as the experiences and actions shift while individuals rationalize a situation (Weick, Sutcliffe, & Obstfeld, 2005).

Social political view on crisis. Crisis in the social political view is characterized by the collective breakdown of role structure and cultural roles (Pearson & Clair, 1998).

Assumptions and Limitations

Assumptions

Three primary assumptions founded the study. Not all businesses are able to recover; the three companies were chosen due to their ability to recover and rebuild after a disaster. No three small businesses are alike and not every organization recovers from disaster or recovers in the same manner. Small business systems and actions can be understood and explored to help future small business disaster recovery.

Limitations

Similarly, three limitations affected the study. The major bias of the research was the researcher's knowledge of the small business environment in the state where the study took place. Qualitative research is limited in its ability to generalize, and in the case of the current study, was limited by a small sample size. Yin (2009) stated case studies usually include only a small sample size due to the unique nature of the research. This was addressed in the current study by triangulation of the data to ensure validity and the potential for future research within the area.

The final limitation was the accuracy of participants' memories and perceptions of the events. Because the crisis events occurred in June of 2008, November 2008, and January of 2010, memories may have shifted over time. As Yin (2009) stated, individual participants' statements and recollections can be verified, but exaggerations are difficult to detect. This was mitigated by using groups of two employees to validate each others' statements during the interview process and to encourage accurate descriptions of events.

Outcome of Stated Bias

The biases of the study might have been an asset to the research in several ways. The researcher's knowledge of small business, having managed a small family company, enabled the researcher access to the participants in this study. Having an understanding of small business and the local area encouraged trust between the researcher and participants. Understanding the small business environment helped provide accuracy in building themes from the transcripts.

Nature of the Study and Theoretical Framework

The qualitative method within the three case studies of small businesses enabled understanding of disaster situational analysis and learning through the eyes of employees and managers. The qualitative method allowed a rich description of the subjects' survival. Creswell (2009) stated qualitative case studies provide an understanding of lived experiences by in-depth inquiry. This enabled uncovering perspectives of employees and managers during post-recovery and their attitudes toward job changes, support, and employees' contribution to rebuilding.

This research, using a social constructivist interpretive perspective, allowed awareness of the cultural changes to the internal environment through the eyes of managers and employees. Rowlands (2005) stated that by adopting an interpretive paradigm, the researcher assumes perceived meaning of events that are not objective, but rather subjective to the individuals involved. Such a study uncovers the apparent actions and emotions of employees dealing with the recovery process and the professed changes taking place within the work environment.

The data collection from employees enabled the conceptual framework to develop. Swanson and Holton (2005) revealed the conceptual framework of a case study could also grow out of the literature. The literature on disaster recovery is limited but the literature on cultural changes, emotional support, and organizational learning helped lead to an understanding of the events and the multiple meanings of the crisis event to the employees.

Organization of the Remainder of the Study

Chapter 2 of this study consists of a literature review and discussion of Weick's sensemaking theory, organizational reactions after disaster, and organization learning. Chapter 2 is an expansion of the concepts found in Chapter 1, with allusions to the research methods uncovered within Chapter 3. Chapter 3 contains both the research methodology and the reasons it was chosen for this study. Chapter 4 contains a summary of the data obtained through interviews with both management and employees of small businesses that had recovered from a disaster. Chapter 5 is the location of the

interpretations of the findings, suggestions for future research, and insights into the interview protocols and coding of transcripts.

CHAPTER 2. LITERATURE REVIEW

This chapter includes reviews and descriptions of several areas. It contains discussions of literature on small business, defining crisis research literature, change models, crisis management, sensemaking, and limitations to sensemaking. Huy's (1999) multilevel emotional theory, small business learning, lack of learning by small businesses, and the need to cover small business disaster research appear in the chapter. Literature in the chapter uncovers the current weaknesses surrounding the limited research on small business post-recovery, learning post-disaster, and the reactions of managers to disaster. Currently, only vague research is available on the perceptions of employees to disaster recovery and few studies pertaining to acceptance or responses to change. Support for the qualitative methodological approach and descriptions of its usefulness appear in the chapter. The theories surrounding organizational change, learning, and coordination during and after major crisis events have yet to be explored in the small business setting.

Small Business

The vital role of small companies in providing jobs, products, and growth to the U.S. economy are covered extensively in research literature pertaining to small businesses, yet attention to disaster planning and recovery is noticeably lacking. Carter and Van Auken (2006) discussed the ways small businesses contribute both innovation

and expansion of the U.S. economy. Kobe (2007) estimated small firms create 75% of new jobs and produce 51% of the gross domestic product. Small businesses have been recognized as a major source of growth to free market economies, and the survival of these firms needs to be an issue of concern (Lussier & Pfeifer, 2001). Without proper disaster planning or crucial tools to rebuild, small businesses could fail.

Few researchers have focused on small businesses yet their structure may help them in times of crisis. Dobrev and Carroll (2003) indicated survival research suggests small companies lack the bureaucratic restraints seen in larger companies that allow them to be flexible and rapid during recovery. Research on small business recovery may provide additional insight into the advantages of small companies. Organizational members may provide an advantage to surviving disaster due to their ability to be open to working together during the recovery process.

The development of employees and the resources devoted to them may predict business success or failure (Lussier & Pfeifer, 2001). Small business employees may be the resource crucial to ensuring the survival of businesses post-disaster and their perspectives need to be heard to ensure proper action by management. Without the understanding of crucial staff, the rebuilding process may be hampered. Additionally, management may be closer to employees and customers, thereby enabling faster problem resolutions (Lussier & Pfeifer, 2001). This proximity needs to be studied to understand and learn from the rebuilding process.

Small businesses provide local communities with resources they may not have without the company. Products and services offered through small businesses, along with the jobs added to the local area, all encourage economic growth. Due to the proximity of

small businesses to their customers, recovery from natural disasters or internal crisis ought to be studied to ensure the best possible recovery for the community. Small business responses to crisis are not well understood, although such businesses are particularly vulnerable (Nigg & Tierney, 1990).

Defining Crisis Research

Literature on crisis management focuses on defining crisis and planning for disasters and often concentrates on the negative without viewing the potential growth of organizational members resulting from their recovery process. Mitroff (2005) and Pearson and Clair (1998) described natural disasters as low-probability events that create a high impact and threaten organizations. NyBlom (2003) discussed crisis from the planning, organizing, and leadership of activities that control the recovery process. The literature on disaster recovery overlooks the roles of managers and employees as they deal with potential changes in social structure and roles in the wake of a catastrophe. Investigating the growth of organizational members allows detailed study of both recovery and the rebuilding process.

Changes in social structure after a disaster ought to be a focus of research to provide knowledge of the roles organizational members play during the recovery process. Pearson and Clair (1998) assessed the importance of crisis literature and examined how a crisis affects organizational members. The psychological view discussed by Pearson and Claire pointed to the need for research on individual perspectives during organizational crisis, while the social political view highlighted the need to study potential breakdowns

of social structure to provide insight into the transitions needed for successful organizational rebuilding.

Change Models

Change models focus on organizational transitions vital for rebuilding successfully. One of the earliest change model advocates, Lewin (1947), discussed the three-stage model of freezing, unfreezing, and refreezing. This is one paradigm that enables understanding employee perceptions during the rebuilding process following disaster. Kotter (1995) supplied an additional paradigm by discussing errors: lack of urgency, coalition, vision, communication, failing to remove obstacles, anchoring change, or declaring victory too soon. Kotter's ideas contributed to an understanding of the decisions of managers and the reactions of employees.

Organizational change viewed from Lewin's or Kotter's perspective envisioned change as a process that may be enhanced through management action. Carter (2008) continued this viewpoint when discussing the phases for successful change, including urgency, momentum, stability, implementation, support, and a view of the future. Carter addressed successful strategies, skills, and structures set up by management to support the process of change. Effective change management may be a crucial part in the study of effective leadership in crisis management.

Crisis Management in the Small Business Environment

In determining the responses of small business managers during crisis, management attitudes and ability to overcome disaster need to be investigated. Keh, Foo,

and Lim (2002) cautioned many small business owners felt control over an environment even during chaos and were under the illusion of control, even in uncontrollable situations. This perception by business owners may encourage rebuilding even in harsh or unstable environments. Small business owners' perceptions of the environment are reflected from self-influences, which can motivate or affect actions of owners (Bandura, 1993). If managers perceive rebuilding can take place, they may be more likely to encourage commitment from employees toward change.

The role of management is vital to leading effective change and encouraging commitment of employees toward change (Raukko, 2009). When managers commit to change and rebuilding after a disaster, they are likely to encourage employee support. If managers provide employees with structure by stating job duties or creating teams during recovery, a process can be set up to enhance the rebuilding process. Understanding the reactions of employees to such a process may enhance the knowledge of which actions work best during crisis recovery. Adamson (2004) suggested that CEOs can increase success of change by appointing teams along with providing a vision for employees. Determining which actions work best in disaster recovery may provide insight into what managers have learned following rebuilding.

Gaining insight into the vision managers supply employees during recovery may encourage an understanding of employees' perceptions of events following rebuilding. By providing a vision for employees, management may enhance the function of organizational members during and after a disaster. Braverman (2003) determined employees have an effect on the functions of the business post-disaster. If employees are unable to function during the post-disaster period, they may impact the survival of the

company and potentially hurt the rebuilding process. Knowledge of employee actions during rebuilding may supply insight into the perceptions held by employees during that time. Research is needed to determine whether managers can create a vision of rebuilding, and if so, how the vision affects the perceptions of employees. Emotional support for employees post-disaster includes providing them with helpful resources and guiding them through the post-crisis environment (Myer, 2001).

Survivors of a crisis differ in their emotions and vary in their ability to concentrate due to the trauma and potential preoccupation with the disaster (Collins & Collins, 2005). Individuals can experience analytical and behavioral problems as they deal with crisis and the issues following (James & Gilliland, 2005). Management needs to be aware of the emotional and physical issues facing employees post-disaster because if the issues continue, recovery may be hampered. If managers are able to gauge which management techniques work best to support recovery, they may be able to implement them. Thus, uncovering perceptions of employees after a crisis is vital research as it may offer insight into the support they need.

Small Business Response to and Acceptance of Change

The responses of small business owners, along with the support they can provide employees, are vital factors in crisis management research. Management action in small businesses is a major factor in creating an active environment for the survival of the business (Albert, 1981). The active environment produced through good plans post-disaster may encourage employees to view survival of the company as viable, a valid reason for the need for research in the response of managers and the acceptance of

change by employees. With employees as the most vital resource of a small business, the employees' ability to accept the transforming environment may be vital to the rebuilding process.

Many small business owners rely on a variety of resources to supply the tools needed for rebuilding after a disaster. Determining these resources through the study of small businesses that have recovered from disasters produced knowledge for other small companies to use in planning for and overcoming disasters. Siemens (2010) found rural small businesses relied on the internal business resources rather than turning to outside support. The primary resource of many small businesses is their employees, as these individuals are able to provide labor and implementation of recovery plans.

Understanding how the employees react to the changes and what actions they perform could allow preparation for future crises. The ability to use employee resources may be crucial for the survival of small companies following a disaster.

Research on the survival of small businesses post-disaster has yet to determine if such businesses can rely on their ability to overcome the uncertainty of the events and focus on their resources for recovery. Crisis events are unexpected events that threaten the goals of an organization and can create a high level of uncertainty among members (Ulmer, Sellnow, & Seeger, 2007). In planning post-disaster, management must overcome the uncertainty and access their resources. Research has determined that leaders committed to creating clear goals during disaster cannot implement plans without access to resources such as human capital, financial capital, and technology (Jenkins, 2006). Research has yet to uncover how human capital reacts to the recovery plans or what leads managers to determine which actions are necessary.

The perceptions of employees following a disaster and their reactions need to be understood to allow managers to determine response plans. Employees unable to make sense of a situation or to fall into a new routine may not perform at their full potential. Humans may use emotions to decipher a situation, but may instead act out of habit or social norms rather than reason (Pearson & Clair, 1998). Organizational members need to feel supported and be guided by management to ensure they can overcome the emotional uncertainty they may feel. Without a clear understanding of the reactions of employees, managers may struggle in disaster response planning.

