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Frances C. Wilkinson

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A CULTURE OF CAMARADERIE: EXAMINING EMOTIONAL INTELLIGENCE COMPETENCIES AND ACADEMIC LIBRARY DISASTER TEAM MEMBERS' ATTRIBUTES

BY

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DISSERTATION

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Education

Educational Leadership

The University of New Mexico

Albuquerque, New Mexico

May, 2012

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Dedication

To Katrina and Gary – for so many reasons.

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intelligent leaders. She encouraged me to pursue a doctorate and she has provided steadfast support throughout the process.

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many conversations about the importance of higher education that I had after school with one of my teachers, Sister Mary Clement. We corresponded through the years and she was so pleased to learn that I was pursuing a doctorate. It took a long time, but I have realized that dream. I only wish that these two amazing women were still here to celebrate with me.

A CULTURE OF CAMARADERIE: EXAMINING EMOTIONAL INTELLIGENCE COMPETENCIES AND ACADEMIC LIBRARY DISASTER TEAM MEMBERS' ATTRIBUTES

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Abstract

This qualitative case study examines the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who led their libraries to recover from a disaster. Using appreciative inquiry protocol to conduct individual and focus group interviews at two academic libraries – the University of Iowa, which suffered a flood in 2008 and the University of New Mexico, which underwent a fire in 2006 – this research contributes to understanding disaster team members' emotional intelligence. The study presents findings from emergent thematic coding of interview transcripts, documents, and artifacts. The overarching theme was one of creating a culture of camaraderie to cope with the disaster, exemplified through teamwork, collaboration, and initiative. A more complex finding involved the realization that although solid leadership was exhibited by traditional library

leaders, most often leadership was expressed through the initiative of individuals who took responsibility and made quick decisions in the moment. Other major themes were trust/trustworthiness, communications, and adaptability. The study provides another layer of understanding through the application of predetermined concept choice mapping of the data, using Goleman's (2001) Framework of Emotional Intelligence Competencies. All twenty emotional intelligence competencies were mapped in participants' transcripts. These results amplify the major themes found in the emergent thematic coding and suggest a strong relationship between emotional intelligence competencies and attributes exhibited by disaster team members as they dealt with the disasters at their respective institutions. Study findings may inform library leaders who appoint and provide training for disaster team members.

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CHAPTER 1

INTRODUCTION TO THE RESEARCH STUDY

"It is not the strongest of the species that survive, not the most intelligent, but the ones most responsive to change." ~~ Charles Darwin

Introduction

Universities are at a turnaround moment in their histories. Personnel at all levels from the most junior faculty and staff to the most senior administrators play a crucial role in this process of change. They must respond promptly and effectively to the many challenges and opportunities that come their way (Fullan & Scott, 2009). According to Davaniou (2005), the workplace of the 21st century is no longer predictable or stable and the demands of the workplace have created uncertainty in employees. Academic libraries are no exception. The academic library workplace is in a state of rapid change on many levels; however, few events create more instability and change than a sudden disaster.

This qualitative instrumental case study examines the relationship between emotional intelligence competencies (Goleman, 1995, 2001) and the personal attributes of academic library disaster response assistance team members who led their libraries to recover from a disaster. Using an appreciative inquiry protocol (Cooperrider, Whitney, & Stavros, 2003) to conduct individual and focus group interviews as well as document analysis at two academic libraries, this research contributes to the understanding of team members' emotional intelligence by providing insight into which emotional intelligence competencies emerge during a library disaster response and recovery process, the unique

meaning individual disaster team members make of the emotional intelligence competencies that emerged, the emotional intelligence competencies that are the most common among these team members, and the emotional intelligence competencies that these team members consider to be of greatest importance in leading the disaster response and recovery process.

Statement and Context of the Problem

To survive and grow, libraries must be prepared to adapt to change, and increasingly this includes being able to respond rapidly and effectively to emergency situations. Librarians are very likely to have to respond to a disaster during their careers. One survey of college libraries reported in the Association of College and Research Libraries *Clip Note* found that 75% of respondents had experienced an emergency and several reported multiple disasters (Thomas, 2009).

Library disasters consist of events that are broadly categorized as either natural disasters or human-caused disasters impacting people, facilities, and collections. In some cases, librarians may have some warning that a disaster is imminent. More often, disasters strike with little, if any, warning, threatening an organization’s ability to meet the needs of its users (Wilkinson, Lewis, & Dennis, 2010). Library disasters come in many forms, including such events as floods, fires, earthquakes, hurricanes, vandalism, workplace violence, and so forth. A survey conducted by the Heritage Preservation (2005) of 14,500 archives, libraries, and museums found that 53% of respondents reported experiencing damage to their collections by water. Another survey reported that the most frequently cited disaster by college libraries involved water damage (61%),

followed by 9% of responding libraries citing weather, and 8% citing fire (Thomas, 2009).

Library organizations recover from disasters to varying degrees, at various speeds, and the process is always emotionally charged. The larger and more wide-spread the disaster, the more individuals will be affected and everyone involved will be experiencing a rush of emotions. Library leaders and employees face the challenge and opportunity to quickly and appropriately respond to any disaster that befalls their library, regardless of its type or severity. To meet the fiscal, physical, and emotional challenges and seize opportunities both during the initial emergency response and later during the disaster recovery phase requires understanding, skill, and dialog – but which attributes of the library employees who are involved in this process are the most critical?

Most of the literature on the topic of library disasters is practitioner literature rather than empirical quantitative or qualitative research studies. Numerous books and dozens of articles focus either on developing a comprehensive disaster plan (Childress, 1994; England & Evans, 1988; Fleischer & Heppner, 2009; Kahn, 1998; Todaro, 2009) or on specific aspects of emergency response and recovery such as where in the library building emergency supplies are located; which books, journals, and equipment have the greatest priority for rescue; how to handle insurance claims; and so forth (Alire, 2000a; Corrigan, 2008; Jones, 1998; Mathews, 2005; Payton & Shields, 2008). These authors among many others emphasize that libraries which are either poised to respond to a disaster or have nimbly transformed during an emergency are those that have invested time as well as financial and human resources to plan ahead for a disaster. These

organizations have carefully documented the various steps to follow when a disaster strikes.

Some libraries recover from a disaster more quickly than others. Others recover more fully, emerging with better facilities and more committed employees. Recovery does consist of the physical building structure and the collections contained therein; however, perhaps more importantly, recovery depends upon the attitudes, competencies, and morale of the employees who must respond to the disaster, while continuing to deliver library services to their customers. Therefore, establishing a cross-functional team to plan for and respond to a disaster is essential to a library's recovery. "This team is referred to in the literature under a variety of names including Disaster Response Assistance Team (DRAT), Library Emergency Response Team (LERT), Library Disaster Response Team (LDRT), and so forth" (Wilkinson, Lewis, & Dennis, 2010, p. 5). A library disaster team or DRAT typically includes the dean/director of the library and the following coordinators: administrative and financial; collections and preservation; communications and media; facilities and security; human resources; library services; and systems/IT (Alire, 2000a; Wilkinson, Lewis, & Dennis, 2010).

Identifying roles and responsibilities that are required of the team members and matching the right employees to meet those needs is critical (Collins, 2001). Library disaster team members must be willing to serve and should be enthusiastic, organized, flexible, and adaptable, as well as have good people skills, common sense, and knowledge of how the library functions and of its facilities and services. They must be able to work in a crisis situation and be both a leader and a team player, seeing the big picture yet being able to drill down to the smallest details (Wilkinson, Lewis, & Dennis,

2010). These turnaround leaders must be able to listen, link, and lead as well as model, teach, and learn (Fullan & Scott, 2009). The personal attributes, traits, characteristics, competencies, and qualities – the emotional intelligence – of the team members play a central role in the effectiveness and success of a library disaster team.

Emotional intelligence – the ability to assess and regulate emotions – is recognized as being crucial to the growth and development of personally responsible and successful people (Nelson and Low, 1998). As Bensimon and Neumann (1993) have pointed out, excluding the emotions of team members and team leaders cuts “short the range of actions they might take” (p. 29). Organizations are becoming increasingly aware of the dynamic of teams, the emotional intelligence of team members, and the effect emotional intelligence can have on team performance (Furnham, 2009; Prasad & Akhilesh, 2002). The impact and relationship of leadership and emotional intelligence has received considerable research (Dulewicz, Young, & Dulewicz, 2005). The scholarly and popular literature is filled with research on the relationship between emotional intelligence and effective leadership. Regardless of the many studies that have been conducted on emotional intelligence in the workplace, Scott, Coates, and Anderson (2008) observed that studies about how leaders effectively manage change are still relatively rare.

In the last decade, librarian researchers have begun to conduct studies on the relationship between emotional intelligence and library leaders (Hernon, Giesecke, & Alire, 2007; Hernon & Rossiter, 2006; Kreitz, 2009); however, there has been no research on the relationship between emotional intelligence competencies and the personal attributes of academic library disaster team members as they led the change

process of responding to and recovering from a disaster. My dissertation research takes a first step at filling that gap. The insight that emerged from my research may inform and aid library leaders as they select and appoint library employees to serve on disaster response assistance teams as well as enlighten these leaders about fostering emotional intelligence dynamics as they work together to effectively manage the changes brought about by a disaster.

Purpose of the Study

In this study I sought to identify and understand the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members who responded to and led their libraries to recover from a disaster. In addition, this research contributes to the understanding of team members' emotional intelligence by providing insight into which emotional intelligence competencies emerged during a library disaster response and recovery process, the unique meaning individual DRAT members make of the emotional intelligence competencies that emerged, the emotional intelligence competencies that are the most common among these team members, and the emotional intelligence competencies these team members consider to be of greatest importance in leading the disaster response and recovery process.

Scope of the Study

This study is the first of its kind to use appreciative inquiry – which comprises a 4-stage protocol to ask positively phrased questions that focus on discovering, designing, dreaming, and destiny in an organization (Cooperrider, Whitney, & Stavros, 2003) – to examine the connection between emotional intelligence and the personal attributes of

library disaster team members at academic libraries that experienced a disastrous event. As such, it contributes to the existing body of knowledge regarding emotional intelligence in the workplace. The two cases that I studied as part of my research are examples of libraries that are recovering from disasters: a flood at the University of Iowa Main Library in Iowa City, Iowa and a fire at the University of New Mexico Zimmerman Library in Albuquerque, New Mexico; however, each case is different and each library is unique. I selected these library workplaces for my research in part because floods and fires are among the most frequently reported disasters and, therefore, should be most relevant to the consumers of my research.

Research Questions

The central research question and the four sub-questions that guided this research study are:

- What is the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members who responded to and led their library in its recovery from a disaster?
  - Which emotional intelligence competencies emerged in DRAT members during the disaster response and recovery process?
  - What unique meaning do individual DRAT members make of various emotional intelligence competencies that emerged during the disaster response and recovery process?
  - Which emotional intelligence competencies are most common among DRAT members?

- Which emotional intelligence competencies do DRAT members consider to be of greatest importance in leading the disaster response and recovery process?

Conceptual Framework

As a librarian and faculty member at the University of New Mexico, University Libraries, I initially became interested in preparing for a disaster in the early 1990s when preparation and oversight of the University Libraries' disaster response and recovery plan became part of my job portfolio. Also, at that time I was asked to serve as team leader of the library's disaster team. Since that time, the University Libraries at UNM have experienced two major floods (one in its Centennial Science and Engineering Library in December 2004 and one in its Zimmerman Library in October 2007) and a fire (in its Zimmerman Library in April 2006) causing significant damage to collections and facilities. The Libraries have also encountered numerous relatively minor water leaks causing only limited damage as well as several close calls involving the threat of mold, asbestos, and Hanta virus.

As I led the disaster response and recovery process during each of the library's disaster events, I became increasingly interested, at first in the interpersonal dynamics of disaster team members as they moved through each stage of the recovery process, and later by the personal attributes – the storehouses of strength and stability – the team members exhibited during this emotionally charged time. Curzon observed "At the heart of every disaster is the impact on people and their lives…immediately after a disaster, and for a long time thereafter" (2006, p. 27). I observed team members initially questioning why the unimaginable had happened to their library, but the shock, grief, and

even anger for some team members was put aside, at least for the moment, while they each set about performing the tasks expected of their particular roles and responsibilities within the team. As they worked to respond to the disaster's impact on the library's facilities and collections, they also strove to set a positive tone. The team members seemed to instinctively know that a critical aspect of the recovery hinged on the emotional state of fellow team members, other library employees, and this intuition even extended to the users of the library. They exhibited a profound degree of teamwork, collaboration, initiative, trust, and adaptability as well as other attributes such as conflict management, emotional self-control, and empathy – all key components of emotional intelligence (Goleman, 1995). Surprisingly, in the worst of times, some individuals who had previously shown only minimal leadership began to emerge as socio-emotional leaders who seemed to know just what to do to raise everyone's spirit or to accomplish the task at hand. As a result, my interest increased in the personal attributes exhibited by the disaster team members. I became committed to learning more about the phenomenon.

After the disaster response phase ended and the library recovery was well underway, I began reading about personal trait theories which ultimately led me to research about emotional intelligence abilities and competencies. I initially conducted a literature search using emotional intelligence as a keyword and found dozens of books and hundreds of dissertations on the topic. Recently, Stough, Saklogske, & Parker (2009, p. 5) reported that nearly 1000 articles have been published on emotional intelligence in various subject areas including: the workplace (industrial and organization psychology, management, personnel, and training); psychometric and construct validity (test construction, reliability, validity, personality, and IQ); neuroscience, health, education

(primarily scholastic results, and student attrition); cross-culture; sports; and a variety of other disciplines. Interest and research on emotional intelligence is growing exponentially.

As I waded through nearly twenty years of research on emotional intelligence, I realized that the measurement of emotional intelligence has come under scrutiny (Mathews, Zeidner, & Roberts, 2002) centering on the lack of agreement between researchers on how to define it as a construct. Currently, numerous emotional intelligence models are being advocated in the popular and scholarly press; however, there are two main theoretical approaches used to assess and study emotional intelligence. The first is the abilities model framework that is generally credited to Peter Salovey & John D. Mayer (1990). Their model is comprised of a set of skills that combine emotions with cognition (Mayer, Salovey, & Caruso, 2008). The pre-eminent ability measure is the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT). Most research done using the abilities school of thought is strictly quantitative in mode.

The second approach is generally known as a mixed-model framework which comprises a combination of cognitive, personality, and affective attributes and competencies. This model is credited to Daniel Goleman (1995), who popularized emotional intelligence in his blockbuster book, *Emotional Intelligence: Why it can matter more than IQ*. The Emotional Quotient Inventory, the EQ-i, (Bar-On, 1997) and the Emotional Competence Inventory, the ECI (Wolff, 2005), are perhaps the two best known and most frequently cited of the emotional intelligence self-report instruments.

To address emotional intelligence in the workplace, Goleman (1998) developed a “Framework of Emotional Competencies” with five domains and in 2001 he refined it to

four domains based on an examination of more than 600 corporate managers in a variety of settings. In this later work, Goleman (2001) categorized emotional competencies into the following four domains: self-awareness, self-management, social awareness, and relationship management, with twenty emotional competencies. Research done using the competencies model can be quantitative, mixed-method, or qualitative; however, much of the qualitative research conducted uses this competencies-based framework or a form of it.

I found this competencies-based framework, as compared to an abilities-based model, to be most compelling as I considered the possible relationship between emotional intelligence and the personal attributes of library disaster team members. My research interest aligned well with the competencies-based framework because it allowed me to deeply explore the emotional attributes, as opposed to the skills and abilities, of the library disaster team members. I narrowed my literature search to scholarly work that had been done on emotional intelligence that used a trait or competencies-based approach, especially searching for instances of this approach being reported in the higher education and library literature. I located numerous articles, theses, and dissertations; however, I identified three articles using Goleman's Framework that seemed especially relevant to my research interests.

Two studies looked at the emotional intelligence traits of library leaders (Hernon & Rossiter, 2006; Kreitz, 2009) and one study explored the relationship between organizational climate and emotional intelligence in identifying a "leaderful" community college (Yoder, 2004). Yoder's article led me to find her 2003 dissertation containing an in-depth accounting of her original research study. I found the Yoder 2003 dissertation

and 2003 article on leadership in a community college to be especially compelling for several reasons: her research used Goleman's framework; she utilized a qualitative mode of inquiry to more deeply explore participants' experiences than quantitative research allows; and she developed interview methods that used the appreciative inquiry protocol which crafts positive questions that focus on the best in people, situations, and organizations. In these three significant areas, Yoder's work paralleled the research philosophy and methods that I preferred to use to answer my research questions in this study. Although these three articles are most relevant to my research, none of these researchers – Hernon & Rossiter (2006), Kreitz (2009), nor Yoder (2003, 2004) – explored the emotional intelligence competencies of library leaders responding to disaster events as I did in this research study.

Roadmap to Understanding

When clearly articulated, a conceptual framework has potential usefulness as a tool to scaffold research and, therefore, to assist me as a researcher in making meaning of my findings. Such a framework was intended as a starting point for reflection about my research and its context. As with all investigation in the social world, the conceptual framework that I embraced solidified my entire research agenda and this framework was scrutinized and tested, reviewed and reformed, as a result of my investigation (Guba & Lincoln, 1989).

I sought to gain a deep understanding of the relationship between emotional intelligence and library disaster team attributes. I believed that the insight I desired would emerge as I engaged with library DRAT members to gain a fuller understanding of their authentic depth and complexity and I found that to be the case. Given my research

question, my use of appreciative inquiry, and my personal beliefs about this research study, my research paradigm was clearly constructivist because "its central purpose is to make sense of human experience and to understand and derive shared meaning within a particular context…knowledge within this paradigm is emergent, contextual, personal, socially constructed, and interactive" (Guido, Chávez, & Lincoln, 2010, p.15). Conducting my research within a constructivist paradigm, with its roots in symbolic interactionism (Blumer, 1969), allowed for collaborative co-construction of knowledge between participating library disaster team members and me as the researcher. Constructivist axiology (the role of values) espouses that inquiry is value-bound, that values are inherent in the context of the study, and the researcher's values affect the study (Guba & Lincoln, 1989; Tashakkori & Teddlie, 1998).

As a librarian and university leader who went through several disasters, I was an insider to my research to some degree; however, I was also an outsider except in my own library and even then, as a senior administrator I may have been viewed as an outsider to some front line staff. Regardless of my role, my values are inherent in the context of the study. The values that I hold undoubtedly affected the study making the constructivist paradigm the best fit for my research philosophy. However, I do not see this situation as a conflict of interest, but rather as a confluence of interest (Stake, 2006) as I explored the relationship between emotional intelligence and the personal attributes of library disaster team members.

In the constructivist paradigm, qualitative methods predominate, although quantitative methods may also be utilized. In addition, "the use of qualitative methodology in LIS [library information science] research has increased considerably

over the past two decades" (Pickard & Dixon, 2004, para. 7). As a researcher who has conducted several quantitative studies, I prefer that mode of inquiry when endeavoring to answer "how much or how many" type-questions; however for this study, my preferred mode of inquiry was qualitative because of the deep, holistic perspective it brought to the research.

Qualitative research is based on a relativistic, constructivist ontology meaning that reality is constructed, subjective, multiple, and relative – constructions are not more or less true, instead they are more or less informed (Guba & Lincoln, 1994). Therefore, as I considered my research study, I operated under an ontological assumption that since each of us "experiences" from our own point of view, each of us experiences a different reality and as such, the phenomenon of multiple realities exists. Thus, conducting my research study without taking this factor into account would have violated my fundamental view of the individual.

Engaging in qualitative research allowed me to generate questions that raised awareness and understanding of the personal attributes of those individuals who led the disaster recovery process in libraries. This mode supported my exploration of the perspectives of a certain kind of group: DRAT members, across multiple settings: two academic libraries that experienced a disaster (Biklen & Casella, 2007). Also, the qualitative mode of inquiry was well suited to my research study because it is context sensitive in that it "proceeds from an assumption that ideas, people, and events cannot be fully understood if isolated from the circumstances in which and through which they naturally occur" (Schram, 2006, p. 9).

The epistemology (the nature of knowledge) of the constructivist, qualitative mode is that the knower and the known are interactively linked and findings are created as the research proceeds. Also, qualitative research studies are typically rich in detail, providing insights into participants' experiences of the world and are often more meaningful because they are "…epistemologically in harmony with the reader's experience" (Stake, 1978, p. 5). Constructions are not separate from those who make them, they "are not part of some 'objective' world that exists apart from their constructors" (Guba & Lincoln, 1989, p. 143). Qualitative research resonates with me because my epistemological assumption about the best way to deeply understand almost any phenomenon is to view it in its context.

When considering the method to employ for my research, case study, specifically instrumental case study, seemed most appropriate because the research involves collecting and presenting detailed information about a small group in a specific context: library disaster response team members. Several other features identified the research that I conducted as a case study. For example, the cases for my study were comprised of two university libraries; I used multiple sources of data to provide a detailed, in-depth picture of the library DRAT member's personal attributes as they lead the library's disaster recovery efforts; and I thoroughly described the contexts and setting for my cases (Creswell, 1998; Stake 1995, 2000, 2006; Yin 1993, 2003). The case study method allowed me to organize the research in terms of the problem, the context, the issues, and the "lessons learned" in each discrete case as well as across the two cases (Creswell, 2002; Lincoln & Guba, 1985; Stake, 2006). In addition, case studies typically include the accounts of the participants themselves, which was central to my research.

The research methods that I used to collect the data were individual interviews, focus group interviews, and reviews of relevant documents regarding the disaster. I used the appreciative inquiry (AI) protocol to interview DRAT members individually and as focus group participants. Appreciative inquiry fit well with my research paradigm and mode of inquiry for this study because it is based on postmodern constructionist theory in which reality is socially constructed and "the questions asked become the material out of which the future is conceived and constructed" (Cooperrider, Whitney, & Stavros, 2008, p. 8).

Definition of Terms

Academic Library. A library which serves an institution of higher learning, such as a university or a college, in which librarians support the teaching, learning, and research needs of users (primarily students and faculty). It offers an in-depth collection of materials, both primary and secondary, in a variety of formats. The terms academic library and academic research library are used interchangeably in this dissertation.

Appreciative Inquiry (AI).

- An organizational development philosophy or process that engages individuals within an organizational system in its renewal, change and focused performance.
- AI "...refers to both a search for knowledge and a theory of intentional collective action which are designed to help evolve the normative vision and will of a group, organization, or society as a whole" (Cooperrider & Srivastva, 1987, p.159).
- AI is a practice in the evaluation of organizational development strategy and implementation of organizational effectiveness tactics, using a particular way of

asking questions and envisioning the future that fosters positive relationships and builds on the basic goodness in a person, a situation, or an organization.

- AI utilizes a 4-stage process focusing on the following: discover, dream, design, and destiny.
- This construct was developed by David L. Cooperrider and Suresh Srivastva of Case Western Reserve University in the1980s.

Case Study. The collection and presentation of detailed information about a particular participant or a small group. Case studies typically include the accounts of participants themselves.

Case Study: Instrumental or Instrumental Case Study. A case study using the example offered by a case to explore and understand an issue or phenomenon in depth (Stake 1995).

Disaster. A natural or human-caused crisis, emergency, or catastrophic event that causes significant physical damage to or destruction of property and/or injury to or loss of life.

Disaster in a Library (or Library Disaster). A library disaster might cause harm to the library collection, building, staff, or users and creates an unscheduled disruption of normal library services (Henson, 2000). For the purposes of this dissertation the library disasters include a flood causing water damage at the University of Iowa Main Library and a fire at the University of New Mexico Zimmerman Library.

Disaster Planning. Also called emergency/disaster response and recovery planning or business continuity planning (BCP). This planning is conducted prior to a disaster occurring. Planning involves creating a document that includes the procedures to be followed to respond when a disaster occurs. These plans should include contact

information, annotated building diagrams, and salvage priorities. Planning may also include appointing and training a cross-functional disaster team.

Disaster Recovery. A process of recovering and rebuilding after a disaster, typically beginning after the initial emergency response phase concludes; however, the two phases may overlap. This phase includes the ongoing processes that ensure that all needed steps are taken to identify the full extent of the damage, repair or rebuild the facility, replace damaged materials, and support the emotional recovery of the employees to ensure resumption and continuity of services.

Disaster (or Emergency) Response. Disaster response includes procedures and processes whereby a team of trained individuals responds to a disaster and determines the best ways to recover damaged materials so that normal business operations can resume as quickly as possible. (Kahn, 1998). Typically, the emergency response phase begins within minutes of the disaster occurring and may include evacuating the building, initiating the disaster plan, performing an initial review of the damage, and any other measures required to stabilize the facility and its contents. This response phase may last a few hours or a few weeks, depending on the extent and severity of the disaster, before the recovery phase begins.

Disaster Response and Recovery. The terms “disaster response” and “disaster recovery” (as defined above) are often combined to denote one long process. Throughout this study, the two terms are typically combined.

Disaster Response Assistance Team (DRAT). Also called business recovery team, crisis management team, and a variety of related terms. A group of trained individuals appointed to form a cross-functional team responsible for the development, writing,

updating, and evaluation the organization's disaster plan; responding to the disaster; and overseeing its recovery through completion.

[An] Emotional Competency. A learned capability based on emotional intelligence that results in outstanding performance at work (Goleman, 1998). Emotional intelligence involves competencies that can be categorized into four domains: self-awareness, self-management, social awareness, and relationship management, with twenty emotional competencies (Goleman, 2001).

Emotional Intelligence (EI).