Research has determined that trust within a small company may be vital in ensuring the ability to respond well to crises, yet research lacks suggestions for how to gain trust. The trust formed before crisis is critical to the performance of group members following a disaster (Hannah, Uhl-Bien, Avolio, & Cavarretta, 2009). If trust is absent, group cohesiveness may be hampered, in turn hampering recovery. Management may need to focus pre-disaster on building trust with and among employees to shape a sense of stability for employees. Extreme events call for leaders to perform as meaning-givers to assist followers to make sense of a situation (Foldy, Goldman & Ospina, 2008). Small business leaders may be at an advantage in providing stability to the groups they manage, though no research currently supports this.

Conducting research in the area of small business can assist in determining if they are at an advantage in building trust and supporting members. Research by Yagil (2008) suggested physically closer leaders are able to build direct communication with followers as well as being role models for them. Many small business leaders continually work closely with employees as they manage the day-to-day activities of their companies. This

proximity allows them to get to know employees, build trust, and form close communication, which all may be advantageous during times of change or recovery from a crisis.

Management needs to determine the responses of employees post-disaster, which might indicate acceptance of change while encouraging the organization to thrive. The research dealing with the responses of management and employees is scarce but could provide insight into the success of recovery and explain how small business can thrive, even after devastating events. Research by Carver (1998) revealed individual personality differences or circumstances could enhance or hamper the ability to thrive following a trauma. The major four responses include the ability to survive, submit, overcome, or thrive (Carver, 1998).

Psychological Responses to Change

Determining the emotional stress of disaster cleanup and recovery along with the perceptions of managers' actions may be vital research to support recovery. Smart and Vertinskin (1977) discovered organizations that are under stress can become centralized in the way they communicate as a way of stopping potential misunderstandings and dysfunction in coordination of plans. Managers who do not understand the emotional stress may be unable to communicate cleanup plans. Day, Junglas, and Rilva (2009) discovered that managers who deal with disaster situations required improvement within their communication responses, as they tended to rely on only their previous communication systems, which could not meet the new needs of the recovery

environment. The stress of the environment may change the communication methods and messages, along with other management practices during recovery.

The stress of recovery may also encourage managers to take on a more democratic style of managing. Research on the responses of managers seems to leave unclear the matter as to whether a democratic response is needed. Lanzetta (1955) discovered that during the elevated stress of crisis recovery, managers encouraged a democratic style in decision making, yet many employees continued to prefer that all decision making abilities remained with management. Research is necessary to determine if managers are more open to employee input due to the stress of disasters or if they should look for answers from employees.

Managers may feel inadequate to deal with a disaster situation if they are untrained. Milburn, Schuler, and Watman (1983) found employees or organizational members preferred to obey the supervisor's authority when they were under stress due to their uneasiness in the situation. Determining perceptions of stressful situations along with decisions made during such times is needed to preparing small business for crisis management.

Crisis Management

Reilly's (1993) multi-method study identified five effective activities of company executives during crisis recovery: rapid decision making, mobilization of resources, internal and external communication, and sensing of organizational needs. Research has yet to identify if employees are able to collaborate with managers in making recovery decisions. Crisis leadership encompasses crisis management but moves above this by

encouraging followers to pursue the organizational vision of recovery (Weiss, 2002).

Research on leaders' actions following a crisis may provide insight into potential collaboration through a common vision of recovery.

Strong crisis management provides managers with the skills for learning to implement change, including taking on the challenges of supporting employees and preparing the organization for transformation. Strong change leadership strategically uses trust, communication, and learning to organize change and to lead others through the recovery process (E. James & Wooten, 2005; Senge, 1990). To lead others and to promote cooperation and openness to the transition, management needs to understand the attitudes of employees. Leaders need to provide emotional support both to encourage ideas in the workplace and to promote the unselfish attitudes of employees (Huy & Mintzberg, 2003; Salovey & Mayer, 1990).

Leaders who support, encourage, and provide open communication are better able to help employees through the change process. Bennet and Bennet (2008) reasoned the main challenge of change for leaders is informing workers while offering an open environment for change. Managers with open communication practices and positive attitudes can encourage employee commitment to change. Lauver, Lester, and Le (2009) found managers' commitment influenced risk perceptions of employees, as management's support encouraged safety and innovation by employees. When managers support employees, innovative ideas and positive attitudes may increase.

The perceptions of employees and managers may cause attitude changes towards the organization and the coordination of recovery. Senge (1990) and Huy (1999) viewed individuals as key operators in organizational procedures and learning. Managers'

positive outlook about change may promote employee confidence in recovery. Attitudes of a supervisor can play a role in whether employees are aware of potential threats (Lauver et al., 2009; Nelkin & Brown, 1984). Research is needed to see if managers play a role in employee receptivity and learning gained from organizational change.

Huy's Multilevel Emotional Theory

Huy's (1999) multilevel emotional theory suggests that change includes four areas: receptivity, mobilization, learning, and emotional dynamics. Receptivity, as defined by Huy, is an individual's willingness to consider change, while mobilization refers to a direct action toward change. Following a disaster, people may have little choice about the change forced on them and therefore they must move into the mobilization phase of procedures. The actions taken after a disaster by small businesses may be triggered by the owner's and employees' emotional responses to the disaster. Research is needed to uncover whether managers' responses affect employees' perceptions. This knowledge could allow business managers to make sense of the situation, take control, and start the recovery process.

Determining employees' emotions following a crisis may help uncover recovery strategies used by management to take control of the situation and lead employees. Management may want to use the emotional realities of their employees to coordinate plans and effectively coordinate change (Sanchez-Burks, & Huy, 2009). Research has yet to determine whether management response to crisis is partly generated by the emotions of employees following the crisis. Understanding the emotions of both employees and management may help determine useful actions taken during recovery.

Carver (1998) suggested four possible emotional responses to crisis, including succumbing, surviving, thriving, and resilience. Research is necessary to discover which emotional responses by employees can help small business managers create effective response plans. The situational reality created by employees through sensemaking (Weick, 1995, 2001) offers management the ability to create plans for recovery and a feeling of obligation to the organization.

The recovery process included within Huy's (1999) multilevel emotional theory offers insight into the actions of recovery. Little research has been able to capture whether organizations can learn from their actions and the reactions of employees. Sanchez-Burks and Huy (2009) indicated that management working through transformations needs to focus on the feedback of employees, whether positive or negative, to identify the reactions of team members. Uncovering the perceptions of organizational members allows management to understand the attitudes of members through recovery and suggest the actions they may need to implement to accomplish recovery efforts. Research is needed to encourage learning from the attitudes and actions, along with determining what works best following crisis.

Sensemaking After a Disaster

The attitudes and views of organizational members during recovery impact comprehension of a disaster situation and the meaning created from the events. Weick's (1995, 2001) sensemaking theory and evidence of employee collaboration with management during recovery can provide knowledge and support in times of crisis. Sensemaking, as defined by Weick (2001), is an ongoing creation by individuals of

situations and actions in an attempt to rationally comprehend them. Weick's sensemaking as explained by Scott (2003) describes the individuals of the organization as creators of their own perceptions and suggests that they determine the significance of their situation.

The various views of disaster, by survivors, present descriptives of the emotional struggle following the initial shock of an event. Gioia and Chittipeddi (1991) stated sensemaking helps construct meaning for individuals and groups from past situations. The perceptions of a disaster also provide the opportunity for understanding the recovery process and reveal how employees collaborated with management in recovery. Stein (2004) suggested that sensemaking has several features during disasters, including members facing shocking and dangerous situations, the sudden loss of past views of reality, and changes of organization views along with uncertainty. The reactions of employees solicited in qualitative interviews encouraged in-depth discovery of how each employee created meaning out of the situation.

Retrospective sensemaking (Weick, 1988) stated that individuals look back on experiences to make sense of the event through an individualistic perspective. The individually created meanings of employees and managers combined supply the basis for how managers can encourage collaboration from employees and how employees feel about the responsibility. Weick (1988) stated crises determine individual actions, which may not be known before the decision is enacted, as the actions may not be considered appropriate until after the decisions are evaluated. Describing the actions made following a disaster can supply new impressions of events and actions during the recovery period, both for individuals and for the group.

Sensemaking continues to be used in research to provide insight into organizational change and actions during the recovery period. Thurlow and Mills (2009) used sensemaking as a template for understanding the processes of how individuals make sense changes. Their research looked at Weick's sensemaking theory to provide insight into the construction, reflection, and enactment of a changing environment. Researchers have acknowledged the need to understand organizational change and the ways organizational members mentally organize the transformation. Spencer (1996) referred to research surrounding Weick's sensemaking and enactment as a perspective that gathers knowledge. Researchers have employed the theory of sensemaking to determine the process of change within organizations and its impact on organizational members.

The perceptions following a disaster may impact the recovery process and affect how well organization members can learn from the rebuilding process. Allard-Poesi (2005) emphasized that sensemaking and learning coordinate actions among individuals. The rebuilding process may start with the perceptions of managers, but their actions may be influenced by the views of employees. Sensemaking can be used to determine perceptions of disaster but has yet to uncover the progress of recovery and the lessons managers can learn from decisions made during the rebuilding process. The learning gained from studying recovery sensemaking may provide disaster planning and goal setting during recovery.

Limitations of Sensemaking

Sensemaking may provide information in setting goals and the roles of employees, but the theory also has limitations. Sensemaking can explain the inaction of

individuals as they downplay warnings of disaster and fail to prepare (Mills & Weatherbee, 2006), but is limited in its ability to downplay the role of individual responsibility. Additionally, sensemaking draws attention away from rational explanation of a situation (Mullen, Vladi, & Mills, 2006) and may not provide a full understanding of the situation, as the theory is directed at individual perceptions, not a complete organizational view of the situation. The actions of an individual may be understood through personal perceptions of the situation, but this may not supply the logical diagnosis that caused the situation. The actions or inactions of individuals do not provide a comprehensive understanding of the situation or explain how the culture might influence the individuals involved.

Sensemaking offers insight into the actions of individuals, but the ability of an individual to make sense of a situation is created out of that individual's personal perspective, which also encompasses their culture and background. Each individual's experiences may shape his or her reaction to crisis and how the individual makes sense of the situation that follows. This means sensemaking only provides insight into individuals, without much ability to look at the cultural structure of the organization. Sensemaking is limited, as it does not provide the background of the organizational culture as it influences the actions of organizational members and does not explain why an action is considered typical (Mullen et al., 2006). The internal motives of managers or employees may not be easily answered through sensemaking, even though subsequent actions provide insight into the perceptions of organizational members and the roles they play in recovery.

Responses to Crisis

The roles of organizational members following a crisis or the actions they take may predict the outcome and what others can learn post-disaster. Weick (1988) defined enactment as the structure individuals produce when they act and bring events into existence. Sensemaking offers the basis for understanding actions of individuals as they perceive the environment and act on that environment. Weick suggested enactment offers crisis management the ability to control the stress level and speed of employee interactions through the actions of organizational members. Such actions may provide a basis for employee perceptions of recovery and the actions they choose to perform. The actions, along with the reactions, may enhance the recovery process and success of rebuilding.

Research has described responses to crisis but has not connected the responses to the perceptions or actual success of the events. Six factors have been found to enhance the response to crises including a sense of proximity, rapid reaction time, concern for staff, versatility of staff, and local networking and community support (Cater & Chadwick, 2008). These responses display both external factors and the internal culture of an organization but do not provide insight into the perceptions of employees as to the actions of management. Managers who are able to make sense of the environment and understand the emotional responses of employees may have greater success in their rebuilding efforts.

Research is needed to gain knowledge of the reactions to the rebuilding effort in order to provide insight into the post-disaster beliefs. Scott (2003) described Weick's views of organizational members' perceptions as being predisposed by their environment

or situation, which can influence their actions within it. Determining actions that create successful results may be only part of the success of recovery. Research needs to uncover whether the actions themselves or emotional responses to the actions produce better results during rebuilding.