- The ability to assess and regulate emotions in order to manage behavior and to interact successfully with others (Bar-On 2000; Goleman, 1995).
- Managing feelings so that they are expressed appropriately and effectively, enabling people to work together smoothly toward their common goals (Goleman, 1998).
- How leaders handle themselves and their relationships (Goleman, Boyatzis, & McKee's (2002).
- The ability to monitor our own and others' feelings and emotions, to discriminate among them, and to use this information to guide our thinking and actions (Mayer & Salovey, 1997).
- The capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others (Wolff, 2005).
- The construct of emotional intelligence is generally credited to Peter Salovey & John D. Mayer (1990) who discussed social skills and described an abilities

model; however, emotional intelligence was popularized by Daniel Goleman (1995) whose definition included personal attributes and competencies.

Emotional Intelligence Competency Domains (Goleman, 2001).

- Self-awareness: Understand one's own emotions and how these emotions impact one's own behavior and decisions.
- Self-management: Controlling one's own emotions and adapting to different personal and professional circumstances.
- Social awareness: Understanding, reacting to, and sensing other's emotions and comprehending different social networks.
- Relationship management: Inspiring, influencing, or developing other people and managing the daily conflicts that arise in the workplace.

Emotional Intelligence in the Workplace. The ability to understand oneself and others sufficiently to express emotions in a healthy manner in a work setting. This ability is crucial to job success and career satisfaction.

Research Outline Map

Given my research question and my beliefs about the best way to conduct my study to explore this research question, I created a constellation of research beliefs – "a basic set of beliefs that guide action…taken in connection with a disciplined inquiry" (Guba, 1992, p. 17). This research outline is depicted in Figure 1 and described in detail in Chapter 3.

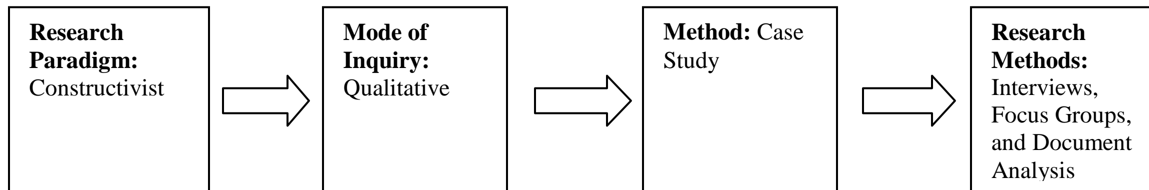


Figure 1. Research Outline Map: Examining Emotional Intelligence and Academic Library Disaster Team Response.

Assumptions, Strengths, Limitations, and Delimitations of the Study

Assumptions

Prior to beginning the study, I conducted preliminary conversations with the Deans at both libraries that I hoped to study and I found that there was willingness among most disaster response assistance team members at each institution to participate in my research. Of course, disaster team member participation was entirely voluntary and participants could withdraw from the study at any time. Further, I assumed that disaster team members would have adequate memory recall of their emotionally charged experiences and actions either during the initial interview or during the follow-up interview to provide sufficient data. Also, based on my exploratory research design and multi-stage analysis plan, I assumed that coding and interpreting DRAT members' responses would be possible and that mapping them would be relatively straightforward.

Strengths

I have extensive experience in conducting interviews and focus groups as well as some experience in coding and analyzing textual data. My use of method triangulation, a combination of research methods (interviews, focus groups, and document analysis), which is built into the case study methodology was another strength of the study. By employing three methods of data collection I was able to generate a fuller, more

multilayered data set than one or two methods would likely have generated. Also, choosing to conduct my research at two library sites, one that experienced a flood and one that experienced a fire, is also a strength of the study. However, some of the strongest aspects of the design and analysis in the study may also be limitations to some extent. For example, my experience as a researcher and a senior library administrator in a library organization that is still recovering from disaster as well as the positive engagement of the study participants through my use of appreciative inquiry questioning proved to be a strength.

Limitations

The design of the research, the assumptions of the study, and the manner of selecting participants, as well as the collection and analysis of the data, were all subject to my values and biases as a researcher. I am an academic librarian who has experienced a library disaster. Having knowledge of the roles that disaster team members assume during a disaster provided the opportunity for heightened insight, but also the natural inevitability for bias. Therefore, I likely had some effect on the study in spite of the care I took to limit that effect.

The qualitative research study was confined to the disaster team members at two university libraries. I used a purposive sampling method to select participants from those two libraries. The study's participants were individuals who responded to the library's disaster and who voluntarily agreed to be interviewed or attend a focus group. A concern about these factors is that some study participants may have said what they think I, as a researcher, wanted to hear. This occurrence may have been especially true of the interviewees at the University of New Mexico where I am employed. Further, by using

appreciative inquiry, which requires the use of positively phrased questions, some study participants may have painted a more positive picture of their personal attributes and experiences than they otherwise would have done. However, by also asking about what could have been done differently or perhaps better, I believe that I minimized some of these limitations.

The documents I reviewed were those that were either published in some form, available on the library's website, or unpublished plans, procedures, meeting minutes, notes, or other materials as well as photographs, poems, and other ephemera that were provided by the library's employees for inspection as part of the study. Some of the unpublished documents that were provided to me may have been selected to shed a positive light on the disaster recovery process. Another limitation was that some documents were incomplete. In addition, there was some unevenness in the amount of material received; I received more materials from the University of New Mexico, but this may have been because more documents were produced regarding that disaster.

Delimitations

The study was delimited to academic libraries that experienced a disaster and agreed to be studied. Only two Association of Research Libraries (ARL) member libraries were included in the study: the University of Iowa which experienced a flood and the University of New Mexico which experienced a fire. Both are ARL member libraries with distinctive research-oriented collections and resources of national significance. Further, both ARL member libraries' parent institutions are classified as RU/VH, very high research activity by the Carnegie Classification of Institutions of

Higher Education ™. Both the limitation and delimitations of the study offered opportunities for future research.

Summary and Organization of the Research Study

All entities in higher education are experiencing rapid change (Baker & Wiseman, 2008; Benjamin, 2003; Holley, 2009; Kezar, 2009; Loomis, 2009). This phenomenon is especially true of academic library leaders whose libraries are recovering from a natural or human-caused disaster. I conducted a study that sought to identify and understand the relationship between emotional intelligence competencies and the personal attributes of the academic library disaster team members at two universities who responded to and led their libraries to recover from a disaster.

To accomplish this research I used a constructivist research paradigm, a qualitative mode of inquiry, and a case study method. Data collection included individual interviews and focus group interviews using an appreciative inquiry 4-stage process of questioning. I also reviewed relevant documents regarding the disasters.

Chapter 2 of this study consists of a literature review and discussion of leadership during the response to and recovery from library disasters as well as research about emotional intelligence and appreciative inquiry as they relate to my research questions. Chapter 3 includes a detailed description of my research design and procedures. Chapters 4 and 5 contain my research findings and analysis of the data. Chapter 6 presents my meaning making of the findings and recommendations for further research.

CHAPTER 2

REVIEW OF RELATED LITERATURE

"In the middle of difficulty lies opportunity." ~~ Albert Einstein

Introduction

Disasters have occurred and been written about throughout recorded history. This literature review discusses disaster research, concentrating on the 20th century, especially the mid- to latter 20th century, and the early 21st century. My exploration begins with an overview of historical disaster and crisis literature and narrows to the literature that focuses on disasters impacting higher education and more specifically includes sources about disasters in libraries, especially academic libraries, as well as literature about disaster response assistance teams that deal with the aftermath of disasters. The review concludes with an examination of emotional intelligence competencies and appreciative inquiry interviewing and how they were combined in my research study to explore the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster.

Brief Historical Overview of Disaster Research

One early pioneer to write about disasters was sociologist Georg Simmel. His 1904 work demonstrated how "conflict could lead to cohesiveness" when people worked together to deal with conflict (as quoted in Stein, 1976, p. 144). His work is credited as beginning the research on collective behavior and emergent groups during disasters.

Another early researcher, Samuel Prince, a Columbia University student, wrote about catastrophe and social change after the 1917 Halifax, Nova Scotia ship collision resulting in an explosion that set the ships, the dock, and near-by businesses and homes ablaze and caused a tidal wave that devastated everything in the area. His groundbreaking 1920 dissertation is credited as being the earliest research on disaster response (Drabek & McEntire, 2003; Moore, 1956; Scanlon, 1998).

Another early leader in disaster research was Gilbert White, a geographer, who began his disaster management studies in the 1940s. He enjoyed an illustrious, well-published career during his ninety-four years of life, and is known today as the "father of floodplain management, with most geographers tracing the origins of natural hazards research to White's 1942 dissertation on human adjustment to living in floodplains" (Mileti, 1999, p. 19). Throughout his long career, he conducted research that championed the sound, comprehensive management of floodplains and the adaptation to or accommodation of flood hazards rather than common structural solutions, such as dams and levees. Hewitt (1983) credits White's work as beginning to articulate the spectrum of natural hazards and their characteristics as well as the discussion of hazards, hazard events, and hazard impacts. In 1956, Harry Estill Moore developed a theory that looked at the ways in which disaster victims and the community interacted in the aftermath of a disaster. His groundbreaking work touched on emergent groups and set the stage for many of the researchers that followed (Kennedy, 2004).

During the early 20th century, disaster research was a fledgling field of study. In 1951 Janis wrote, "As yet, little advance has been made in the direction of developing any kind of theoretical framework that systematically covers the effects that disasters are

known to have on individuals, organizations, and communities"(p. 13). Quarantelli and Dynes (1977) observed that very little research existed on social crises or disasters in the first half of the 20th century. They noted in 1977 that three decades ago (the 1940s) "there was not enough theoretical material or research work on response to social crisis and disasters to have warranted writing more than a footnote about the fact…" two decades ago (the 1950s) "a paragraph could have summarized all the relevant work and activity…" even 10 years prior to their article (the 1960s) "several pages might have sufficed to summarize the burgeoning activities in the area" (Quarantelli & Dynes, 1977, p. 23).

By the mid-1970s, that all began to change. Growth in disaster research had started to grow exponentially in numerous disciplines forcing researchers to become highly selective in "the choices of topics relating to disasters" (Quarantelli & Dynes, 1977, p. 23). By 1986, Drabek concurred that scholarly literature of disaster and emergency response existed in abundance and was becoming quite discipline and industry specific.

Lalonde (2007) reported that in the early 21st century, due to a variety of events, the potential contribution of the field of organizational development to crisis and disaster management has exploded. Contributing events include human-caused incidents such as fires due to arson, terrorism such as the September 11, 2001 attacks, campus shootings, social unrest, and wars in the middle-east and elsewhere, as well as natural disasters such as floods, typhoons, hurricanes, tornados, earthquakes, mud slides, and so on.

Discipline Specific Threads

A review of the literature over the past several decades reveals little cohesion among the disciplines. According to Preble (1997) there is no single paradigm guiding the research in disaster and crisis management due to its multidisciplinary nature. Definitions and causal attributions are field specific, with each discipline providing its own unique slant. This individualization makes it more challenging – though still critically important – for variant disciplines to cohesively integrate crisis management into their strategic management processes.

Approximately "… thirty academic disciplines" have been involved with disaster research, crisis management, and various other related topics (Alexander, 1997, p. 289). Nearly all disciplines in the humanities, social sciences, and sciences, as well as most organizations including business, government, and education have considered the phenomena of disasters in recent years. Each discipline has its own perspectives, paradigms, strategies, and nomenclatures. However, Cross (2000) noted that the disciplines of sociology and geography are considered to be the founders of disaster and hazards research. Drabek (2007) observed that human behavior in disasters is a natural fit with the sociological research agenda and commented that "…when disaster strikes, sociologists have often asked, 'how do humans respond'?" (p. 2).

When conducting a review of the literature on the study of disasters for my research, I found the work of several noted scholars in sociology such as Drabek (1986, 2007), Drabek & McEntire (2003), Mileti (1999), Quarantelli (2005), and Quarantelli & Dynes (1977) to be especially informative specifically because of the human attributes brought to bear with responding to a disaster. However, Drabeck (2007) and Tierney

(2007) agreed that disaster research conducted by sociologists increasingly took them outside the traditional purview of sociology and into multidisciplinary arenas where they adopted other disciplines' methodologies. Thus, by the turn of the 21st century Quarantelli (2005) remarked that much of what sociologists research "…in the disaster area is not sociology at all—in fact, it is sometimes very difficult to identify the work in any disciplinary terms since it lacks, at least explicitly, any of the assumptions, models, theories, hypotheses, concepts, and linkages to the non-disaster literature, etc. that is the corpus of present day sociology or any other science" (p. 330).

As diverse in nature as the study of disaster and emergency management appears to be, Jensen (2010) argued, "Despite the continuing deliberation about the disciplinary nature of emergency management within the academic community…emergency management is already on the verge of becoming a discipline in and of its own right but that, there is still a need and place for multidisciplinary and interdisciplinary work" (p. 2). Jensen stated, "Many academics active in disaster studies and hazard studies would argue that emergency management in higher education must be approached from an interdisciplinary, or multidisciplinary, perspective" (2010, p. 1). She cited her evidence as follows: "1) the subject of how human beings create, interact, and cope with hazards, risk, vulnerabilities, and the events associated with them is so complex that understanding and developing knowledge involving these topics requires the input of more than one discipline, 2) many academic disciplines have made or could make valuable contributions, 3) research on these topics is already trending towards being multidisciplinary or interdisciplinary, and 4) either a multidisciplinary or interdisciplinary

approach is the best way to improve not just our understanding of hazards, risks, disasters and how people adapt to them, but also practice and policy" (Jensen, 2010, p. 1).

Jensen's arguments are persuasive; however, at this stage disaster research continues to be scattered across many disciplines. Countless books, articles, and dissertations have been written in many fields on the topic of disasters. One electronic database alone – EBSCO Academic Search Complete – delivered over 50,000 article citations dating from 1986-2010 on the topic. For purposes of my research interest, the disaster literature focusing on higher education in general, and libraries in particular, is most relevant to review in greater depth to inform, guide, and shape my study design.

Higher Education

Disaster research in higher education is based on the cumulative work produced in sociology, anthropology, geography, psychology, public administration, education, organizational development and management, and many other disciplines. Sociologists and anthropologists have typically sought to research disasters as phenomena, looking at the human attributes and experiences brought to bear when responding to a disaster and how it affects groups and organizations (Drabek, 2007). Geographers are naturally interested in "the geographic dimensions of hazards—where they occur, why they occur where they do, who is and which places are most vulnerable…" (Cutter, 2001, p. 2). Psychologists seek to understand how individuals cope before, during, and after disasters in their organizations and engage "…with the mental health aspects of public and organizational emergencies" (Parker, 2007, p. 19). Psychologists also study the effect of disasters and crises on organizational systems, however there is little empirical testing in most crisis management literature (Pearson & Claire, 1998). Public administration

scholars consider a variety of policy implications involved with disasters. Educators research every aspect of how individuals and teams deal with disasters especially in preK-12 and higher education, often studying the leadership brought to disaster response and recovery. Organizational development and management research is multi-disciplinary, crossing many fields in higher education; therefore, having a basic understanding of organizational culture provides a solid starting point to review the literature on how disasters affect institutions of higher learning and the mechanisms that they put in place to deal with emergencies and disasters.

Organizational Culture and Disaster Management

The organizational culture in institutions of higher learning affects their disaster management philosophies and strategies. Like other organizations, colleges and universities operate from an organizational perspective with an organizational culture that may embrace a bureaucratic, collegial, political, or even anarchical model (Birnbaum, 1988) or a combination of models at various times. As seen in Birnbaum's organizational models, regardless of the organization's culture, its culture affects many aspects of campus life.

Masland (1991) posited that the strength of the organizational culture depends on several factors including the scale of the organization, the tightness of the organization, the age of the organization, and the founding of the institution. All these factors will shape how an organization such as a university operates – how entrenched it is or how nimble it is. The organizational culture of a university is important to explore at least minimally in this literature review, because a university's organization culture will influence its crisis planning, emergency response, and disaster recovery strategies.

When organizations, with their well-established cultural norms, respond to disasters, they face challenges that are very different from those faced by loosely formed groups of community members responding to a large-scale crisis. Mileti (1999) outlined the stages that organizations must complete when responding to a disaster: “they must mobilize; assess the nature of the emergency; prioritize goals, tactics and resources; coordinate with other organizations and the public; and overcome operational impediments” – and “all these activities must be accomplished under conditions of uncertainty, urgency, limited control, and limited access to information” (p. 223). To accomplish these daunting tasks, in the latter part of the 20th century campuses began to appoint emergency managers and disaster teams that plan for disasters and respond to them when they occur.

The first decade of the 21st century has witnessed an increased need for emergency managers on college campuses to create plans for the physical safety of students, faculty, and visitors from natural and human-caused threats, including violence, as well as protection of electronic student records and other data from being accessed by unauthorized individuals. This increased awareness stems from human-caused disasters such as the shootings at Virginia Tech (Virginia Polytechnic Institute and State University) in 2007 and natural disasters such as the wreckage at Tulane University in New Orleans, Louisiana from Hurricane Katrina in 2005. Busenburg (2000) defined these “sudden, unusual, and widely known” events as focus events because they focus “public and political attention on policy issues” (p. 682). Thus, the university’s organizational culture will play a role in how quickly and in what way the institution plans for and/or responds to a disaster. The process may be either bureaucratic or collegial and still move

at a glacial pace or the process may move quickly due to political pressure arising from a focus event. Understanding the organizational culture as an influential factor will aid emergency managers in planning and response to a disaster on their campus.

Types of Disasters

Disasters come in many forms, but are often classified in the literature as falling into one of two broad categories: either human-caused disasters (sometimes referred to as man-made disasters) or as natural disasters (sometimes called acts of God, acts of nature, or weather-caused disasters) (Wilkinson, Lewis, & Dennis, 2010). Even these two historically accepted categories of disasters may become blurred at times. For example, some forest fires are started by humans, but when they burn for miles and spread to buildings, such as homes or businesses, they may become classified as natural disasters (Todaro, 2009). However, most of the literature seems to concentrate on only one overarching category of disaster at a time. My research was conducted at two university sites: the University of Iowa which experienced a natural disaster, a flood; and the University of New Mexico which experienced a human-caused disaster, a fire due to arson. Therefore, the literature on both disaster types informed my study.

Within the broad categories of either natural or human-caused disasters, two other categories are discussed in the literature. These categories are disasters primarily befalling individuals and disasters impacting entire organizations or communities. Two final areas of disaster research appearing in the literature are pre-disaster planning and post-disaster response and recovery. However, beyond general agreement that some type of planning is desirable, the research in these areas has not produced consistent findings (Mileti, 1999). Literature about organizations and the leadership attributes that

individuals in teams bring to planning and especially to post-disaster efforts when responding to and recovering from disasters are most pertinent to my research.

Disaster Research in Higher Education

Much of the literature consists of descriptions of how colleges and universities responded to disasters by providing accounts of what happened to cause the disaster and the events and actions that transpired during and after the disaster as well as the importance of and how to plan for a disaster. These articles and book chapters are informative and useful experience-based practitioner literature, but they are generally not based on empirical research.

Numerous authors have written about the effects of natural disasters on college and university campuses. For example, Wilson (1996) wrote an article summarizing the events that took place on the California State University at Northridge following the devastating 1994 earthquake; Davis (2005) described how Pensacola Junior College in Florida survived the damage wrought by Hurricane Ivan; Johnson, Nolan and Siegrist (2006) outlined the lessons learned from the damage to the Delgado College after Hurricane Katrina; Lawrence and Schafer (2007) wrote an article about the experience of managing the campus disaster recovery center at Southeastern Louisiana University; and Mochida (2010) contributed a book chapter about how a flood at the University of Hawaii at Mãnoa impacted the operations and materials at the Thomas Hale Hamilton Library.

Numerous authors have also written about the effects of human caused disasters, especially incidents of campus violence on colleges and universities. Eckert (2010) discussed the lessons learned from the shooting at Kent State University in Ohio that took

place on May 4, 1970 killing four students and wounding nine others; Fallahi, Austad, Fallon, and Leishman (2009) conducted a survey on perceptions about the shootings at Virginia Polytechnic Institute and State University (Virginia Tech); Flynn and Heitzmann (2008) wrote an article about the Virginia Tech shooting tragedy; Fox and Savage (2009) examined the changes on college campuses following the Virginia Tech incident; Hughes, White, and Hertz (2008) addressed some of the gaps in existing risk mitigation efforts on college campuses and examined a relatively new incident reporting technology; and Mastrodicasa (2008) made recommendations about how colleges and universities can utilize technology to communicate with their campus community during crisis events such as the Virginia Tech shootings as well as during natural disasters such as Hurricane Katrina.

Much of the qualitative and quantitative research about crises and disasters at institutions of higher learning and the leadership required to deal with them is produced by doctoral student researchers. For example, Chun (2008) conducted a study at seven private four-year residential colleges and universities in Northern California to analyze the critical elements needed for campus crisis planning. To accomplish his research, Chun reviewed each campus's written crisis plan and interviewed the campus officials responsible for leading their respective institution's crisis planning efforts. His data revealed that the threat of natural disasters was a common impetus for formal crisis planning. He found that these institutions borrowed information from other campuses and public and private organizations to craft their plans; however, philosophies varied on specificity versus flexibility as the framework for planning. Ultimately, the State of California Standardized Emergency Management System (SEMS), which became the

template for the Federal National Incident Management System (NIMS), became the underlying factor for crisis planning among the institutions in Chun's study because compliance with SEMS/NIMS is a requirement for receiving federal disaster emergency reimbursement for property damage. He concluded that crisis planning is important for campuses to prepare for and to effectively respond to an incident in order to reduce harm to people and to reduce property damage.

Another researcher, Rowe (2009) conducted a study to determine the factors that motivated the thirty-two four-year public and the thirty-six four-year private colleges and universities in Texas to review and revise their emergency management plans. To accomplish her research study, she sent the chief emergency officer at each school a questionnaire via electronic mail. Rowe notes that in the period since 1999 security concerns have increased on campuses, requiring them to act swiftly whether the threat is due to natural disasters, terrorist threats, hazardous materials, data breaches, or campus violence; however her study concentrated on the influence of shootings as a "focusing event" on change in emergency planning (p. 65). She found that prior to 1999 only nine institutions had an emergency plan, and when she tested Busenberg's theory that "…sudden unusual, and widely known events motivate actions" (2000, p. 682), her study "…did not generate the data to support [his] theory of focus events because the five shootings used in the study were not in the public consciousness enough to evaluate their motivational effect on action" (Rowe, 2009, p. 97). Nevertheless, her study did show that awareness of violence on other campuses contributed to review and revision of emergency plans. For example, "The Virginia Tech tragedy prompted review by ninety

percent of the schools in the sample and eighty-three percent reported revisions after the Virginia Tech incident" (Rowe, 2009, p. 97).

Kennedy (2004) conducted a study about emergent groups and disaster subculture to determine what factors aided or hindered Colorado State University's (CSU) leaders as they attempted to stabilize and restore the campus after their 1997 flood. He found that although CSU had a few rudiments of a disaster subculture, it was not sufficiently developed to adequately deal with the disaster. Specifically, CSU did not have a disaster plan that could be made operational, it did not have an organizational memory of previous flooding, and its formal structure was totally inadequate to deal with the increased demands brought about by the flood. In addition, lack of adequate coordination of activities and communications created major problems during the recovery stage. However, Kennedy found that in the void, new relationships and groups emerged within the institution to address the recovery.

The practitioner-based literature and the empirical research on disaster planning, response, and recovery at colleges and universities address the broad-based issues regarding the need for campus leadership to create and ensure that emergency management systems are in place and that the personnel needed to respond to an emergency are identified. These systems are designed to protect the safety of individuals as well as facilities on a campus-wide level in the event of a disaster. Each campus school or department such as the teaching colleges, administrative offices, student service units, and the libraries works with the central emergency managers to ensure that the particular needs of their individual organizations will be met. Since my research topic focuses on university libraries a review of the library disaster literature follows.

Disaster Research in Libraries

Libraries are not immune to disasters. One of the most infamous library disasters was a fire that destroyed much of the Alexandria Library in Egypt in approximately 48 BCE. Since then, numerous other disasters have befallen libraries and they seem to be increasingly prevalent (Wilkinson, Lewis, & Dennis, 2010). Just as much of the literature about college and university disasters provides descriptions of how the institutions prepared for and/or responded to disasters, much of the library literature about disasters also concentrates on how libraries accomplish these critical tasks. This practitioner literature provides recommendations about planning for a disaster and experience-based advice on the steps to take to respond to or recover from the disaster. Like the literature on college and university disasters, most articles and books on the topic of disasters in libraries are not based on empirical research.

The Heritage Preservation (2005) conducted a study of over 14,500 archives, libraries, and museums and found that 80% of the institutions responding did not have an emergency plan that included collections recovery. Thomas (2009) reported that a survey of small to mid-sized colleges libraries found that 29% of responding libraries that had experienced a disaster did not have a disaster plan in place at the time of the emergency.

In spite of the disturbingly low rate of disaster planning reported by these responding organizations, the literature is filled with a plethora of articles and books on library disaster planning. For example, Morris (1986) and Todaro (2009) published books on library emergency and disaster preparedness for libraries. Numerous other authors and editors have included major sections in their books on library disaster planning ad preparedness including Alire (2000a), Fortson (1992), Kahn (1998), and Wilkinson,

Lewis, and Dennis (2010). Also, many articles have chronicled the planning process for libraries including Norton (2008) who wrote an article outlining the “nuts and bolts” of writing a library disaster plan as well as others who have written about various aspects of library disaster planning such as Muir and Shenton (2002), Riley and Meadows (1995), and Wong and Green (2008). Some authors have included planning recommendations such as Johnson (1996) who wrote an article about how a library in Florida was damaged following a hurricane. He suggested that to avoid flooding damage, library materials should not be stored in basements and that buildings subject to risk of flooding should have more detailed disaster plans.