The actions of management may be the most crucial in shaping the perceptions of employees post-disaster and the tasks they take on to create a successful recovery. Research has yet to combine the actions of managers with the perceptions of employees. Research in this area may allow management to determine whether implementation of recovery plans ensures employees a successful view of rebuilding. Cater and Chadwick (2008) discussed crisis response as the second phase of crisis management because it involves the formation and implementation of communication and planning for recovery. Strong recovery plans may help provide structure to employees during a time of turmoil, as they perceive actual success during recovery.

Individuals feel more secure if they are provided smaller tasks, yet research has yet to connect whether managers who set goals have employees who feel secure and visualize a successful recovery. Weick (1988) suggested that as people take action, they produce simpler tasks out of the complex, which facilitates clarity and relevance, even in unorganized settings. This suggests managers' actions or the goals they provide offer simplified options for rebuilding that become realistic within the minds of employees. Research is still needed to determine if employees who perceive recovery as realistic produce better rebuilding efforts.

Companies successful during transformation continue to be flexible and encourage rebuilding through planning (Ghoshal & Bartlett, 1996). Managers responding

to crisis with little planning or rigid plans may find their actions do not produce successful results. In contrast, management responding to crisis by setting goals for employees may encourage rebuilding, return to pre-crisis activities sooner, and potentially learn from the event. Goals can control the impact of a crisis (Elliott, Harris, & Baron, 2005).

Goals set by management may offer support during recovery and control the stress responses of employees dealing with the changes. The goals set by management can also help provide a quicker return to pre-crisis levels within a company (Smith, 2005). Research needs to determine if goals established with the employees' mental states taken into account encourage recovery to pre-crisis activities. Smith and Spika (1993) suggested learning could accompany the activities that make up goals. Research is absent on the subject of whether individual goals given to employees can encourage learning following crises.

Research has determined teams that achieve complex change are able to continuously adapt and learn from the changes (Mills, 1967). More research is necessary to understand how organizational members create beliefs about the changes and the actions taken. Capture of the reflections of team members post-disaster may provide insight into what individuals were able to learn from the recovery changes.

Even though many actions support recovery change, the reflection of individuals post-disaster may supply insight into the reasons for actions. Enactment is the process of action followed by the reflection of individuals on those actions to make sense of what was done (Weick, 1988). The responses, along with the reactions of organizational members following disaster, supply an awareness of a situation through the eyes of

survivors. These actions can then be viewed to potentially justify the actions taken and whether those actions were appropriate. Organizational members' reflections on their experiences and actions post-disaster may allow them to learn and prepare for future disasters.

Learning from reflection has not been well studied due its lack of priority among survivors. Reflection by managers may not take priority as they react to trauma. Rather, managers may feel reflecting on disaster is detrimental, as it distracts from the daily rebuilding activities (Schon, 1983). Managers instead react to the situation as it evolves. Managers may not take the time to reflect or set new goals for rebuilding and moving toward a more secure recovery.

Small Business Learning

Even though small businesses continue to be crucial to the economy, little research has been done on the effectiveness of training programs and education for those managing them (Huang, 2001). Understanding how a small business learns offers insight into which businesses are able to learn from crisis and overcome obstacles. If small business owners or managers can gain an understanding of how they learn and prepare for the unexpected, they may provide a stable company to better survive disaster.

The survival of small businesses may rely on the ability to learn from other small businesses and apply the information to their own situation. Jennings and Beaver (1997) acknowledged that the literature on small business management is limited, as much of current theory was built from the experiences of large firms. The experiences of larger corporations dealing with crises or obstacles may differ greatly from those of a small

company. Therefore, small businesses need to learn from other sources that seem applicable to their situation. So far, small businesses have had to rely on peer networks or on-the-job training to supply the information managers require. This is partially the result of a lack of data from which to learn.

Small business owners may not prepare well for the unexpected, as they may prefer to learn only what seems relevant. They may feel they are too busy to learn, yet many owners report they are willing to train if the location is close and information is applicable to their situation (Walker et al., 2007). Training for disaster may not seem relevant to small business leaders until an event happens to one of their peers or seems viable to their company. Therefore, many small business owners may not spend time focusing on potential crises. Such inaction may put them at a disadvantage in times of crisis and potentially hamper survival efforts. There may be different ways for these businesses to learn than the traditional training approaches.

Zhang and Hamilton (2009) asserted small business leaders feel they benefit from peer networks and learn from reflecting on the experiences of others. Zhang and Hamilton suggested that small business owners could learn from their employees, suppliers, competitors, and associates in the industry. Learning through these various methods may enhance higher learning through reflection of the experiences or perceptions of others. This information points to the need to capture data collected from companies that have survived and thrived post-disaster.

Capturing the learning post-disaster through the experiences or reflections on events may provide greater learning potential. Management education literature mentions that collaborative learning increases learning outcomes for business owners

(Bruffee, 1994). Small business managers who are able to learn from an event or problem situations of peers may find lessons they can utilize in the future. If small business owners listen and learn from the events of others and reflect on their own experiences, they may gain insight into problem solving.

Learning From Disaster

Learning from disaster, through the experiences of organizational managers, may not be a major focus of previous disaster research, but it is essential to provide insight to aid in future disaster recoveries. Runyan (2006) invited researchers to explore post-crisis learning and individual experiences in hope of positively influencing future disaster recovery. The ability to learn from the recovery process provides businesses and managers with a potential plan for a future crisis. Sitikin (1992) declared a crisis could be a catalyst for both individual and organizational learning. Research needs to provide the information available for small businesses regarding crises and learning from others' recovery efforts.

Small businesses need to plan for crisis to prepare for potential future disaster situations. Cope and Watts (2000) indicated learning involves the assimilation of information from one situation and application to another. If small business owners read and view the actions of other small businesses, preparation may be quicker and the potential stress may be less. The ability to apply information from different crises allows managers to prepare plans.

Small businesses that take on a learning atmosphere may be at an advantage in the ability to recover and utilize employees in the rebuilding process. Senge (1990) revealed

that the quality movement of organizations starts with continual learning and improvement, which can be achieved by breaking down the hierarchy. The breakdown of a hierarchy and the inherent power may be easier following a disaster, as management are open to employee input into the rebuilding process. Research still needs to capture how employees may help in disaster planning and rebuilding.

Current research seems to capture only the negative aspects of disaster, without providing positive case studies to encourage crisis planning. Case studies on crises tend to focus on the failures of business, unlike other fields, which encourage learning from successful decisions (Jaques, 2008). Research focused on the failures provides only a limited understanding of learning following any such disaster. Research needs to include both the successes and failures during the recovery to truly gain knowledge from the experience.

Most research on learning focuses on reflection post-disaster and the ability of individuals to create meaning from a situation. Reflective learning is a cognitive approach by individuals to create meaning from reflection and questioning of past events (Mezirow, 1991). Reflection on the disaster and rebuilding by managers and employees may encourage a new perspective on events and their meaning. Jaques (2008) concluded that optimal learning following a crisis requires openness to ideas, understanding of the situation, and the ability to access and recognize problems while being aware that problems happen anywhere. Allowing individuals to reflect on both the positive and negative actions of events allows learning to take place.

Lack of Learning in Small Business Owners

Research seems to show gaining knowledge from disaster is the hope of many business managers, but not all organizations are able to learn following a crisis. Elliott, Smith, and McGuiness (2000) mentioned the barriers to learning after a disaster include rigid beliefs, ineffective communication, failure to understand the situation, inability to adapt, and minimization of the situation while not taking responsibility. Lack of learning by small business managers may hamper recovery and slow future disaster preparation.

Learning for small business managers may be hampered by simple daily activities. This not only hurts the managers, but also may harm other small partner or supplier companies. Matlay's (2000) study of 6,000 small business respondents indicated that learning was not the priority of small business managers, as they were busy reacting to the changes in the market. Managers dealing with changing environments or daily activities may lose sight of the decisions that produce successful rebuilding. Managers may not be able to reflect while reacting and are thus unable to learn from an event or to teach others about it (Schon, 1983). If small businesses are unable or unwilling to learn from their reactions after disaster, they may be at a disadvantage in their ability to prepare for crises. Managers of small businesses that fail to learn may reduce the ability of other small businesses to learn from their experiences.

Without learning from a disaster situation, the small business may once again deal with crisis unprepared. Dufort-Roux (2000) revealed many business owners fail to learn from disaster out of denial and belief that events are of low probability or are isolated to one incident. Management denial of the severity of a situation or the ability for it to happen again may hamper the company's future disaster recovery. Management must

not refuse to see the changes in their employees or their motivation, as it could harm recovery efforts. More research is needed to determine how management can learn during troubled times and what skills they can gain to prepare for future crisis.

The Need to Continue Business Disaster Research

Research needs to continue to identify disaster impacts on organizational members along with what organizations can learn to prepare for future crises. After Hurricane Katrina, research in the area of disaster recovery gained strength, but mainly as related to this large-scale natural disaster. The Cater and Chadwick (2008) exploratory study determined four factors had inhibited two small businesses after Hurricane Katrina. These included limited financial resources, communication problems, logistics issues, and governmental bureaucracy. Though Cater and Chadwick studied small business, their research was unable to uncover the perceptions and reactions of organizational members post-disaster during recovery.

Weick's sensemaking theory is a starting point for researchers to understand individual perceptions of disasters but it has yet to be used for small business crises. With the current need for small business growth to help the U.S. economy, the need to understand the reactions of organizational members following a crisis is crucial. Research is needed to ensure the potential for recovery and sustainability following crises, not only for large organizations, but also for small companies that may already be struggling.

Previous disaster research has utilized sensemaking but has not focused on individual small business crises. Research by Mills and Weatherbee (2006) suggested

Weick's sensemaking could be used to understand the responses to a natural disaster and whether the outcomes could be better managed by both local and state governments. The research focused on large-scale disasters affecting several businesses, which does not speak to small organizations looking for resources pertaining to individual disasters without local or state support. The use of sensemaking theory seems logical to determine the reaction of organizational members in minor disasters and to identify actions organizational leaders can use to enhance and learn from recovery.

Recovery research could provide support for small organizations to enhance recovery and help leaders during unfamiliar crisis conditions. Weick (1992) stated that the Mann Gulch incident, a 1949 fire disaster, displayed how individuals work together during a disaster. That situation likely was not much different from today's disasters, as people are thrust into unfamiliar roles, watching the potential the collapse of the familiar. Leaders, even under extreme conditions, must attempt to reduce confusion to encourage support in rebuilding. Leaders who develop resilient groups are able to bring order out of disorder (Weick, 1992). Managers who educate themselves on the models of change and on crisis management within other small businesses may be able to respond to crises with a better understanding of the roles they need to take on to create a stable environment for employees.

Disaster management research lacks a clear focus on the role of management; this absence could hamper the recovery process. Past research on disaster management consisted primarily of case studies of large-scale disasters, but even those are minimal. Few studies have addressed the impact of natural disasters on the business community (Piotrowski, 2006). Runyan (2006) agreed, stating research in the area of crisis

management and planning has been, minimal and recommending that researchers explore this area during and after an event. The current research represented an attempt to uncover the perceptions of managers and employees following a disaster and present the learning generated from the rebuilding process.

Research focused on small organizations encourages the expansion of disaster research, along with the providing support to small businesses that may be more susceptible to a changing environment. Smaller businesses may be more vulnerable to change within the external environment, compared to larger organizations (Carland, Hoy, Boulton, & Carland, 1984; Denning, 2006). With small business struggling financially due to the economy, learning and awareness about disaster preparation is needed. The current research was directed at small companies that did not have the resources to combat natural or unforeseen internal disasters. The intent of the study was to provide insight into the changing environment of these companies and to learn how to prepare for future disasters.

Research is needed not only to help provide small business owners with the tools to rebuild and to overcome a disaster, but also to learn from the past. Boin and Lagadec (2000) stated that crisis managers need to plan for a future crisis, as during post-disaster recovery, many forget the events they complete a return to normal. Harburg (2007) reminded business owners of Churchill's advice to learn from past mistakes and lead change by communicating and personalizing the situation to employees. The present study was an investigation of how employees and managers perceived change and what learning they gained over the recovery period. Interviews with small business

management and employees provided insight into the recovery period, reflection on events, and knowledge gained during disaster recovery.

Theoretical Adaption Determining Post-Disaster Change

Research is still needed concerning sensemaking within the group members of small businesses to help define the experiences and actions during the recovery period. Weick et al. (2005) defined sensemaking as an individual's perceptions of the world as the individual experiences events and then shifts actions to rationalize the situation. Uncovering whether small business team members perceive crises or recovery through a similar viewpoint may allow understanding of their success in rebuilding. Perceptual accuracy provides evaluation and alternatives, allowing best choices for the goals of the organization (Weick et al., 2005). Group members viewing their experiences similarly may explain successful actions post-disaster during the recovery process.

This research was an exploration of sensemaking among organizational members and an explanation of their actions post-disaster to determine what can be learned by small businesses after crisis. The unique nature of the small businesses in the present study may encourage a greater understanding of the small business environment, decision making following a disaster, and the perceptions of organizational members. The findings in the current qualitative study extended previous sensemaking research in efforts to understand the perceptions of both managers and employees of small businesses.

The recovery process brings with it emotional shifts for individuals, yet how this influences management actions remains unknown. Huy's (1999) multilevel emotional

capability theory states organizational members' emotions may influence management actions. Researchers had yet to utilize Huy's theory to see if this is true in disaster situations of small businesses. Huy's theory suggests that environments under transformation require leaders who can adapt to group members' needs. The investigations in this research centered on small business managers and employees during recovery and provided insight into whether collaboration took place.

The impact of individuals' emotions during disaster recovery may also provide insight into the learning gained from organizational members following the recovery process. Huy's multilevel emotional capability theory allows insight into the emotional reactions of disaster survivors. Huy's (1999) theory addresses three areas of dynamic change: receptivity, mobilization, and learning. The behaviors include the receptivity of individuals following the disaster, their ability to cope with the situation, and the learning they gain. The reactions of organizational members, the actions taken by both management and employees, and the potential learning gained following recovery were primary elements of the current study in the examination of three small businesses following three different disasters. How each organization reacted, rebuilt, and learned formed the results of the study, in addition to determining any differences observed between organizational size and disaster situation.

This case study research was unique in that it provided in-depth analysis of three small businesses through the eyes of managers and employees. Weick's (1995, 2001) sensemaking theory and Huy's (1999) multilevel emotional capability theory combined to produce research exploring perceptions, learning, and collaboration among management and employees. Qualitative case study research on disaster recovery from a

funeral home, a community center, and a small grocery store provided new knowledge on the rebuilding process from personal experiences. Though this research was limited by the small number of cases, it represents a starting point for future research on small business recovery and learning. This study was expansion of Weick's sensemaking theory accomplished by viewing the perceptions of managers and employees following disasters within three small businesses. The study findings provided insight into whether small businesses learn from crises.

Qualitative Research Method

The purpose of this qualitative case study was to clarify current theory on the recovery process through the eyes of small business managers and employees as they made sense of the disaster and learned from the recovery process. The objective of the research was to help prepare small business owners with processes for post-disaster planning and give key details of how other small companies had overcome disasters and managed the rebuilding process. Interviews with small business managers and employees who had overcome crisis supplied the tools for disaster planning by other small companies. Qualitative research studies emphasizing learning from past crisis experiences provide opportunities for improved management of future events (Lagadec, 1997; Simon & Pauchant, 2000; Wang, 2009). The qualitative interviews of organizational members produced data to allow small business owners to gain insight into perceptions and reactions post-disaster, which might enable them to prepare the tools needed to overcome a future disaster.

The data gained from the interviews used in the qualitative method enable small business owners to learn from the experiences of other small business owners. The interactions of the qualitative method encourage understanding of various situations and provide support for disaster planning. The interviews allowed organizational members to have a voice, allowing owners to hear their perceptions. Qualitative interviews enable small business owners to hear the needs of organizational members and to plan for crisis with a full view of the potential environment.

CHAPTER 3. METHODOLOGY

Introduction to Methods

Small business organizations must be able to adapt to change and plan for the unexpected, as crises can occur anytime. Small business management can learn from other organizations that have dealt with the unexpected. The findings of this study provide managers with experiences and perceptions of other small business managers who had recovered from a fire or flood. The qualitative research allowed the comprehensive exploration of individual perceptions and learning after disaster recovery.

Using a qualitative research method for this study rather than a quantitative method facilitated in-depth analysis of personal perspectives to uncover disaster recovery efforts. The difference between qualitative case studies and quantitative survey designs begins within the research question creation. Both the qualitative case study and quantitative survey research designs encourage answers to topics related to disaster management, but the case study design dominates due to its ability to provide in-depth examination of the issues.

The qualitative case study design enables transcripts and quotes directly from survivors, providing firsthand accounts of the events. The qualitative case study method remains the staple of crisis management research and is the best format to

uncover the research questions of the current study. Jaques (2008) revealed case studies are widely used in the social sciences. t'Hart, Heyse, and Boin (2001) found crisis research is one of the few areas in the social sciences that continues to be relevant in creating knowledge for setting policies. Case studies provide real world exploration, reflection on actions, useful procedures, understanding of decisions, and the ability to provide theory to a situation to serve future actions (May, 2006). The cases within this research provided answers to the research questions and enhanced the knowledge of disaster rebuilding through the employees' and managers' ability to accept change and take action.

Niaz (2009) stated the generalization of qualitative research is not necessary, nor is it the desired outcome for a case study design. Qualitative data analysis is not more complex than quantitative data; rather, it is considered more flexible because it allows adapting to new ideas through the codes produced (Miles & Huberman, 1994). Case studies enable researchers to observe participants, providing the researcher with potentially private information as the participants integrate into the group (Merriam, 1988). Creswell (2009) confirmed the popularity of qualitative research for its ability to provide reciprocity between the participants and the researcher, encouraging highly collaborative work. Qualitative researchers value participants for an understanding of events, by either observing or interviewing the individuals to determine their views.

The first research question of this study was, "How does the sudden imposition of a disaster alter employees' and managers' abilities to accept and respond to change post-disaster?" The second research question was, "How can small businesses learn from their disaster situation?" The research questions provided access to any learning

gained during the disaster as well as to the perspectives of participants following recovery. The qualitative researcher looks toward theory for an explanation of the actions or perceptions of individuals to construct a hypothesis (Creswell, 2009).

The qualitative research questions guided exploration of the understanding of a disaster situation by several employees and managers, the roles employees assumed during recovery, and the learning following the crisis. The knowledge offered to small business organizations by providing experiences and actions of other business owners while gathering the knowledge gained during disaster recovery is invaluable. The qualitative case study method used for the current study encouraged in-depth exploration of crisis actions, insights to personal experiences, and expansion of disaster research in the area of small business recovery.

Research Design

The research design of this study enabled investigation of managers' and employees' perceptions of the disaster, the business recovery process, and the ability to learn from the events. Using the case study approach with open-ended interview questions permitted in-depth examination of managers' and employees' perceptions from an interpretive perspective. Interpretive research is designed to uncover events through the significance the participants attribute to a situation (Rowland, 2005). Case studies used in a descriptive format can illustrate and explore processes in a particular setting (Swanson & Holton, 2005). Management and employee interviews examined perceptions following the disaster and the learning that took place in three different settings following three separate disasters.

Merriam (1988) indicated qualitative case study research can be inductive and may focus on the interpretation of a situation. The current research focused on interpreting the differences in perspectives between management and employees regarding actions or feelings during recovery. Jaques (2008) concluded that case studies provide an opportunity to uncover an organization's reactions, along with their reflection on behaviors. The combination of these two elements may provide an understanding of why events took place as well as the ability to gain theoretical knowledge from a disaster situation.

Qualitative Case Study Research

The qualitative research methodology may be able to comprehensively uncover the issues surrounding disaster recovery at a deeper level. Qualitative research requires a focus on survivors to understand by observing and interviewing them to determine their perceptions of events. Laws and McLeod (2006) stated in-depth interviews might encourage the richness of qualitative research as the focus is on the issues of interest. Unlike the quantitative research method, which can require participants to pick from specified statements, a qualitative interview encourages deep, comprehensive descriptions of the survivors' perspectives.

The need for comprehensive details or firsthand accounts of a crisis is essential to uncover its impact. The observations during interviews of participants supply information, not revealed by participants, that may offer understanding of the situation. The clarification of perceptions of individuals during and following a crisis may supply details needed to interpret people's actions. Merriam (1988) stated qualitative case

studies are inductive and focus on the interpretation of a situation. The fundamental philosophical assumptions of qualitative research support disaster recovery research.

Several of the philosophical assumptions in qualitative case studies appear to support a sensible means to study crisis management. Qualitative case study research can uncover an individual's beliefs and perceptions of reality. The intent of this study was to examine the knowledge obtained by survivors as the researcher asked participants what they learned from the crisis. Richardson (1993) asserted case studies may supply managers with awareness about better decision making abilities during crises. Findings in the present case study revealed the private nature of survivorship following disaster. The case study design in qualitative research facilitated telling the story of survivors and supported understanding of related issues surrounding disaster management.

The retrospections of events allow an understanding of whether management or employees felt they gained knowledge after the recovery. Issues of change events in a retrospective view are crucial to interpreting organizational change (Chreim, 2006). Weick (1979) pointed out, "All understanding originates in reflection and looking backward" (p. 194). The present research encouraged reflection on recovery events and learning gained from the rebuilding process.

Reflection and the potential for transferable understanding of crises in small businesses were important elements of the current study. Stake (1995) argued case study research could provide transferable knowledge. The present research included three case studies to supply small business owners with the knowledge gained from small businesses that recovered after a disaster.

Research Needs in Crisis Management

Learning gained post-recovery and during rebuilding allows other small businesses to gain an understanding of the perceptions of managers and employees of events post-disaster. Little research has been offered in the area of small business owners' responses to challenges (Siemens, 2010). The present study contains the perceptions and responses of three different small companies' unique crises and the learning that followed.

Sensemaking Theory Extension

Weick's sensemaking theory has been studied in several disaster situations to explore the events and perceptions of survivors. This research extended the sensemaking theory into the small business environment. Research on small businesses has lacked the responses to and acceptance of change following disaster and the learning management can gain from the experience. Therefore, this research expanded study on small business recovery by exploring three individual cases of disaster recovery.

Field Study

A field study is a small role-playing version of the intended study to verify accuracy of the questions. This research included a field study performed to provide guidelines during data analysis. Field studies allow the refinement of a proposed study by determining the viability of the research study (Yin, 2009). Interview questions and

protocols for the study are deemed useful through role-playing interviews with colleagues. Business owners not impacted by disaster were solicited to clarify meanings of interview questions. The exercise improved accuracy of the interview questions.

Practice using the data analysis is one of the objectives of a field study. The field study in this research ensured accuracy of the questions while determining pragmatic issues, such as an optimal interview environment, along with the assembly of voice recording equipment. This field study allowed modification of the analysis as needed.

Research Sample

The sample in this study was management and employees from three small businesses in the Midwest state that had been affected by a disaster. Creswell (2009) revealed a purposeful sample could be chosen when the purpose was to obtain the process, problem, and events from different perspectives. All three companies within the study were small companies that had dealt with either a flood or fire. Company 1, a funeral home, survived the June 2008 flood of a medium city. Company 2, the community center and catering business, recovered from a January 2010 flood caused by a faulty sprinkler system. Company 3, a grocery store, overcame a devastating fire caused by a faulty piece of equipment in November of 2008. The participant interview sample provided diverse views of both natural and internal disaster recovery. The management and employee participants offered a sample of small businesses that had dealt with a disaster and had gone through the recovery process.

The sample represents the small business sector of a Midwest state. Company 1 had one manager-owner and two full-time employees. Company 2 had one manager, also the owner of the company, one full-time employee, and several part-time employees for the catering services. Company 3 had one manager, the owner, along with eight employees.