Disaster planning advice ranges from overarching, basic steps to intricately detailed strategies. Wood (1994) wrote about “1000 easy steps toward developing a disaster recovery plan,” while Page (2011), a well-respected library disaster preparedness expert, outlined on her website “ten things librarians need to know before a disaster strikes.” Other authors wrote about disaster planning in various library settings. For example, Dryden (1993) wrote about disaster planning in hospital libraries; Eng (2002) wrote about how technology and planning saved a community college library at ground zero during the 9/11 terrorist attacks; Stevens (1995) wrote about disaster planning in libraries, archives, and museums; and Villadsen and De los Santos (2007) wrote about general preparation for disasters in community colleges.

Works on disaster planning for libraries are not limited to libraries in the United States and Canada. For example, Adinku (2005) conducted a survey on disaster preparedness and recovery planning procedures at the University of Ghana; Alegbeleye (1990) and Obokoh (1989) wrote articles about library disaster control planning in

Nigeria; Ashman (1991) wrote a conservation piece on disaster planning in Scottish libraries; Bell (1989) provided guidelines for disaster planning in the Oxford Colleges in England; Coates (1987) gave a paper on planning for disaster control at a library conference at the South African Library in Cape Town that was later published in conference's proceedings; Cuthbert and Doig (1994) discussed disaster plans in Australian academic libraries; and Ngulube and Magazi (2006) discussed how "a stitch in time saves nine" extolling the desirability of emergency preparedness in libraries of Kwazulu-Natal, South Africa. All these authors and many others contributed to the international library disaster planning literature.

While the practitioner literature on library disaster planning is immense, many authors have also written about disaster response and recovery. For example, Miller and Pellen (2006) co-authored a book about dealing with natural disasters in libraries. Numerous other authors and editors have included major sections in their books on library disaster response and recovery including Alire (2000a), Fortson (1992), Kahn (1998), and Wilkinson, Lewis, and Dennis (2010), who also included sections on planning. Various articles have told evocative stories of library disasters and provided experience-based advice on how to respond to and recover from them. Silverman (2006) has shared the seven deadly sins of library disaster recovery, Smith (1991) outlined disaster recovery problems and procedures, and Strudwick (2006) offered a compelling selected bibliography of library disasters stories. While most books and articles focus on recovering paper-based library collections, Cervone (2006) discussed disaster recovery and continuity planning for digital library systems. As libraries, especially academic

libraries, become increasingly digital, this type of disaster recovery planning will increase (D. Hendrickson, personal communication, December 8, 2009).

Perhaps two of the most widely written about disasters impacting libraries in the last two decades were the Hurricane Katrina and the Colorado State University (CSU) flood disasters. According to the Tropical Weather website, Hurricane Katrina, which touched down on August 28, 2005, was the costliest U.S. hurricane on record and one of the worst natural disasters in U. S. history. Hurricane Katrina made its last landfall on the Mississippi/Louisiana border, with a storm surge of nearly 12 feet and peak gusts of 98 miles-per-hour in New Orleans, LA. The majority of the damage in New Orleans was due to levee failure, resulting in nearly 80% of the city being flooded with up to 20 feet of water. The entire Mississippi coast also suffered catastrophic damage due to storm surge and wind damage. In all, total damage estimates were placed near $81 billion (TropicalWeather.net, 2010).

Many university, college, school, special, and public libraries were severely ravaged by Hurricane Katrina. For example, Corrigan (2010) described the devastation to Tulane University's libraries located in New Orleans. Tulane is the largest private academic institution of higher learning in the Central Gulf Coast and its library is a member of the prestigious Association of Research Libraries of which only the top 123 academic libraries in the U.S. and Canada hold membership. Corrigan lamented, "Perhaps as many as 700,000 print volumes were underwater in the main Howard-Tilton building; about 480,000 or so were lost" (2010, p. 120). He went on to describe the heavy losses of other materials including audio-visual media, microforms, newspapers, art, and archival collections.

Other authors wrote about the devastation caused by Hurricane Katrina across the Gulf Coast. For example, Clareson and Long (2006) and Ellis (2007) wrote about library “lessons learned” as a result of Hurricane Katrina; Frost and Silverman (2005) poignantly wrote about “disaster recovery in the artifact fields of Mississippi” after the hurricane; and Nevins and Nyberg (2006) outlined various Gulf Coast academic and public library recovery projects.

Another disaster that was well-documented in the library literature was the flash flood that struck the Colorado State University campus. Colorado State University (CSU), located in Ft. Collins in northern Colorado, is a public institution of higher learning, and like Tulane University, its library is a member of the Association of Research Libraries. The flood, sometimes referred to as the Spring Creek Flood of ’97, hit on the evening of July 28, 1997 as a result of rain from several heavy thunderstorms over a period of two days. Damages to the city of Ft. Collins were estimated at over $200 million, with the Colorado State University campus sustaining millions of dollars in damages to its buildings. The Morgan Library and the Lory Student Center were the most severely damaged buildings on the campus (C. A. Alire, personal communication, September-December, 2002).

Many authors have written about the ruin at CSU caused by the water damage. Alire (2000a) edited a book that chronicles the impact to the CSU library and its valiant, innovative journey as its staff led the response and recovery effort. Many others wrote articles on the library’s flood recovery process. Jones (1998) described the disaster flooding experience at CSU and discussed recovery and mitigation tactics; Lunde (1998, 1999) described the process of restoration of books after the CSU library flood; Schmidt

(1999) described clean-up and recovery including federal depository materials after the CSU library flood, and Wessling and Delaney (2000) described how CSU libraries reaped a harvest of innovation after the flood.

Publications about library disaster response and recovery also abound throughout the international library literature. For example, Amarasiri's (2006) article discussed tsunami-affected libraries in Sri Lanka; Arnoult (2003) documented the never-ending story of war-caused damage and destruction libraries in Iraq, as did Shea (2004), Johnson (2005), and many others; Báez and MacAdam's (2008) book chronicled the history of the destruction of books from ancient Sumer to modern Iraq; Balík and Poliseňski (2004) described the floods at the National Library of the Czech Republic; Obokoh (1991) discussed coping with flood disasters at a university library in Nigeria; Preiss (1999) provided insights about library disasters based on a decade of experience at the National Library of Australia; Shaw (2003) wrote about assessment of the damage to libraries and archives in Iraq; and Sung, Lenov, and Waters (1990) described the fire recovery at the Library of the Academy of Sciences of the USSR.

Leadership in Library Disasters

Oliver-Smith (2002) posited, "Disasters occur at the intersection of nature and culture…" (p. 24). A disaster starts as an event such as a flood or a fire and develops into a process because the disaster requires an organizational and cultural process to address its aftermath. Dynes (1987) observed that to respond to emergencies, new groups emerge, existing ones undertake non-routine activities, and those persons whose involvement is expected must often make substantial changes in their routines, while other organizations in impacted areas cease operating altogether (p. 72). Oliver-Smith (1996) maintained that

in times of crisis or disaster, part of the process is for individuals to come together, creating emergent roles to deal with the situation. Often, these roles did not exist before the disaster and they normally cease after the disaster is over.

The literature is rife with information on planning for, responding to, and recovering from all sorts of library disasters in various types of libraries in the U.S. and internationally. While much of the literature on library disasters touches upon the leadership of the library dean/director and/or the disaster response assistance team, a few works focus on leadership during library disasters. For example, Kahn and Higginbotham (1995) discussed the role of the library or archive director during disaster recovery and Alire (2000b), the Dean of CSU Libraries at the time of their flood, described managing during the first week after the disaster. The first chapter of Alire's (2000b) book contained a personal account on "what to do when it happens to you, managing a major library disaster" outlining her experiences, challenges, critical action points, operational plans, and lessons learned after the CSU flood. In addition, Alire (2000b), Kahn (1998), and Wilkinson, Lewis, and Dennis (2010) each devoted a section in their books to detailed descriptions of the leadership roles of the library's dean/director and its disaster team.

Although some literature focuses solely on leadership of library disasters, there is limited literature on the emotional, human aspects of the individuals who must deal with library disasters. Alire (2000b), Kahn (1998), and Wilkinson, Lewis, and Dennis (2010) each designated a relatively small section in their books to the emotional issues surrounding disasters, especially as the recovery stage drags on, but they are not the central themes of these works.

One library researcher who was interested in the human aspect of disasters devoted her dissertation to the subject. Parker (2007) conducted a study to investigate how the disruptive forces of the 1997 flood at Colorado State University's Morgan Library changed the organization environment to promote organizational learning and innovation. To accomplish her research she conducted a case study, interviewing employees who responded to the disaster. Parker's data "generated six thematic areas for analysis: change and innovation, behavior and speech or the library's Dean and other administrators, significant challenges and accomplishments, motivation, disagreements with university leadership and recovery contractors, and thoughts and activities related to disaster planning for the future" (2007, pp. 133-134). An unexpected finding was the "identification of the strength of employees' affective bonds with members of their work groups and how this supported the development of learning and innovation as powerful tools applied in the Library's strong response to the flood" (p. 137). Based on her study data, Parker concluded, "Leaders who wish to strengthen an organization's capability to respond to or prepare for all kinds of change should…build an organizational climate and culture that provides opportunities and rewards for employees to try out new ideas within organization structures like teams and other groups where they also develop work relationships that support collaboration and learning" (p. 146).

Library Disaster Response Assistance Teams

When disasters strike libraries, groups of individuals must respond to the crisis. The literature attests that when a library has a disaster preparedness plan in place, usually the library dean/director has appointed a disaster response assistance team prior to the disaster. In more prepared libraries, that disaster team will have had safety training,

including disaster preparedness training, and know their roles and responsibilities (Wilkinson & Lewis, 2008). In other cases, especially when there is not a disaster plan in place, a disaster team will be hastily chosen and leadership roles will emerge as the response and recovery unfolds.

Regardless of how the library's disaster response assistance team comes together, its ability to successfully perform its duties will be affected by the competencies and personal attributes of the disaster team members who must respond to and lead their library in its recovery from a disaster. After extensive review of the library disaster literature, I located few books or articles that even touched on desirable personal attributes for library disaster team members. I could not locate any material that substantively addressed the personal attributes needed by team members or the competencies that may emerge in disaster team members during the disaster response and recovery process. I found nothing about which competencies are most common and/or considered to be of greatest importance in leading the process, or the unique meaning that disaster team members make of the various competencies that emerged during the process. Since this research does not appear to exist in the library disaster literature, I turned to the general library leadership literature for guidance.

Library Leadership and Emotional Intelligence

I reviewed numerous books and articles dealing with library leadership; however, the library literature on personal competencies and attributes that I found most compelling dealt with emotional intelligence of library leaders. Hernon, Giesecke, and Alire (2007) wrote about academic librarians as emotionally intelligent leaders. Although, their book focuses on emotional intelligence, they do not tout it as the "sole

theory of interest to academic librarians”(p. xii). These authors (Hernon, Giesecke, & Alire, 2007) considered various leadership theories, issues, and traits in light of the increasing trend of academic libraries to be organized into teams involved in managing change; however, in each chapter of their book, the authors discussed the many positive advantages that can occur when library leaders create an emotionally intelligent organization culture. They also purported that most studies have shown that emotional intelligence is a component of transformational leadership. In addition, in Alire’s (2007) chapter, she described Goleman, Boyatzis, and McKee’s (2002) work on resonant leaders who manage their own feelings and overcome the cycle of stress, sacrifice, and dissonance that many leaders suffer from. She also discussed the need for leaders to renew themselves and nurture mindfulness, hope, and compassion in their lives. Alire (2007) went further to highlight resonant leadership’s relationship to emotional intelligence, adding “although all resonant leaders are EI leaders, not all EI leaders are resonant leaders” (p. 96). Throughout their book, Hernon, Giesecke, and Alire (2007) persuasively made the point that emotionally intelligent library leaders are better equipped to manage change in their organizations. Although these authors did not specifically address the change brought about by disasters, many of their points about managing change in libraries are pertinent to managing the changes that disasters bring.

Hernon (2007) argued, “leaders should not only excel through their abilities, skills, and intelligence, but they should also handle themselves and their relationships with others to achieve a common vision or goal” (p. 11). He further asserted that emotionally intelligent leaders are cognizant of how they contribute to an organization, communicate effectively with others, and develop effective relationships with employees.

He provided a broad overview of the literature on emotional intelligence, finding that there has been very little research done involving the emotional intelligence of library leaders. However, he concluded that emotional intelligence has "…significant promise as a construct separate from personality traits, and it is necessary for leaders engaged in change management to possess" (p. 23).

Although there has been minimal research about the relationship between emotional intelligence and library leaders, two research studies specifically addressed the library leader's emotional intelligence. Both studies were published in articles appearing in *College & Research Libraries*, the official journal of the Association of College and Research Libraries, a division of the American Library Association. Hernon and Rossiter published one of these studies in 2006 and Kreitz published the other study in 2009. While both studies dealt with the emotional intelligence competencies of library leaders, neither study considered library leadership during disaster response and recovery.