The solicitation of the businesses managers' involvement in the study took place through a formal letter explaining the study and the interview processes, and a copy of the informed consent. Appointments for personal and group interviews started with the agreement of managers to participate in an hour-long, open-ended interview. The employees received an introductory letter and consent form for the study. Once employees agreed to participate in group interviews, they received a schedule of times and places. Group interviews consisted of two employees at a time, with employees choosing a partner to participate in the interview process. Each interview was audio recorded for transcription and accuracy purposes and will be destroyed five years after the dissertation is published. Audio recordings will not be shared outside of the researcher. All interviews were transcribed within two weeks so participants could verify words and meanings, if deemed necessary by the researcher. All participants were informed of the confidentiality of the study and learned that identifiable information would be deleted during coding.

Participant Selection and Recruitment

Participants were selected from small businesses within the researcher's community that the local media had reported on as having overcome a crisis. All of the

three case study groups were small organizations, locally owned, with fewer than 20 employees. The businesses had recovered from a disaster within the last five years. The researcher required the owner of each business to be an active part of the organization: for example, a manager in contact with employees. The participants of this study were management and employees of three small businesses in the Midwest state. Using employees from three companies provided access to a variety of views from both natural disaster situations and unexpected internal crisis events. The findings in this research described the experiences of individuals during disaster and recovery.

Participants were recruited with management sanction via a formal letter. Participants were informed of the need for research on disaster recovery and the ways participation in this study could supply other small businesses with information needed to rebuild after a crisis. Informed consent letters were provided to participants by their company and individuals were encouraged to contact the researcher with any questions pertaining to the research. Participants were also supplied with access to the researcher if questions or concerns related to the study arose or concerns came up before the interviews took place. Before their scheduled interviews, participants received an informed consent, which they signed, and they received a copy to take home.

Informed Consent

The informed consent provided information about the study, the role of participation, potential issues related to participation, and contact information for the researcher if they had questions or concerns. Participants read the informed consent letter and understood that their participation was voluntary. They were encouraged to

ask any questions before signing and were provided with a copy of their signed form. Additionally, each participant was encouraged to call the researcher with any questions or concerns during the data collection process. Participants were also given access to a local crisis counseling website, as well as phone number, in case participants felt the need to receive mental health counseling. The crisis counseling site was a mental health program set up by the State Department of Human Services as a free service to survivors of the 2008 flood. Participants also had access to their business's health insurance for professional assistance if they needed counseling or assistance.

Interviews

Managers were asked to participate in an hour-long, one-on-one interview, which was tape recorded while the researcher took field notes. Each of the managers had managed the organization prior to and during the disaster and recovery. The managers were asked to help set up group interviews with employees and to provide access to a comfortable setting for group interviews. Hour-long group interviews were also audio recorded while the researcher took field notes regarding participant interactions and personal demeanor. Data from each interview were transcribed within two weeks and participants were asked to verify accuracy if clarification was needed.

The interview procedures were set up according to methods described by Patton (2002): creation of the interview protocols, a field study to test the interview questions, contacting interview subjects, and finally performing the actual interviews. The interview questions related to the research questions, as described in Table 1.

Table 1. *Research Questions and Corresponding Interview Questions*

1. How does the sudden imposition of a disaster alter employees' and managers' abilities to accept and respond to change post-disaster?	
Management Questions	How were you impacted by the disaster and the changes that followed? Describe your management style during and after the disaster. How did your employees respond to the changes in following the disaster?
Employee Questions	What was your reaction to the disaster and changes that followed? Describe how you were involved in the recovery process.
2. Can small businesses learn from their disaster situation?	
Management Questions	Describe what you learned from the disaster and the recovery process. What process did you use to conceptualize your learning?
Employee Questions	What do you feel you learned from the disaster? What do you feel your company has learned post-disaster? What process did you use to conceptualize your learning?

Setting

Given the qualitative nature of the research, participants were asked to meet in comfortable surroundings. Interviews were scheduled at each business location for the convenience of participants. The researcher took field notes on the participants' demeanor, interactions with one another, and physical characteristics or personality to ensure accuracy of body language. Follow-up interviews took place only if the

researcher needed to validate notes and recordings. Second interviews were located within the local facilities and again recorded for accuracy.

Instrumentation

The interview guidelines in Appendix A were used to guide individual interviews of management. The interview guidelines in Appendix B were used for group interviews with employees. Both sets of guidelines consisted of open-ended questions designed to encourage participants to explore retrospective experiences without leading or prompting by the researcher. In qualitative research, the researcher becomes the human instrument in collecting and processing data (Hoepfl, 1997). The main instrument of this research was the researcher: performing interviews, observing, transcribing, and then coding the transcripts and performing triangulations of the data. Business owners, contacted via phone, were offered an explanation of the study. A company meeting with business managers and employees provided information concerning the study's purpose and participant responsibility, and the meeting served as a forum for inviting participants to become involved.

The information obtained through manager and employee interviews documented personal reflections and events. The perceptions following the disaster encapsulated various collaborative actions and the learning post-disaster. Researcher observations allowed capture and description of body language.

Transcription review and analysis helped create emerging coding themes. Codes were developed by open coding of interview transcripts and were created from the emerging themes. Perceptions of the disaster decision making and the learning

participants discovered after the crisis were the primary focus of the coding to identify areas of interest for the small business owners.

Semi-structured interviews provided a personal encounter with participants, enabling security and collection of higher quality information (DiCicco-Bloom & Crabtree, 2006). The group interviews of employee pairs facilitated viewing the interactions of participation as they discussed job changes and perceptions of events. The purpose of the analysis was to determine the perceptions of managers and employees and discover whether learning took place post-disaster.

Data Collection

Data were compiled from the personal and group interviews with management and employees. Law and McLeod (2006) believed in-depth interviews encourage rich details on the area of focus. Interviews were used to encourage accurate details of perceptions following the crisis and during recovery, and to record subsequent learning. Observations are a form of interpretation that allows the researcher to match participant reactions and behaviors (Stake, 1995). Following the interviews, transcription took place within two weeks and was provided to participants for validation if the researcher felt it was necessary. When data were deemed valid, open coding was performed to develop categories. Categories were formed from common themes obtained in the interviews. Themes were built in areas pertaining to views of the event, recovery stress, feelings toward management or employee contributions to recovery, and areas where learning took place.

Data Analysis

Miles and Huberman (1994) described the data collection process as reduction, display, theory construction, and verification. The reduction of the research happened concurrently with the categorizing of the interview transcripts. The wording and comments of participants helped determine keywords to produce categories. The categories facilitated data reduction by helping to create a display of the identified themes. The data were reduced within a file folder labeled with similar keywords and themes and stored within an Excel display file.

Displaying, the second step, included the use of keywords and themes to focus attention on critical relationships or interview categories. The three cases were clustered into categories by themes or keywords within the display process. The last stage of the process was the theory construction, which started with coding by themes.

Data analysis and theory building began with open coding of transcripts by theme. Open coding begins with the identification of themes and the naming of each category to allow for descriptions and multi-dimensional categories (Hoepfl, 1997). As coding continued, new themes surfaced and data were placed into categories.

Axial coding becomes a second step in open coding, allowing for identification of categories to emerge (Creswell, 2009). Saturation of the data is accomplished when no expansions or new concepts are found (Law & McLeod, 2006). Saturation was evident when themes became repetitive and no new themes emerged. Once code categories reached a saturation point, coding was complete.

After saturation of data and coding was complete, transcripts were filed in an electronic file for safeguarding for the standard five years. All transcripts, both hard

copies and electronic files, were numerically coded so participants were not identifiable. Hard copies of transcripts and field notes will remain in locked storage for five years before destruction through shredding. The audio recordings of interviews will be destroyed six months following publication.

Coding Methods

The coding of the study data included both open coding and axial coding. The open coding began with the themes found within the interview transcripts. Patton (2002) stated themes could be extended in the analysis of the interview data. The transcripts were analyzed for key phrases and compared to current theories. Phrases related to disaster emotions or reactions to disasters were separated to gain the knowledge of differing views. The theories were then categorized to ensure that interview content either correlated with or rejected theories. Axial coding contributed to theory construction, as it supplied relationships between categories, as Spiggle (1994) predicted in noting that axial coding offers the basis for theory construction by displaying the interrelationships of various concepts.

Strauss and Corbin (1990) explained that axial coding allows for reexamining of categories to identify links and create a conceptual model to display the story line. The conceptual categories were separated by the keywords found from the open coding of transcripts. The categories then enabled a visual display of relationships between keywords. A story line was built for each case study to show similarities and differences among the disaster cases.

For example, Parker's (2007) research displayed her story line from each participant, along with his or her reactions and reflections on disaster events. The goal of the present research was to compare and contrast each case to view both management and employee perceptions for the researcher's insight into any differences or similarities among the disasters. The content analysis of words and phrases from interviews were checked for valid assumptions. Content analysis allows data to have valid assumptions while being replicable to their context (Krippendorff, 1980). This helped ensure theories were valid and reliable.

Coding developed from the interview data analysis. Preliminary codes were established and modified as data accumulated. The coding can also advance through the literature review and hypothesis creation, and develop with the study (Miles & Huberman, 1994). Data analysis was enhanced by reexamining categories and evolution of themes with input from the committee input and outside data experts. Themes were added before finalization to ensure accurate codes.

Validity and Reliability

Miles and Huberman (1994) described that triangulation provides validity to a study as it can confirm or contradict independent measures. The research established validity by gathering multiple sources of information from the employees' perspectives, management views, and observations during interviews. The various sources were then triangulated to ensure a valid understanding of the disaster situation. The triangulation of the employees' comments and management interviews enabled patterns to emerge when participants' perceptions differed.

Triangulation using multiple methods to confirm findings can enhance the coding process (Law & McLeod, 2006). Participants received access to the data when needed to ensure accuracy of meaning. Committee members supplied with a sample of the data and codes validated the research. The findings from personal and group interviews along with field notes enabled clear illustration of questions. Scandura and Williams (2000) stated triangulation provides the ability to draw conclusions and obtain higher external validity.

Miles and Huberman (1994) revealed code checking enhances clarity and reliability. The validation of transcripts provided reliability of the data and enhanced codes created with the data. However, Merriam (1988) mentioned case studies provide descriptions or explanations of the world for interpretation, but repetition with the same measure is not likely due to the variety of perceptions. Though the codes may be reliable, qualitative research on people's perceptions is difficult to measure.

Ethical Considerations

A large-scale disaster cannot ethically be staged as an experiment, so researchers continue to explore crisis through qualitative methods. A qualitative case study of individual organizational members' retrospective perceptions of disaster supplied data for this research. This study, conducted a year or more post-disaster, allowed time for physical and emotional recovery, yet not so much time as to allow participants' memories to fade. The researcher, having an understanding of small business environment within the state, had a bias in the research yet it also resulted in trust between the researcher and participants. The research proposal was reviewed and approved by the Capella

University Institutional Review Board dissertation committee before data collection and after the researcher completed the required CITI Course model to protect research subjects. The completion of the course and committee approval support ethical research in scholarly works.

Research ethics in scholarly works pertain to the protection of participants and include informing participants of the purpose and nature of the study, participant rights, and the benefits of the study (Cooper & Schindler, 2008). Informed consent from both management and employees needs to be obtained before work begins. Miles and Huberman (2007) reveal informed consent should be in place before the fieldwork to ensure protection of all participants.

The respect for the emotional wellbeing of participants within each case study is important to help mitigate participant uncertainty about the reason for the research. The informed consent provides participants with a full disclosure of the procedures (Cooper & Schindler, 2008). Participants were informed that the data would remain confidential and transcripts would be destroyed within five years post-publication. The participants were informed that they would have assigned code letters in the study, with no name or position mentioned. Participants were also informed that data files would be saved in a secured file until their destruction post publication. Miles and Huberman (1994) emphasized that confidentiality requires participants to be clear about who has access to information and how identifiable the data becomes. Data were not provided for use without the participants' knowledge and permission.

CHAPTER 4. RESULTS

Introduction to Results

The purpose of this qualitative case study was to clarify current theory on the recovery process through the eyes of small business managers and employees as they made sense of the disaster and learned from the recovery process. The first research question of this study asked, “How does the sudden imposition of a disaster alter employees’ and managers’ abilities to accept and respond to change post-disaster?” The second research question of this study asked, “How can small businesses learn from their disaster situation?” Both of these research questions are addressed within this chapter, along with a discussion of the findings from all three cases. The cases used within the study were three small businesses, all affected by disasters in 2008 or 2010. This chapter contains discussion of the interviews with managers and employees, the coding process, data validation and analysis, and results. The findings from interviews as well as their summaries comprise part of the discussion.

Study Sample

The study sample consisted of ten individuals from three cases. Management interviews consisted of three owner-managers, two men and one woman, ranging in age from late 30s to late 40s. The employee interviews consisted of two men and five women

ranging in age from mid-20s to mid-50s. All employees had been with the companies prior to the disaster and continued post-recovery. Provided with confidentiality forms and an introduction about the case study before the interviews started, not all employees chose to participate.

Case 1 interviews included the owner-manager and two employees and took place three and one half years following a major flood. Case 2 interviews consisted of the owner-manager and one employee, two years after an internal flood. Case 3 interviews consisted of the owner-manager and four employees, three years post-fire. Interviews took place in person or over the phone, when needed. All manager interviews consisted of five interview questions (see Appendix A) while the employee interviews consisted of six questions (see Appendix B). During the field test, experts in qualitative research and owners of other small business owners confirmed validity of the interview questions.

Coding and Analysis Details

Both predetermined and emerging themes were useful to uncover details within the interviews. Inductive and deductive analysis provided guidance for the coding. Each interview was examined to reveal patterns and to produce categories for coding. The management interviews were grouped together to find similarities among them. Employee interviews were grouped together to display patterns among answers and to reveal potential codes. Transcripts from participants' interviews were viewed to determine the words that described sensemaking, and emerging patterns were incorporated into a spreadsheet for examination, which provided insight into similarities and differences among the cases.

The coding began with patterns of similar responses among respondents. Codes were determined through words found several times among participants. The employees' responses were viewed separately from the managers' responses to determine code words. Comparisons made within each case and then among cases helped to determine similarities and differences among all three cases. The managers and employee responses and codes were compared to see if similar responses were present between the two groups. The comparisons of statements led to new codes and analysis of the data. The chartable codes are shown in Table 2 Chartable codes of Manager and Employee Interviews.

Table 2. Chartable Codes of Manager and Employee Interviews

Initial Response	
Managers:	Stress/Overwhelmed – 2 of 3
Employees:	Shock – 5 of 7 Disbelief – 3 of 7 Uncertainty – 4 of 7
Sensemaking	
Managers:	Friends and family support – 1 of 3 Employee support – 3 of 3
Employees:	Sympathy/Worry – 4 of 7 Acceptance – 3 of 7 Wake up call – 4 of 7
Learning	
Managers:	Employee teamwork – 3 of 3 Blessing/Found good in disaster- 3 of 3 Community/Local professional help- 3 of 3
Employees:	Belief in learning- 7 of 7 Came together – 6 of 7 Preparedness – 4 of 7

Validation Triangulation Techniques

After completing all interviews, coding the data helped organize the text into related segments (Creswell, 2009). The validation of the codes for this study used

triangulation as a validation technique. Four kinds of triangulation include methodological, data, investigator or evaluator, and theory (Patton, 2002).

Methodological triangulation was useful in this study by asking the same questions of all managers and employees, offering insight from both viewpoints. The triangulation of data sources included using both field notes and interviews to ensure meaning while gaining accuracy of information. The field notes provided additional information about body language, tone of voice, and eye contact. Participants were asked to explain information as questions arose during coding to assure accurate meaning.

The data were triangulated with the use of committee members as evaluators for coding. The extra evaluators ensured accuracy of codes as they validated a section of transcripts to codes provided by the researcher. The use of committee members and not outside evaluators ensured confidentiality. Creswell (2009) stated an external audit or analysis of data ensures interpretation of the data in the same way the researcher had determined. The data analyses of three committee members supplied the accuracy of codes and determined findings were valid. As the codes were found valid, the themes were viewed deductively, utilizing the research found in the literature from Chapter 2.

When codes and themes started to emerge from both the management and employee groupings, the researcher was able to use deductive analysis. Deductive analysis started by matching the research questions with codes. Research methodology described in Chapter 2 supplied the organization of codes and helped the researcher view the potential relationship of transcripts to the research questions. The data from each individual were compared with other individuals' data, along with data from each individual case. Then the data among cases were compared and contrasted with

differences between the employees' and managers' transcripts to determine relationships. The coding showed similarities among all three small businesses, with some disparity between the larger citywide flood and two smaller stand-alone disasters.

Management Interview Results

Initial Responses by Management

Question 1 of this research study investigated the ability to accept and respond to changes post-disaster. The initial response of managers was stress following the disaster, which caused them to feel overwhelmed. One manager, "Austin" (fictitious names were used for managers and fictitious initials were used for employees), mentioned the emotions he felt during the first days of cleanup and recovery. "Physically and emotionally, it was overwhelming, completely overwhelming, on a level I had never felt before." Another manager, "Jordan", described his initial feeling after hearing about the disaster.

Oh, well, it was an instant dose of stress, and you know, 'cause you didn't know if this is like getting your pink slip in a different manner, and the unknowns were not there because you haven't spoken with insurance policies or the insurance companies.

Managers continually mentioned the overwhelming stress which affected them emotionally following the disaster. The stress of the unknown may have hampered managers' ability to make sense of the situation initially but as time went on managers' abilities increased.

Managers' Sensemaking of the Situation

The first question of the research also addressed managers' ability to make sense of the situation following the event by utilizing Weick's theory of sensemaking to accept the new circumstances. Weick (2001) defined sensemaking as an ongoing creation by individuals of situations and actions in an attempt to rationally comprehend them. Managers relied on the support of others to make sense of the situation and help them come to terms with the events that had taken place. "Austin" asserted employees provided support during the early days of cleanup. "There was a lot of emotional moments and a little bit of hysteria, because people don't even know where to start. Once you get through that shell shock, everybody jumps in." "Austin" went on to discuss how insurance supplied the needed paperwork, which helped make sense of the rebuilding process. "So, I would ask most people to send me stuff and walk me through it." Managers felt the initial shock following the disaster, but with the support of family, friend, and employees managers were able to make sense of the new circumstances. "Jordon" discussed how friends and family supported during the stress of rebuilding.

As far as learning process and understanding the situation . . . I probably had moments where I just wanted to boil over, but good friends and family [are] kind of there to help you chill down, and then just [I] kind of listen[ed] to a lot of advice.

Employees along with family and friends supported managers through the stressful cleanup providing them with the ability to make sense of the situation. As managers comprehended their circumstances they were able to move on and make decision for rebuilding.

Acceptance by Managers

Research question 1 looked at the acceptance of managers post-disaster through their ability to make sense of the situation. Data showed managers were able to accept the changes with the help of the teamwork their employees displayed during recovery. Each one mentioned how well their employees took on the recovery process, how they worked as a team, and how they felt employees gained a sense of ownership. Managers felt employees accepted the changes post-disaster by becoming more involved with the welfare of the company. Managers mentioned they accepted the changes personally by supporting their employees through decisions, allowing them flexibility, and watching as they took on a sense of ownership about the business. “Sidney” discussed the relationship employees had during cleanup of the business, which brought them closer together.

The employees, I think, became more involved in and took an individual ownership of the whole future, you would say. They became more involved in the welfare than just putting in time and working, so it brought ownership, pride, togetherness.

“Jordan” discussed how the company’s cleanup process went, saying, “Yeah they were really happy to be able to come and clean up. Everybody got in there and got our knuckles dirty and did what we had to do to clean up, move things along.” “Jordan” felt employees took on duties that assisted during the rebuilding process and supported “Jordan” during the emotional time following the disaster.

“Austin” stated how the employees “just jumped right in” during the cleanup and that the staff took on tasks they could have said no to, but they worked as a team, which supported the whole rebuilding.

Very much a team approach, and so appreciative of every single person and what they did, as they were as overwhelmed, as I was, but they could have walked away from it and they didn't. So it was as much a team as, um, as I could ever expect. ("Austin")

"Austin" was not the only manager to feel supported by employees, which allowed the managers to comprehend the events and accept the new circumstances.

"Sidney" spoke about the freedom employees had within the company, which continued during the rebuilding process. "Everybody is given the freedom to make decisions. I don't follow them around like a dictatorship. Everyone is allowed to make decisions."

"Sidney" felt as though employees had always been a support to the organization, and during the rebuilding process, the support continued. "Sidney" had the time and opportunity to deal with other emotional and managerial factors during rebuilding due to the abilities of the employees and their freedom to make decisions. All managers felt they supported employees, and in turn, the employees supported them in rebuilding.

Learning Similarities Among Managers

The second question of the research study dealt with how managers learn following a disaster. All managers felt as if they had learned post-disaster, but the learning seemed to be personal growth, such as understanding what is important or that blessings can come in times of crisis, rather than any learning associated directly with how businesses might avoid or overcome a disaster more effectively. "Jordan" revealed the disaster helped in learning that even the worst situations have some good.

I guess not all disasters, you know, not everything is a disaster. I wouldn't call it a disaster; it was just a setback. There is some blessings in disguise; you know, some good things came out of this. We got newer equipment that works better, doesn't break down as often now.

“Austin” learned that managing seemed overwhelming at times, but it was easy, compared to rebuilding. “Austin” also mentioned how if disaster had to strike, it happened at the best time of the year.

Oh, when you think you’re busy in life, um, stop and look around you and go, “No, I am not overwhelmed, I’m not that busy, because everything around me is intact.” It just really makes you appreciate things that you take for granted. I was appreciative that no one was hurt and no events [were] booked at this time. There could have been so many horrible scenarios. If it had to happen, this time could have not been better.

The learning to enjoy life and not stress over small things was a topic mentioned by other managers. “Sidney” revealed a new perspective on what matters in life.

Um, the biggest thing I learned is that everything is replaceable. Everything you think you need, you don’t *need*. It is all replaceable. And from buying a business, to running a business, to having it completely flooded within a short amount of time, to having virtually nothing, to where I am sitting at right now at the desk, talking to you in a new location: and everything, as I am looking around, is new. Everything is replaceable. People are not replaceable, but everything else is.

The managers felt they learned from the disaster and rebuilding process.

Managers gained knowledge on a personal level and a new perspective on life after careful reflection post-disaster.

Potential Support for Learning

The second question of the research discussed how a manager could learn from disaster. Examining the learning statements provided by the managers in this study revealed reflection was one of the main areas in which learning took place. Managers mentioned the insurance process and other local professionals as resources that could provide guidance during the process, and they learned from those individuals. “Jordan” reflected on the decision made during rebuilding.

I just feel like we made a lot of good calls on the re-build and I think everything worked out good with the employees too, as far as getting through it. Nobody got laid off and they probably got a little bit of pride in helping to rebuild the new facility that we're in.

“Austin” discussed the local business people who provided support post-disaster.

Um, you just learn a tremendous amount from it. Um, just the local professionals, the people that just make it easier, the people that just knew someone that knew someone to bring in the big fans, just things like that.

“Austin” went on to describe how insurance professionals also supported during the rebuilding process.

You know, I just relied on professional people, um, insurance people, to process what they were going to require and need from us as we went through everything, because if you don't follow those guidelines and you don't follow those rules, um, then it is not going to work in the end.

The insurance professionals, along with other professionals, provided an area of learning for all the managers, as all managers reflected back on the rebuilding process.

Though none of the managers actually stated they learned from the insurance representatives, the individuals might have offered knowledge or provided comfort during the stressful conditions.

Employee Interview Results

Initial Responses

All employees initially displayed shock, disbelief, uncertainty, and loss following the disaster. As discussed by Scott (2003), sensemaking includes several of these emotions, including members facing shock, the sudden loss of past reality, and uncertainty with the changes of the organization. The employees' abilities to respond to

the disaster were hampered by shock and disbelief as they tried to make sense of all the events taking place.