Hernon and Rossiter (2006) conducted research to identify which of the traits that comprise emotional intelligence are of greatest importance for library directors to possess. The authors stated, "previous research has explored the traits of successful academic and public library directors…no study has recast those traits in terms of EI" (pp. 260-261). They used Goleman's (1995) original five categories of emotional intelligence: self-awareness, self-regulation, motivation, empathy, and social skill, with each category having multiple traits associated with it. The first three categories involve self-management, while the latter two categories address managing relationships with others (Goleman, 2004). Their study consisted of two steps: a content analysis of job advertisements for library director positions and a survey of directors of Association of

Research Libraries member libraries. They found, “among all the frequently mentioned traits” (all five of Goleman’s emotional intelligence categories) the attribute most prized by library directors, was “visionary – able to build a shared vision and rally others around it,” followed by the “ability to function in a political environment” (Hernon & Rossiter, 2006, p. 265). They also concluded that an emotionally intelligent leader appears to have much in common with a transformational leader.

Kreitz (2009) also conducted a research study that explored the “ideal” emotional intelligence traits of academic library directors; however, her study also included these directors’ senior management teams. She reorganized and remapped the study instrument that Hernon and Rossiter (2006) used in the study from Goleman’s original five domains to his revised four domains. Six library directors and twenty-one senior management team members from eight academic libraries participated in the study. These participants were asked to identify the top ten emotional intelligence traits for an ideal library director and the top ten traits for an ideal senior management team member. Kreitz’s study hypotheses were: “1. There will be no statistically significant differences ($p=.05$) between the traits that library directors choose for a director and the traits that they choose for a senior management team member” and “2. There will be no statistically significant differences ($p=.05$) between the traits that senior management team members choose for a director and the traits that they choose for a senior management team member” (2009, p. 536). She found that hypothesis 1 “was supported except for one trait” (attracting, building, and retaining talent) that was ranked as being significantly more important for a director to possess than for a senior management member (p. 544). Hypothesis 2 “was supported with eight exceptions” (p. 544). Kreitz stated that her findings “…suggest that

different competencies are needed in each role" (p. 544), that her study results "…create a foundation of leadership skills that may be useful in a number of venues" (p. 547) and that library directors and senior management team members can use her lists of ideal emotional intelligence traits "…to analyze the traits they collectively possess and those they might need to acquire…[and] to help them recruit and hire to balance their team's overall EI traits" (p. 547). Further, her results "…confirm Goleman's conclusion that no one leader can or needs to develop competency in the full range of EI traits leaders need…[instead] they can concentrate on honing their strengths and find others who can make up for their limitations" (p. 548). Although Kreitz's study focused on academic library senior management teams rather than academic library disaster response assistance teams as my study did, it supported the need to look beyond the top leader, the library dean/director, when studying the relationship between emotional intelligence and leadership.

Emotional Intelligence

Goleman, Boyatzis, and McKee (2002) have called emotional intelligence "the *sine qua non* of leadership" – absolutely indispensable or essential (p. 5), but how did this indispensable notion come into being? The earliest writings on emotion can be traced back to Plato who referred to emotions as a spirited element, which works with reason to control the appetites, and then to his student Aristotle who investigated emotions from a psychological, political, and ethical perspective (Ross, 1972). However, there was little emotional theory developed until the 17th century when Descartes began to envision emotions as separate, animalistic, and of a lower form when compared to reason. He postulated that this was because reason was of the mind and not of emotion (Watson &

Evans, 1991). This separation and duality of emotions and reason, accompanied by a minimization of the importance of emotions, where emotions were treated with a negative connotation, continued until the mid-20th century.

By the mid-20th century, scholars' negative views of emotions began to change. Increasingly, the positive aspects of emotions began to appear in the literature. For example, Leeper (1948) described a motivational theory in which emotions were no longer viewed as disorganized response; Wechsler (1958) suggested that non-intellective abilities were crucial for predicting the life success of individuals; and Tomkins (1962) viewed emotions as having a positive effect when considering them in the context of the whole human.

In the 1980s, social constructionist conceptions of the nature of emotion began to emerge in which emotion was seen to be constructed within the social context (de Rivera, 1984) and psychologists began to examine how emotions and thoughts interact with one another in a more positive way (Bower, 1981; Zajonc, 1980). For example, Boyatzis (1982) began to view emotions as organized responses that can create competent managers and leaders; Gardner (1983) offered his multiple intelligence theory emphasizing both interpersonal and intrapersonal skills related to IQ; and Simon (1982) commented on emotions in terms of affect and cognition. By the 1990s, the spotlight was on the positive aspects of emotions and the term emotional intelligence was born out of a long history of research and theory in personality, as well as social and organization psychology (Cherniss & Adler, 2000).

Overview

The term emotional intelligence has been variously defined as the ability to assess and regulate emotions in order to manage behavior and to interact successfully with others (Bar-On, 2000; Goleman, 1995); how leaders handle themselves and their relationships (Goleman, Boyatzis, & McKee, 2002); the processes involved in the recognition, use, understanding, and management of one's own and others emotional states to solve emotion-laden problems and to regulate behavior (Mayer & Salovey, 1997; Salovey & Mayer, 1990); the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions effectively in ourselves and others (Wolff, 2005).

Payne (1985) first used the term emotional intelligence in his dissertation; however, the concept of emotional intelligence is generally credited to Salovey and Mayer (1990) who discussed social skills and described a mental abilities model. According to Bar-On (2000), "In an early original article, Salovey and Mayer argued boldly and creatively for broader interpretations of intelligence…pointing to the adaptive values of flexible planning, social adroitness, and interpersonal considerations" (p. 264).

Goleman (1995) popularized emotional intelligence with his mixed-model of emotional intelligence that focused on personal attributes, competencies, traits, and skills. When Goleman's 1995 book *Emotional intelligence: Why it can matter more than IQ* appeared in the marketplace, the public became intrigued with the concept. Goleman fanned the flames of public excitement by making difficult-to-substantiate claims about the importance and impact of emotional intelligence such as it is "…as powerful and at times more powerful than IQ" in predicting success in life and "at best IQ contributes

about 20% to the factors that determine life success, which leaves 80% to other forces" (1995, p. 34). Even TIME magazine posed the question "What's your EQ?" on its cover, stating, "It's not your IQ. It's not even a number. But emotional intelligence may be the best predictor of success in life, redefining what it means to be smart" (TIME, 1995). With bold statements like these, it is no wonder that Goleman's book quickly became a bestseller, compelling the interest and imagination of so many people – the general public, the corporate world, and academia alike.

The notion of emotional intelligence, as popularized by Goleman (1995), became so well known that it was even featured in two comic strips: Dilbert (Adams, 1997) and Zippy the Pinhead (Griffith, 1996). Cherniss (2000a) asserted "…ever since the publication of Daniel Goleman's first book on the topic in 1995, emotional intelligence has become one of the hottest buzzwords…when the Harvard Business Review published an article on the topic…it attracted a higher percentage of readers than any other article published in that periodical in the last 40 years" (p. 1).

Although Mayer and Salovey (1997) agreed that general intelligence accounts for only approximately 10-20% of life successes, defined as academic achievement and occupational status, they did not agree that personality factors account for the rest as Goleman alleged. In his later books, Goleman moved away from his earlier unsubstantiated claims; however, he continued to assert the importance of emotional intelligence in life and in 2001 he expounded on emotional intelligence's vital importance in the workplace.

Salavoy and Mayer as well as Goleman and his various associates continued their research, evolving their definitions, and profusely writing about the topic of emotional

intelligence. As a result of their differing views of the construct, two distinct models of emotional intelligence have emerged: an abilities model and a mixed-model.

Two Models of Emotional Intelligence

The abilities model or mental abilities of emotional intelligence was developed by Salovey and Mayer, who are credited with writing the seminal paper on emotional intelligence, published in *Imagination, Cognition, and Personality* in 1990. In their early work they conceived emotional intelligence as being the subset of social intelligence that involves "…the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions" (Salovey & Mayer, 1990, p. 189). They emphasized a set of three conceptually related mental processes including appraising and expressing emotions in the self and others, regulating emotion in the self and others, and using emotions in adaptive ways (Salovey & Mayer, 1990). Later that year, a second article by Mayer, DiPaolo, and Salovey (1990) provided an empirical demonstration of how emotional intelligence could be tested as a mental ability.

By 1997, Mayer and Salovey revised their definition of emotional intelligence to include the idea of feelings, defining it thusly "emotional intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to provide emotional and intellectual growth" (Mayer & Salovey, 1997, p. 10). In both their early work (Salovey & Mayer, 1990) and their later revision (Mayer & Salovey, 1997), they defined their mental abilities model as focusing on emotions themselves and their interactions with thought.

In their book chapter, along with their updated definition of emotional intelligence, Mayer and Salovey (1997) formally introduced their four-branch theoretical model of emotional intelligence, which consisted of perception of emotion, use of emotion to facilitate thought, understanding of emotion, and management of emotions to promote personal growth. In 2002, Mayer, Salovey, and Caruso updated Mayer and Salovey's 1997 book chapter to provide a brief history of the concept of emotional intelligence and an overview of recent studies examining the predictive validity of emotional intelligence.

All these works comprise an abilities model of emotional intelligence as a set of mental abilities that can be measured with performance-based tests. The first test designed by Mayer, DiPaolo, and Salovey (1990) was the Multifactor Emotional Intelligence Scale (MEIS), which consisted of twelve ability measures of emotional intelligence, divided into four classes or branches of abilities. That test was the precursor to the *Mayer-Salovey-Caruso Emotional Intelligence Test* (MSCEIT™), which was followed by the MSCEIT™, Version 2.0. The 2.0 version included a "…141-item scale designed to measure four branches (specific skills) of emotional intelligence: (a) Perceiving Emotions, (b) Using Emotions to Facilitate Thought, (c) Understanding Emotions, and (d) Managing Emotions" (Mayer, Salovey, Caruso, & Sitareniou, 2003, p. 99).

The mixed model of emotional intelligence, sometimes referred to as the competencies model or the trait-based model, is generally credited as being developed by Goleman (1995). Bar-On (1997) was also a major contributor to the development of and research on this competencies or traits view of emotional intelligence. Both Goleman

(1995) and Bar-On (1997) shared similar definitions and conceptions of emotional intelligence as including non-cognitive skills, such as interpersonal skills; moods, such as happiness and optimism; and personal traits, such as flexibility and stress tolerance, which influence the ways that individuals cope with demands and pressure.

Much of the emotional intelligence literature makes a distinction between the two models (the mental abilities model and competencies model), calling Goleman's model "mixed"; however, Goleman does not agree with that assessment. Goleman (2001) wrote, "arguing from their framework of EI as a theory of intelligence, Mayer, Salovey, and Caruso, (2000) make a distinction between models that are mixed and those that are…ability models focusing exclusively on cognitive aptitudes…based on their reading of my 1995 book [they] contend that my EI model is mixed" (p. 20). Goleman explained that his 1995 book was intended to explore emotional intelligence and a "groundbreaking conception of intelligence rather than to systematically articulate an EI model" further arguing that the emotional intelligence-based theory of performance that he articulated in his 1998 book, *Working with Emotional Intelligence,* "…is a formulation that seems to meet Mayer et al.'s criteria for a pure model" (2001, p. 20). For Goleman, his model is purely a competencies-based one.

Goleman (1998) created a competencies model of emotional intelligence that emphasized emotional intelligence dimensions different from Salovey and Mayer's 1990 work. Goleman (1995, 1998) originally conceived emotional intelligence with five categories or domains including self-awareness, self-regulation, motivation, empathy, and social skill. Each category had multiple traits associated with it, totaling twenty-five traits in all. In that early model, "Three dimensions – Self-Awareness, Self-Regulation, and

Motivation – described personal competencies, that is, knowing and managing emotions in oneself. Two dimensions – Empathy and Social Skills – described social competencies, that is, knowing and managing emotions in others" (Goleman 1998, pp. 28-29). Goleman (1998) described emotional intelligence as the element that "…determines our potential for learning the practical skills that are based on its five elements…our emotional competence shows how much of that potential we have translated into on-the-job capabilities" (pp. 24-25). In 1998, Goleman defined emotional competence as "…a learned capability based on emotional intelligence that results in outstanding performance at work" (p. 24).

As a result of research involving nearly 600 corporate managers in a variety of settings, Goleman collapsed his framework from five domains to four and from twenty-five competencies to twenty (Boyatzis, Goleman, & Rhee, 2000). In Goleman's (2001) "revised and reorganized" model of emotional intelligence, the four domains included self-awareness, self-management, social awareness, and relationship management. The self-awareness domain involves understanding one's own emotions and how these emotions impact one's own behavior and decisions. The self-management domain includes controlling one's own emotions and adapting to different personal and professional circumstances. The social awareness domain involves understanding, reacting to, and sensing other's emotions and comprehending different social networks. The relationship management domain consists of inspiring, influencing, or developing other people and managing the daily conflicts that arise in the workplace. Each of these domains still had multiple traits associated with them, but the total traits in Goleman's revised model consisted of twenty.