Shock and disbelief. When asked what their first reactions were to the disaster employee AJS stated shock. “I guess my first reaction was shock.” This was also the case for employee AME, who mentioned, “Ok, I think initially, we were sort of just kind of in shock and didn’t think it was going to happen.” Employee CK stated, “It was like, shocking, I guess, just to see all the damage and everything that it caused, you know.” Several employees, each from different disasters, stated the exact types of initial responses when they heard the news. Though disasters happen every year, these employees were shocked at the actual occurrence to their company. Once the reality of the situation became clear, the uncertainty of jobs and the future became a priority to these employees.

Uncertainty. Employees mentioned their secondary reactions concerned the uncertainty of the situations and their job security. Employee BME mentioned the potential job loss after seeing the building destroyed. “I felt like, you know, we lost our building, and [I] didn’t know if I was going to have a job anymore.” Employee AME discussed questions that went through her mind following the disaster. “I was wondering what’s going to happen with the business? Is this going to; is this it, for a while?” Employees worried about the return of the company, their job stability, and what it would take to rebuild the organization post-disaster.

Feeling of loss. Following the disaster, many employees described the feeling of loss as they realized the company, as they knew it, was gone. Employees were dealing with the emotional cost of the disaster, the initial shock, the uncertainty, and the eventual

loss of what they had known. The employees were trying to make sense of the situation they were now in and trying to determine where they would be in the future. Employee ABE described it:

When we realized we were not able to go back, it was sort of just floating along, like, “What we do now?” I felt like, you know, we lost our building and didn’t know if I was going to have a job anymore. You go through all sorts of emotions and we just felt completely lost.

Employees feeling of loss hampered some of them in comprehending their situation. As time went on employees still felt loss but were able to accept the past crisis and move on toward rebuilding.

Acceptance and Sensemaking in Employees

Once employees were able to make sense of the situation, they gained empathy and the ability to accept the circumstances. The sensemaking by employees post-disaster provided them insight into the feelings of others, acceptance of the new situation, and worry, as this it was a wakeup call that disaster can happen.

Feelings of sympathy/empathy. Several employees felt sympathy for others dealing with disaster, whether it was during the same time period as their own recovery or post-recovery. Employee ASE mentioned, “I think I have more of an understanding. I feel different now when I see somebody’s had a fire on TV.” Another employee, ABE, mentioned,

We deal with families every day who have lost their homes, and you look at that, and even though it was devastating for us to lose our building and had to build it from the ground up, it was nothing compared to the families that came in after the flood that had lost their homes.

Employees felt sad for their own situation yet gained empathy for others. In understanding the circumstances following a disaster, the employees were able to make sense of the events and their situation. This allowed employees to gain acceptance.

Feeling of acceptance. Discussing the procedures post-disaster allowed employees to look back with laughter and relief. Employee AMS stated, “Oh, my gosh, [laughter] we had to clean up the store, we had to go through all the soot, and we had to inventory everything, and then we cleaned it up.” The actual process of cleanup provided employees with the ability to see they could overcome the circumstances. This physical process of cleaning may have helped them accept the situation and accept the process of rebuilding.

Wake-up call of reality and worry. Employee ABE mentioned how this was a wakeup call: “It changes you and you don’t think it is going to happen, and now you just sort of view everything just a little differently.” Even after the recovery, employees continued to feel worry. Several employees mentioned they changed personally, as they now understood disaster could happen to them. Employee BEB mentioned the post-disaster worry.

I was just a little naive to the whole idea of disaster happening. You know, little things that you never really thought about could happen and suddenly become a reality. You have got to protect your place, family, and the things that really matter. I kept viewing it as these things can happen, and you worry a lot more.

Employees worried following the disaster about the rebuilding process, the potential for a future business disaster, and the possibility of a personal disaster. The worry changed many employees in their daily perceptions of security and continued long after the disaster recovery.

Employee Learning

All employees mentioned they believed they learned from the disaster and recovery, but they perceived a difference in the areas of learning. The employees stated they felt the company learned: they were devoted to the recovery, the need to be prepared, and the need to have plans for disasters. Some mentioned they felt they had changed personally, and that they worried more post-disaster. Some employees mentioned they felt changed. Almost all felt their company or manager learned from recovery.

Belief of learning. Employee ABE stated, “I don’t think you can go through a disaster like that and not learn many, many things.” While employee CE mentioned her company must have learned: “I am sure they have. I am sure they had to. How to deal with the disaster and the whole thing and how to overcome it.” Employees believed their company had learned just from the experiences they went through post-disaster.

Coming together. Employee ASE mentioned the other employees and manager must have learned from coming together to clean post-disaster. “I think we learned that we all can come together.” The bonding post-disaster allowed all of them to learn they could overcome the disaster by working together.

Learned to be prepared. Employees mentioned their companies now had preparation plans or had made changes to ensure a similar crisis could not happen as easily. Employee ABE mentioned her company gained knowledge in preparation planning: “Be prepared or have a plan in mind. And [know] people will stand behind you and support you.” A similar response from a coworker employee BBE mentioned the learning post-disaster, “Oh, yeah, I think the company has learned in preparation

management, and we have talked a lot about if something was to happen again, how we would handle it this time.” The preparation was something mentioned by several employees, even in small details of not using extension cords and having computer backups for all records.

Differences Among the Case Studies

Differences surfaced in the findings between the large-scale disaster and the small single-business disasters. While managers and employees from the small, single-business disasters expressed they had learned from the recovery process, none believed they were permanently, or essentially, changed by the experience. On the other hand, the large-scale, city-wide disaster appeared to have a major impact on the manager and the employees. All interviewees from the large-scale disaster discussed changes in life perspective: one mentioned no longer seeing monetary things as important: A couple others mentioned knowing now what really matters in life, such as family or friends. The interviewees expressed gratitude toward the community, which came back and supported them, even though the community itself was still suffering post-flood. The smaller, single disasters did not mention any major mental changes such as continued worry or valuing family more.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

Summary of the Study

Chapter 5 contains an overview of findings, limitations of the study, recommendations for future works, and concluding remarks by the researcher. To supply further insight into the data, this chapter contains discussion of various areas of both sensemaking and learning found in the transcripts and field notes. Unexpected findings of interest to the researcher are in the chapter, as are suggestions for further research in the area of small business disaster recovery. The first research question stated, “How does the sudden imposition of a disaster alter employees’ and managers’ abilities to accept and respond to change post-disaster?” The second question stated, “How can small businesses learn from their disaster situation?” This chapter includes an investigation of both research questions to uncover how the managers and employees of three small businesses provided answers and insight into these areas.

Description of Interview Sample Location

The interviews took place in two locations, a small city and a small town in the Midwest. The city has a population of around 130,000 people with the town having a population of just over 2,000. All participant business locations are within the center of

the city with easy access to all community members. Both the city and town have a Midwestern feel of friendliness and openness.

A friendly atmosphere was evident during interviews at the local offices of participants. The business conference rooms were used for interviews unless a phone call was required due to particular participant needs. Each business allowed for casual conversation and a view of the rebuilt building. Managers and employees were happy to offer insight into their crisis situation and to show off their new facility.

Managers' Acceptance and Response to Post-Disaster Changes

The first research question addressed the abilities of managers and employees to accept and respond to change post-disaster. The study findings indicated that stress felt during rebuilding may have altered managers' abilities to accept the changes early, but acceptance and responses by managers enabled recovery. Managers all concluded recovery was overwhelming and they felt various stressors, such as the financial needs of the company, the insurance requirements, and the rebuilding process. The inability to control the situation was hard on some of the management, leading "Austin" to mention feelings of going crazy.

And financially, um, it hits you hard, and yes, there's insurance and all that, but you have to move forward a lot faster because you have to have cash flow. They don't just write you a check immediately. In those situations, in the magnitude that it was, you have to go and repurchase and keep your receipts and turn them in, which makes you emotional. And also, because you are out, but it drives you crazy, but you also you have to get your billing back.

The stress post-disaster caused issues in acceptance as managers were forced to make decisions quickly. While all managers felt this stress, “Sidney” stated the stress was just part of the rebuilding process.

When it is going on, you really don’t have the time to evaluate your surroundings because you really just need to focus on getting back to what is somewhat normal. So I don’t really; I guess it is just; if we were still in the building process, I guess I wouldn’t know where we were at.

The altered situation may have forced managers to respond and make adjustments, such as opening temporary locations, which caused issues. “Sidney” mentioned having to rely on a competitor for his temporary location, while “Jordan” mentioned a smaller location that caused problems with merchandise. “We were forced to rely upon another competitor until we could forge the gap between where we needed to be” (“Sidney”). The problems added up as managers had to deal with changes to employees’ hours and notification of a changed location for customers. “Jordan” discussed problems with their smaller location: “We did a temporary store in a rental unit that was probably a fifth of the size of our store, and there were some things we couldn’t sell and some things we could.” Even temporary locations, which managers felt were supposed to support recovery sometimes hindered the businesses, as they caused extra stress and added problems.

Support for Acceptance and Response to Post-Disaster Changes

All managers mentioned their employees provided them with support during the rebuilding process. Past research by Lanzetta (1955) suggested that managers preferred the democratic style of leadership post-disaster. Support for that finding was seen in the

present research, as managers continually mentioned the teamwork of employees. Managers discussed employees providing support during the recovery period in cleanup, contacting customers, and taking an interest in the well-being of the business. Foldy et al. (2008) claimed during crisis events, leaders become the resource by providing meaning to followers as the followers make sense of the situation.

The present research indicated both managers and employees gained meaning from the events through mutual help. Employee BBE mentioned her manager took the lead, but their roles changed.

Well, you know, my boss took a lot of the lead as far as trying to figure out where we were going to go. Our roles sort of changed a little bit as to where my boss was forced to figure out what he was going to do.

All the managers found customers provided support in their acceptance to the changes post-disaster, but few of the employees mentioned this aspect as helpful for them. This may have been due to the feedback from customers about how to rebuild or the monetary support they provided while the businesses were in temporary locations, both of which were useful to managers but may not have been seen as such by employees.

Employee Acceptance and Response Post-Disaster

In determining how employees accepted and responded to changes post-disaster, previous researchers looked at whether employees accepted change better with the support of management through the use of good communication and teamwork. Huy's (1999) theory suggested employees must be willing to consider change and mobilize or act toward that change. Employees within the present study initially felt shock and

disbelief, but it did not alter their ability to consider change or mobilize their abilities toward rebuilding. This might have been due to managers communicating they would have jobs post-disaster if the company recovered, which provided security and incentive during the recovery process.

Employees sensed they were able to come together as a team, which managers also discussed as their preferred method of management post-disaster. Two employees discussed the cleanup process, with employee BMS stating, “We all came. It was all voluntary. I mean, we got paid for it, but you didn’t have to come if you didn’t want to clean up. And we all did.” Employee ASM agreed and mentioned, “There wasn’t nobody that didn’t come.” Employees dealt with the changes made post-disaster due to the teamwork with managers and their ability to accept the situation.

Weick’s (1995, 2001) theory on sensemaking suggests the ability to create meaning from the event and comprehend the situation. The objective of the present study was to see how management and employees made sense of the chaotic events and created meaning from the rebuilding. Employee ABE discussed working with her manager as a team post-disaster, “We were forced to work together because it was just the two of us through the whole thing. And even though we were in this other building, we had to make this our place of business residence.” The employees all felt they found meaning post-disaster, as it brought them closer together as a team and they gained appreciation for the ability to overcome crisis. Employee BBE mentioned,

Um, never give up. This was just so devastating and it turned out to be a blessing. You know, it pushed us to do things we were not going to do for maybe 8 to 10 years, and overall, it has been an amazing transformation.

Employees gained acceptance and even determined good came out of the disaster. This allowed employees to make sense of why the disaster may have happened.

Management Personal Learning Post-Disaster

The second research question of this study was, “How can small businesses learn from their disaster situation?” The findings showed managers might be able to learn through reflection, though only one mentioned reflecting on the good decision he had made. When all managers were asked directly what they had learned, they responded with personal answers.

Managers related personal learning, including items such as that the crisis might have been partly a blessing, everything is replaceable, and even if you think you are overwhelmed, you are not. This implied that all managers learned something individually, but it cannot be translated into a crisis preparation plan for other small businesses. The only areas managers alluded to were the support of insurance professionals and other individuals who had gone through disaster situations. The statements made by managers indicated the insurance process made the rebuilding process possible, but did not teach them anything they could identify as new knowledge.