One of the tests developed to assess emotional intelligence competencies is the Emotional Competence Inventory (ECI). Wolff (2005) describes the ECI, a self-report test, as a 360-degree tool designed to assess the emotional competencies of individuals and organizations. The tool is based on the emotional competencies identified by Goleman in *Working with Emotional Intelligence* (1998), and on competencies from Hay/McBer's *Generic Competency Dictionary* (1996) as well as Boyatzis's Self-Assessment Questionnaire (SAQ) initially developed by Boyatzis in 1991. Another test, the Emotional Quotient Inventory (EQ-i®), developed by Bar-On (1997), is the first scientifically validated, and most widely used, emotional intelligence assessment in the world. "Based on more than 20 years of research worldwide, the EQ-i examines an individual's social and emotional strengths and weaknesses. Respondents self-report on their life and workplace performance in 15 key areas of emotional skill that have been proven to contribute to proficiency in complex business activities such as conflict resolution and planning" (Multi-Health Systems, Inc. (MSM), 2011, para. 1-2).

In spite of the body of published research on emotional intelligence competencies, this model has detractors who believe that some of the research surrounding it is unsubstantiated. Scholars have asserted that some of the claims made about emotional intelligence competencies are based on unpublished studies or misinterpreted data (Barrett, Miguel, Tan, & Hurd, 2001; Jordon, Ashkansay, & Hartel, 2002; Mayer, Salovey, & Caruso, 2000). Further, Barrett et al. (2001) pronounced that they could find virtually no empirical evidence supporting the validity of emotional intelligence as a correlate of organizational outcomes. They added that most evidence regarding emotional intelligence competencies emulated a Madison Avenue advertising approach, offering

organizational solutions that were merely anecdotal claims in the absence of empirical evidence.

Although controversy continues regarding which model is superior, the mental abilities model or the competencies-based model, some of the most extreme criticism of the competency-based model of emotional intelligence has subsided as more research has been published and accepted by scholars in various disciplines, such as Carblis' (2008) scholarly book on assessing emotional intelligence that was devoted entirely to the competency framework.

Emotional Intelligence in the Workplace

By the end of the first decade of the 21st century, considerable research using both the mental abilities model developed by Salovey and Mayer (1990) and the competencies model developed by Goleman (1995, 1998) has been conducted on emotional intelligence in the workplace. Numerous books and book chapters have been written about emotional intelligence in the various workplace settings in addition to Goleman's (1998, 2001) notable works.

For example, fairly early in the discussion of emotional intelligence in the workplace, Cherniss (2000b) took on the issue of social and emotional competence in various workplace settings, focusing on emotional intelligence at work. He provided information of past efforts to improve emotional intelligence and discussed that body of work in terms of general management training, stress management, communications and empathy training with physicians, teaching police to handle conflict, and training for unemployed workers as well as personnel selection based on emotional intelligence

competencies. He concluded with research that reported negative findings about attempts to improve emotional intelligence in the workplace.

Mathews, Zeidner, and Roberts (2002) published a chapter on emotional intelligence, work, and the occupational environment in which they reviewed a number of issues relating to the role of emotional intelligence and emotional competencies in the occupational environment. They “survey the claimed relevance of different facets of EI for success and well-being in occupational settings,” and they concluded by “…presenting various programs designed to train employee competence in the job environment, with particular emphasis on the management of occupational stress” (Mathews, Zeidner, & Roberts, 2002, p. 467).

Day and Kelloway (2004) wrote a chapter on the rhetoric and reality of emotional intelligence in the workplace, discussing emotional intelligence and organization outcomes in terms of task performance, contextual performance (including leadership), and counterproductive performance.

Abraham (2005) provided a chapter in which she offered conceptual arguments supplemented by empirical validation linking emotional intelligence as a predictor of success in the workplace “…through its significant association with transformational leadership, ability to foster workgroup cohesiveness…permit feelings of control over work, and enhance self-esteem,” noting, “research in the area of personnel selection appears promising, with the ability of emotionally based tools to identify employees who are capable of succeeding in a particular organization” (p. 255).

Caruso, Bienn, and Kornacki (2006) offered a chapter that took place in two parts. The first part related a story of emotional intelligence in the workplace through the use of

fictional characters in a work setting that are a composite of actual clients and research. The second part of their chapter provided a synopsis on the research on emotional intelligence in the workplace. They concluded, “If this field is to advance, there needs to be much greater sophistication in the way research is conducted” (p. 200).

Druskat, Sala, and Mount (2006) edited a book about linking emotional intelligence and performance at work, sharing research evidence from numerous scholars in the field. Part one of their edited text provided articles on emotional intelligence and individual performance effectiveness, part two focuses on emotional intelligence in groups and group effectiveness, and part three concluded their volume with an agenda for future research and practice regarding the link between emotional intelligence and work performance.

Furnham (2009) wrote about the importance of training of emotional intelligence at work, attesting to “…the liveliness of the research interest and debate in EQ,” adding, “Being emotionally literate and skilled inevitably helps all sorts of problems at work,” while warning “…we await careful, disinterested evidence both how to train EQ as well as precisely how it operates in the workplace” (p. 153)

Zeidner, Matthews, and Roberts’ (2009) book on what we know about emotional intelligence offered an incredibly detailed perspective on emotional intelligence. Their chapters on work and emotional intelligence as well as emotional intelligence and the toxic work environment presented an array of research that has been done on emotional competencies and the lack thereof in the workplace, while cautioning that more rigorous research needs to be conducted in the future.

In addition to these books and many others, numerous articles have been devoted to the topic of emotional intelligence in the workplace. For example, Cooper (1997) wrote an article on applying emotional intelligence in the workplace through training to save time, expand opportunities, and focus energy for better results; Flowers (2000) and Rosenstein (2000) each shared thoughts about emotional intelligence in the library work setting; Zeidner, Matthews and Roberts (2004) wrote a critical review of the research on emotional intelligence in the workplace; Stalker (2008) wrote about the importance for accountants to find their sensitive side and develop emotional intelligence in their workplace; and Eissa and Khalifa (2008) discussed their research about emotional intelligence and self-efficacy as predictors of job stress among elementary school teachers in Egypt.

Goleman’s Emotional Intelligence Competencies Model

Both the mental abilities model and the competencies-based model of emotional intelligence are well documented and have substantial bodies of research concerning them. However, I seek to qualitatively and deeply explore library disaster team members’ competencies as opposed to studying their abilities, which are primarily measured quantitatively. Thus, Goleman’s competencies model clearly lends itself to better explore my research question on the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster. Therefore, the remainder of my literature review on emotional intelligence will provide an overview of Goleman’s competencies model, as applied in the workplace.

Goleman always saw the connection and importance of emotional intelligence in the workplace. In 1995, Goleman boldly stated that at work emotional intelligence will assist people "…in teamwork, in cooperation, in helping learn together how to work more effectively" (p. 163). In 1998, Goleman's definition of emotional intelligence in the workplace emphasized "managing feelings so that they are expressed appropriately and effectively, enabling people to work together smoothly toward their common goal" (p. 7). Goleman (1995, 1998) and Nelson and Low (1998) concurred that individuals with high levels of emotional intelligence are likely to demonstrate higher levels of career success and possess the ability to handle stressful events in their lives. Weisenger (1998) confirmed that individuals who have developed an in-depth understanding of their emotional management techniques can handle diverse situations more effectively; thus, learning to manage one's emotions and learning to understand the emotions of others are key elements to personal success.

While Goleman (1998) has commented that emotional intelligence alone cannot predict job performance and success, he has stood firm, declaring, "…many emotional competencies are linked and provide the framework that leads to superior performance in the work place" (p. 7). In Cherniss and Goleman's 2001 edited book, *The Emotionally Intelligent Workplace*, Goleman outlined a new framework for emotional competencies. Figure 2 depicts Goleman's (2001) framework of emotional competencies, featuring four domains and containing the twenty traits associated with the domains.

	Self (Personal Competence)	Other (Social Competence)
Recognition	**Self-Awareness** ▪ Emotional self-awareness ▪ Accurate self-assessment ▪ Self-confidence	**Social Awareness** ▪ Empathy ▪ Service orientation ▪ Organizational awareness
Regulation	**Self-Management** ▪ Emotional self-control ▪ Trustworthiness ▪ Conscientiousness ▪ Adaptability ▪ Achievement drive ▪ Initiative	**Relationship Management** ▪ Developing others ▪ Influence ▪ Communications ▪ Conflict management ▪ Visionary leadership ▪ Catalyzing change ▪ Building bonds ▪ Teamwork and collaboration

Source: *The emotionally intelligent workplace.* Cherniss and Goleman (Eds.), 2001, p.28.

Figure 2. Framework of Emotional Competencies.

Much research has been done using various models and theories of emotional intelligence in the workplace, including Goleman's (2001) competencies-based framework. For example, in one qualitative research article using Goleman's (2001) competencies that is relevant for this research, Fowlie and Wood (2009) conducted a study in which they analyzed the experiences of 50 MBA students from the University of Brighton, U.K. in 2006/07 and 2007/08. These students were asked to explore their experiences of both good and bad leadership and their resulting responses to determine which emotional intelligence competencies have the greatest importance in times of change. The researchers found, "…bad leadership equates to a lack of self-management and relationship management competencies; however, good leadership is not the exact opposite…[instead] leaders should have highly developed relationship management competencies…[and] face-to-face communication" (Fowlie & Wood, 2009, p. 559).

Various research studies have focused on emotionally intelligent leadership, stress management, organizational change, and crisis situations; however, none of the literature has taken up the issue of emotional intelligence in any setting during disaster response and recovery. To address this gap in the literature, my study specifically explored the naturalistic dimensions and outcomes of the personal attributes of library disaster response assistance team members and the relationships between these attributes and emotional intelligence competencies using an appreciative inquiry questioning protocol.

Appreciative Inquiry

First envisioned by Cooperrider and Srivastva of the Cleveland Clinic and Case Western Reserve University in 1980, and later articulated by them in 1987, appreciative inquiry is a theory of organizing and a method for changing social systems (Cooperrider & Srivastva, 1987). Since its conception, it has become many different things with variant definitions (Reed, 2007). Watkins and Cooperrider (2000) have considered it to be a "…habit of mind, heart, and imagination that searches for the success, the life-giving force, the incidence of joy" (p. 6). Others have considered appreciative inquiry to be "…both a philosophy and a worldview, with particular principles and assumptions and a structured set of core processes and practices for engaging people…" (Reed, 2007, p. 25).

Appreciative inquiry is undeniably rooted in social constructivist theory. It offers a framework for seeking and understanding the best in a living system. Srivastva and Cooperrider (1990) asserted that appreciative inquiry is always collaborative and constantly in search of the light. Watkins and Mohr (2001) stated, "AI invites us to choose consciously to seek out and inquire into that which is generative and life

enriching, both in our own lives and in the lives of others, and to explore our hopes and dreams for the future" (p. 58).

Overview

Sussman and Evered (1978) asserted that most action research projects use logical positivistic assumptions, treating social and psychological reality as fundamentally stable and enduring. However, a decade later, in their seminal 1987 paper on appreciative inquiry, Cooperrider and Srivastva criticized the lack of useful theory generated by traditional action research studies, arguing that there is nothing inherently "real" about any particular social organization to be uncovered and that social order is fundamentally unstable. Fitzgerald, Murrell and Newman (2001) posited that both the implicit theory of social organization and the method of action research are to blame and consider Cooperrider and Srivastva's (1987) notion of appreciative inquiry as an evolutionary form or reconfiguration of traditional action research.

Gergen (1990) wrote that appreciative inquiry is a product of the socio-rationalist paradigm in which social and psychological reality is treated as a product of the moment, open to continuous reconstruction. Cooperrider and Srivastva (1987) asserted, "Social phenomena are guided by cognitive heuristics, limited only by the human imagination: the social order is a subject matter capable of infinite variation through the linkage of ideas and action" (p. 139). They contend that appreciative inquiry is indeed a socio-rationalist view of science that grants preeminence to the cognitive processes of mind and the symbolic processes of social construction. This interpretation of social construction aligns with many of Guba and Lincoln's (1994) precepts when describing the constructivist inquiry paradigm, making appreciative inquiry well suited for constructive

research. Further, Cooperrider and Whitney (1999) and Whitney and Trosten-Bloom (2003) concluded that appreciative inquiry is based on the constructionist principle in which reality, as we know it, is a subjective rather than objective state and it is socially created through language and conversations.

Appreciative Inquiry Interviewing Framework

Cooperrider and Srivastva (1987) asserted that traditional action researchers tend to assume that their purpose is to solve a problem. Organizations are treated not only as if they "have" problems, but also as if they "are" problems to be solved and that this problem-oriented view of inquiry reduces the possibility of generating new theory and new images of social reality that might help to transcend current social forms.