The lack of a clear answer to learning may be because of the stress felt by managers during the rebuilding process, a potential factor hampering learning. Schon (1983) revealed managers might be unable to learn while they are reacting to an event. “Sidney” explained the stress of rebuilding saying, “I guess, day to day and looking back ... When it is going on, you really don’t have the time to evaluate your surroundings because you really just need to focus on getting back to what is normal.” The stress of

day-to-day operations early in the recovery process did not provide managers with the necessary time to reflect or learn.

Learning From Insurance and Other Professionals

One potential way a small business can learn may be with the help and support of insurance professionals. Two managers felt the advice of insurance professionals or other business people helped them process information post-disaster. Two of the three managers mentioned professionals who had gone through a disaster were able to provide advice and direction for them. “Austin” mentioned, “You just learn a tremendous amount from it. Um, just the local professionals, the people that just make it easier, the people that just knew someone that knew someone to bring in the big fans, just things like that.” “Jordan” stated that even the construction professionals were able to offer insight into rebuilding. “Oh yeah, you talk to some of the construction people, they will tell you stories of someone else—somebody else’s project that they worked on—and you get a lot of good ideas coming from your repair and technicians.” Both of these managers stated how these professionals supported them during rebuilding, yet they did not state that they had learned from them.

Learning Through Reflection

One area in which managers can gain knowledge is post-disaster reflection. One of the managers of this study mentioned he felt his company had accomplished a lot due to the advice and decisions made during rebuilding, but only now, looking back, was he sure those decisions were the correct ones. “Jordan” stated,

I just feel like we made a lot of good calls on the re-build, and I think everything worked out good with the employees too, as far as getting through it. Nobody got laid off and they probably got a little bit of pride in helping to rebuild the new facility.

This type of statement may be helpful to other small business if managers were supplied with what kinds of “good calls” were made and how employees were supported. The managers need to reflect on the exact nature of the good calls and be able to provide those answers to other small businesses in their peer networks.

Zhang and Hamilton (2009) discussed the benefits to small businesses of peer networks in that they allow reflection on the experiences of others. Cope and Watts (2000) stated learning must involve the ability to apply information from one situation to another, which is not something other small businesses can do from the answers provided by the three managers. Because the managers reported learning of a personal nature, findings of this research do not allow peers to create preparation plans. Participants in this research only alluded to the potential for learning from other professionals and insurance agents, as well as reflection on some good decisions

Elliot et al. (2000) mentioned one barrier to learning could be the failure to understand a situation or the impetus to minimize it. This may have been the case in these three examples, or it might have been a flaw in the research design. Research on disaster recovery learning needs to be continued as an area worth exploring to determine how small business can prepare for future disasters or recover quickly. With so many small businesses choosing not to rebuild post-disaster, determining the factors that help rebuilding is essential.

Reflection post-disaster may be crucial for small business managers to accomplish learning and quick recovery. Dewey (1933) discussed reflective thinking as the process necessary for learning and suggested people may avoid this out of mental laziness, impatience, or simply feeling pressured to move forward rather than to wallow in the experience. Within the present research, the lack of reflective learning may have been due to the post-disaster stress and the continued overwhelming feelings during rebuilding. The mental task of reflective learning may take more time than allowed by this study, as managers might have still been learning information that could be helpful to other small companies facing crises.

While the managers in this study might not have been able to reflect during the event, they had the abilities to overcome tragedy. The lack of learning might have caused managers to minimize the need to prepare for the future because none of them mentioned planning for future disasters. This may have been a result of the stress of rebuilding or denial of the potential for future disasters. Though several employees mentioned new processes that would support recovery if something happened in the future, managers did not. Whether managers chose not to dwell on the possibility for a second disaster or just preferred to assume a successful future remains unknown.

Dufort-Roux (2000) suggested that business owners may fail to learn from a disaster if they are in denial or believe it was an isolated event. Based on the responses of managers in this study, a lack of learning might have occurred, prohibiting support of disaster preparation for other small businesses. Evidence in the ways managers reconstructed their businesses and set up precautionary measures against future disasters indicated they understood this may not have been an isolated incident.

Whether these managers learned information that would be helpful to other small businesses desiring to create preparation plans remains undetermined. The managers in this study implied that they learned from the disaster by providing personal growth descriptions rather than business specifics of what they learned. Such advice to others may have been intended to help other business owners to view what is important and not to stress about the day-to-day operations.

Though the information may encourage other business owners to live less stressfully, it did not offer them insight into how to prepare for future disaster. Within the interviews, managers alluded to the support of other professionals or insurance as helpful but did not specify exactly what they learned from them or if instead they were simply encouraged to rebuild. Therefore, managers may have learned personally from the process of rebuilding and the reflection back on the events rather than from anyone supporting them.

Support of Employee Learning Post-Disaster

The second research question asked, “How can small businesses learn from their disaster situation?” Employees within this study felt their learning stemmed from the experience and reflection but whether all of them truly learned remains undetermined. Employee SME discussed the recovery: “Yeah, it was a learning experience, just going through it.” Another employee, MME, stated, “I think it was just a [learning] process from the beginning.” Employees learned as they went through recovery and continued to learn as they reflected back on the events. The experiences during cleanup and rebuilding provided employees with an understanding of the work necessary to rebuild,

yet they did not state any of this information. Rather, employees mentioned the post-disaster plans they now have to potentially prepare for future crises.

Employees gained knowledge from the event, as one stated that the company now had plans in place if a crisis were to happen again. Such plans provide security. Employees mentioned if disaster were to happen a second time, impact would be less severe, which seemed to comfort them and allow reflection. Employee ABE mentioned, “Oh yeah, I think the company has learned in preparation management, and we have talked a lot about if something was to happen again, how we would handle it this time.” Such preparation knowledge may be applicable to other small businesses thinking of creating disaster plans.

Other employees described more personal knowledge and growth following the disaster. Four employees reflected on their experiences post-disaster and felt they learned disasters could happen to them. Two employees mentioned they could now empathize with others going through a crisis. Employee ASE mentioned, “I think I have more of an understanding. I feel different now when I see somebody’s had a fire on TV.” The empathy post-disaster was more prominent in the employees who had gone through a citywide disaster, which destroyed not just their company but also the neighborhood in which it was located. The personal learning of employees came from the reflection post-disaster as they returned to their normal work routine and could interpret the events they had experienced. Employee ABE stated,

When I drive home every day, I drive by flooded homes, and these poor families that were forced to try to salvage what they had. And they may have just purchased a home and now they have to go back and make it livable. So, I just kind of have mixed emotions about it, when I look at our building and then look at what others have had to go through. So, I think we are pretty lucky.

The ability of employees to learn post-disaster required them to be able to interpret the events and recognize what they could take away from the situation and potentially apply to other situations. Learning post-disaster may include being open to ideas, the understanding of the event, the ability to access or recognize issues, and the awareness that crisis can happen anywhere (Jaque, 2008). Some employees were able to apply information such as not using extension cords, having backup files, and preparing disaster recovery plans in advance. The knowledge of such little things can be helpful later and can supply other small companies with ideas. Learning for both managers and employees was scarce in the study, but data produced some interesting findings.

Large-Scale Disaster Compared to Small-Scale Disaster

A difference in shock was apparent between employees who dealt with a single crisis event versus the employees who went through a citywide disaster. The employees of a single disaster felt shock that it happened to their company, while those in the major city flood felt disbelief about how widespread and severe the situation became. This difference might have been due to the lack of information for local community businesses and homeowners as to how high the floodwaters would rise. The other differences visible between the two sets of employees were in the overall continual worry felt by those who had seen not just their company, but the entire neighborhood surrounding their company destroyed.

Perceived Changes in Managers

Several employees perceived a change in the manager of their organization, or perhaps the employees viewed them differently. Some employees were unable to explain exactly what changed, yet they felt the manager was different from before the crisis events. Employee ABE stated, “Oh yeah, the recovery process has changed him from the person that he was. He, um, views things a lot different. And I can’t really describe it, but he is definitely a different person now.” Employees understood the events had changed them emotionally, but might not have realized their managers were also affected on an emotional level, which could manifest in different ways. Managers feeling stressed or overwhelmed may react differently to employees. Such managers might also have changed after they grew personally, making their reactions to situations different, such as no longer taking small things personally or worrying over day-to-day problems.

Limitations of the Study

The study was limited in its ability to be generalized as it investigated three small companies with 10 individuals. The study took place at a single region of Iowa, a Midwestern state, addressing disasters during a single two-year period. The study was also limited to two research questions on the subject of disaster recovery and did not cover all the various aspects of the recovery process.

Recommendations for Future Studies

Research needs to be continued in the field of disaster recovery, sensemaking, and learning. Future researchers of small business disaster recovery need to look at various

formats to generate optimal results. Both qualitative and quantitative research may be able to supply additional results, and larger samples may provide more generalized findings. Researchers need to continue to look at the recovery rates of small businesses in various regions and should seek to determine whether or not learning took place. Many small businesses were not able or willing to rebuild, and determining the factors that assist in rebuilding need to be explored.

Recovery researchers need to address the differences between small and large businesses and need to include businesses within large versus small communities. The researchers might also examine whether differences in managers such as age, sex, or race impact business recovery rates or the perceptions of employees following a disaster. Research in this area is needed to provide insight into how businesses recover, what factors allow businesses to recover, and the role of managers and employees in recovery.

Research on small business learning needs to take place to see if other small businesses can learn from crisis. Determining what factors help learning may be best researched in a quantitative format. Research utilizing both qualitative and quantitative methods may provide better insight into the belief of learning, the learning areas, and the factors that helped learning post-disaster.

Concluding Remarks

The purpose of this study was to provide insight into the sensemaking of small business employees and managers post-disaster and whether these individuals could learn from a crisis. This study's findings provided a glimpse of the perceptions and learning of a few small business employees and their managers. Though the study was small and

located within two small communities of Iowa, findings provided insight into how a few small companies responded to disaster and rebuilding. The study represents a starting point for more in-depth research on small business crisis recovery.

Research continues to be necessary, as small businesses are vulnerable to both natural and economic disasters. Many small businesses are unable or unwilling to rebuild after crisis, which may make small businesses vulnerable to the destruction of disaster. Karim (2011) revealed in his research that businesses leaders need to be prepared for extraordinary threats to protect their employees and the overall survival of their business. Karim went on to state the need for preparedness includes strategic management, risk analysis, and information life cycle management, and not just response planning. Even though managers within this study may have a response plan for future disasters, they need a variety of preparations, as future disasters may differ from their recent experiences. Research determining which factors help small businesses recover and how those factors differ between types of crises need to be understood. This kind of research may help small businesses to survive and succeed, which is a necessity in a constantly changing business environment.

Today's small business environment may be more susceptible to change than are larger organizations (Carland et al., 1984; Denning, 2006). Why and how small companies are able to overcome crisis needs to be studied, as recovery for them may differ from that of larger organizations. Teamwork and community help, which supported recovery, was not the initial focus of this research. Yet, these two factors emerged from the data and may be a starting point for further research into small business crisis recovery and rebuilding.

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APPENDIX A. INTERVIEW QUESTIONS FOR MANAGERS

Interview Questions designed by Julie Jewell, 2012

1. How were you impacted by the disaster and the changes that followed?
2. Describe your management style during and after the disaster.
3. How did your employees respond to the changes in following the disaster?
4. Describe what you learned from the disaster and the recovery process.
5. What process did you use to conceptualize your learning?

Please add anything else you would like to say.

APPENDIX B. GROUP INTERVIEW QUESTIONS FOR EMPLOYEES

Interview Questions designed by Julie Jewell, 2012

1. What was your reaction to the disaster and changes that followed?
2. Describe how you were involved in the recovery process?
3. What do you feel you learned from the disaster?
4. What do you feel your company has learned something post-disaster?
5. Reflect on what you and your manager may have learned from the recovery process.
6. What process did you use to conceptualize your learning?