In contrast, the underlying assumption of appreciative inquiry is that an organization is a "solution to be embraced" rather than a "problem to be solved" (Cooperrider, Whitney & Stavros, 2008). Hammond (1998) outlined eight overarching assumptions on which appreciative inquiry is predicated (see Table 1).

Table 1

Assumptions of Appreciative Inquiry

Appreciative Inquiry Assumptions
1. In every society, organization, or group, something works.
2. What we focus on becomes our reality.
3. Reality is created in the moment, and there are multiple realities.
4. The act of asking questions of an organization or group influences the group in some way.
5. People have more confidence and comfort to journey to the future (the unknown) when they carry forward parts of the past (the known).

6. If we carry parts of the past forward, they should be what is best about the past.
7. It is important to value differences.
8. The language we use created out reality.

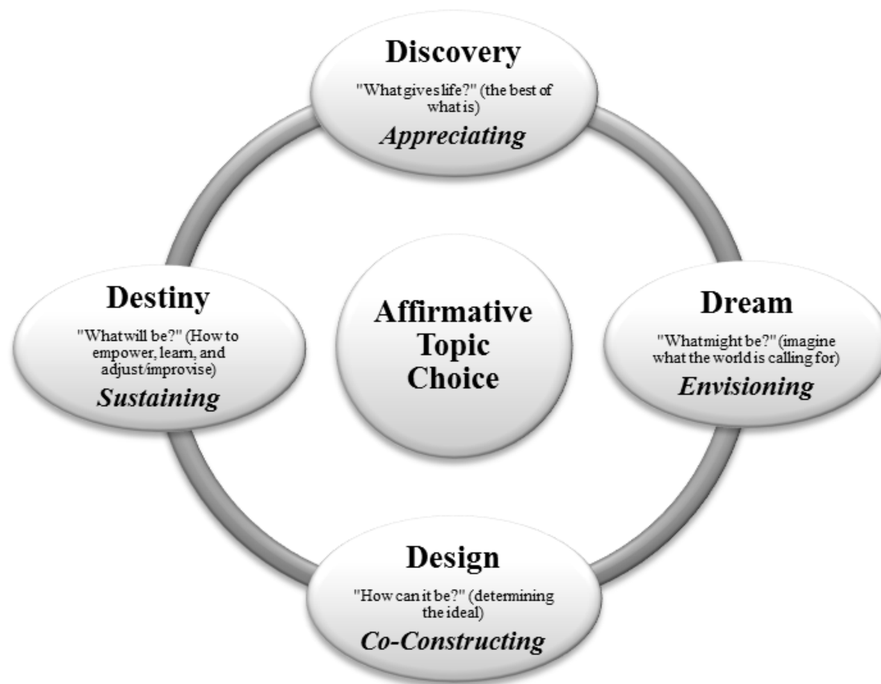
Source: *The thin book of appreciative inquiry*. Hammond, 1998, pp. 20-21.

The focus on appreciation (rather than problems) is the essence of appreciative inquiry. When individuals discuss the positive aspects of the organization where they work and their memories of success, energy increases exponentially (McLean, Davis, Baker, & Anguita, 2005; Whitney & Cooperrider, 2000). Using this view, appreciative inquiry can be seen as "…the cooperative co-evolutionary search for the best in people, their organizations, and the world around them…involv[ing] the art and practice of asking questions that strengthen a system's capacity to apprehend, anticipate, and heighten positive potential. The inquiry is mobilized through crafting of the 'unconditional positive question'…" (Cooperrider, Whitney, & Stavros, 2008, p. 5). Yet this appreciative approach to questioning does not mean avoiding areas of concern or actions that did not or are not working. Rather appreciative inquiry looks at these issues as opportunities for growth, change, and renewal.

Appreciative inquiry interview questions are specifically crafted to engage people to think about themselves and their whole system in a positive framework (Faure, 2006). This particular way of asking questions and envisioning the future is intended to foster positive relationships and build on the basic goodness in a person, situation, or organization, thus enhancing an organization's capacity for collaboration and change. Appreciative inquiry taps the rich and inspiring accounts of the positive (Cooperrider & Whitney, 1999).

Appreciative Inquiry 4-D Cycle of Questioning

Cooperrider, Whitney and Stavros (2008) described appreciative inquiry as a process of questioning that involves interviewing and storytelling "to draw out the best of the past, to understand what one wants more of, and to set the stage for effective visualization of the future" (p. 4). To accomplish this goal, the appreciative inquiry process begins with selecting a topic, the affirmative topic choice, and uses a unique interview process called the 4-D Cycle in which the interviewer facilitates participants to discover, dream, design, and define their destiny (Cooperrider, Whitney, & Stavros, 2003, 2008). The appreciative inquiry 4-D Cycle is depicted in Figure 3.



Source: *Appreciative inquiry handbook: For leaders of change* (2nd Ed). Cooperrider, Whitney, and Stavros, 2008, p. 5.

Figure 3. Appreciative Inquiry 4-D Cycle

Applications and Uses of Appreciative Inquiry

Appreciative inquiry is not without its detractors. For example, Grant and Humphries (2006) have contended that appreciative inquiry remains a research method with little self-reflection or critique to evaluate the process as an action research method. Golembiewski (1999) stated that appreciative inquiry's basis in social-constructivism limits its ability to develop an empirical base of research and notes the tendency for practitioners to be satisfied with merely asking the 4-D cycle questions. Still other researchers believe that appreciative inquiry's increasing popularity could indicate that it is largely a management fad, that it is dangerously lop sided in its unwavering devotion to the positive, making it too Pollyanna-ish, or that it is under-evaluated and under-analyzed (Fitzgerald, Murrell, & Newman, 2001). However, in the more than two decades since its inception, numerous books, hundreds of articles, and dozens of theses and dissertations, including Cooperrider's (1986) own doctoral research, as well as seminars, conferences, and an Appreciative Inquiry Commons website have been devoted to the construct (Appreciative Inquiry Commons, n.d.).

All of these resources demonstrate that appreciative inquiry is more than a method of appreciative questioning; it also has a sound heritage in organizational development and change management in business, industry, education, health, government, military, and global institutions. The 2009 World Appreciative Inquiry Conference highlighted many success stories using appreciative inquiry as it looked to many future applications for appreciative inquiry in many disciplines internationally (World Appreciative Inquiry Conference, 2009). However, for purposes of my research study, which endeavored to explore the relationship between emotional intelligence competencies and the personal

attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster, I concentrated on the unique interviewing method of appreciative questioning since my study is not action research and it does not seek to "produce effective positive change" (Cooperrider, Whitney, & Stavros, 2008, p. xv) at the two library sites where I conducted my research.

Instead of promoting change, my study sought to understand which emotional intelligence competencies emerged in disaster team members during the disaster response and recovery process. I sought to uncover the unique meaning individual team members make of various emotional intelligence competencies that emerged during the disaster response and recovery process, the emotional intelligence competencies that are the most common among them, and the emotional intelligence competencies that they consider to be of greatest importance in leading the disaster response and recovery process.

I believe that appreciative inquiry interviewing was very appropriate for my study because of its positive core structure. Appreciative inquiry, by its 4-D design, sets a positive, appreciative tone when questioning participants rather than using a deficit analysis approach which could invite distress when recalling a traumatic event such as a library disaster. However, in the event that extreme emotions emerged, I was prepared to offer empathy, time to process the emotions, and any other support necessary. Fortunately, no extreme emotions emerged, although a couple of participants did ask for a moment to compose themselves after sharing an emotional-laden experience.

Combining Emotional Intelligence with Appreciative Inquiry

Emotional intelligence and appreciative inquiry are still relatively new concepts, dating back only two decades. Although rigorous research studies involving each

approach are becoming increasingly plentiful in many disciplines, little research has been conducted that combines the two. While scant research exists combining the two constructs, two notable dissertations focus on these areas, each addressing issues in higher education. One dissertation explored appreciative inquiry to produce potential change which my research does not explore, while the other used appreciative inquiry questioning conventions which I did use in my research study.

Siegal (2008), a doctoral student at Ashland University in Ohio, conducted mixed-methods research on the effects of appreciative inquiry on emotional intelligence, with the quantitative approach as the study's primary component, using qualitative follow-up to evaluate and interpret the quantitative results. Her dissertation research asked, "Is it possible to affect both change and professional development simultaneously? Do certain change processes (specifically Appreciative Inquiry) affect the development of skills or competencies (specifically Emotional Intelligence of participants)?" (Siegal, 2008, p. 40). Quantitatively, her exploratory study looked at pre-test and post-test scores on the MSCEIT™ (*Mayer-Salovey-Caruso Emotional Intelligence Test),* which is an ability-based test designed to measure the four branches of the emotional intelligence model, on a convenience sample of 13 faculty and staff, employed mostly in the Admissions Department in a small liberal arts four-year college in Ohio. Her analysis found no statistically significant change in the emotional intelligence of the group members; her study failed to reject the null hypothesis that "the average score of emotional intelligence of the group members before the appreciative inquiry process was equal to the average emotional intelligence score of the group members after the process" (Siegal, 2008, p. 79). Qualitatively, her study found that "…a repeated theme [that

emerged] was that group interaction as evidenced by descriptions of optimism, a positive orientation among the participants and toward groups, as well as engagement while working in groups and while in pairs…mirror[ing] what was demonstrated by numerical data for the test scores in the MSCEIT™…" (Siegal, 2008, p. 79). Obviously, this study was limited by sample size, but it does offer implications for future research to explore possible relationship benefits of emotional intelligence and appreciative inquiry.

Yoder (2003), a doctoral student at the University of Texas at Austin, conducted a qualitative research study based on interpretive research using the appreciative inquiry 4-D cycle: discovery, dream, design, and destiny. In her dissertation and later in a scholarly journal article (Yoder, 2003, 2004), participants engaged in appreciative interviewing using provocative positive questions on emotional intelligence and organizational climate. Specifically, her research design integrated the *technique* of appreciative inquiry with the *topic* of emotional intelligence to explore "the relationship between organization climate and emotional intelligence in identifying a 'leaderful' community college" (Yoder, 2004, p. 47). Her phenomenological study included a purposive sample of sixty-eight leaders from a large, unnamed urban community college. She asked each participant to complete the MSCEIT™ emotional intelligence assessment in an introductory exercise "for the sole purpose of having a common experience around the concept of emotional intelligence, to encourage mindfulness about emotional intelligence, and to enhance the discussion of EI during the appreciative-inquiry sessions…not…to quantifiably analyze the MSCEIT™ results" (Yoder, 2004, p. 49).

At the beginning of each of six appreciative questioning group sessions, participants (ranging from four to sixteen individuals) discussed their experience taking

the MSCEIT™ and shared initial comments about emotional intelligence as well as received an overview of emotional intelligence including a list of emotional intelligence competencies from the researcher. The remainder of the session consisted of 4-D questioning, where the researcher posed open ended questions designed for each segment: discovery, dream, design, and destiny. A research assistant recorded the sessions using a laptop computer and "coded using the indicators in the EI literature" (Yoder, 2004, p. 51).

The six interview sessions resulted in 281 responses that "…participants felt had a significant effect on the organizational climate" (p. 51). When Yoder mapped them to Goleman's (2001) emotional intelligence competencies framework, she found that eight emotional intelligence competencies constituted 75% of the responses; these included: developing others, teamwork and collaboration, organizational awareness, building bonds, visionary leadership, empathy, respect, and open communications (Yoder 2003, 2004). Seven of the eight competencies "…appear at the higher-order functioning of three different EI models" (Yoder, 2004, p. 64). All respondents agreed that personal emotional intelligence and emotionally intelligent leadership are what determines organizational climate. She concluded, "Leaderful organizations are the result of inviting and engaging emotional energy in powerful ways" (Yoder, 2004, p. 61). As a result of her research, Yoder developed "Yoder's Taxonomy of Being," listing domains, characteristics, and requirements for leaderful organizations, which evolved from the convergence of appreciative inquiry with the construct of emotional intelligence (Yoder, 2004, p. 60).

In their book *Academic librarians as emotionally intelligent leaders*, Hernon, Giesecke, and Alire (2007), discussed how "the changing landscape in which academic libraries function makes effective leadership all the more necessary" (Hernon, Alire, & Giesecke, 2007, p.135). Although these authors were not talking about how the changes brought about by disasters make effective leadership especially vital, few events impact libraries more suddenly or are more all-consuming for a time than a disaster and few events cry out for effective leadership more than a disaster. In their book, the authors highlighted Goleman, Boyatzis, and McKee's (2002) three key concepts that leaders must consider in order to build an effective, emotionally intelligent culture – discovering the emotional reality, visualizing the ideal, and sustaining emotional intelligence. They discussed that academic library leaders must embrace these key concepts so that the library's organizational system supports the desired culture because "the culture of the organization is one of the most critical factors in determining an organization's capacity to change and maintain effectiveness" (Herron, Alire, & Giesecke, 2007, p.132).

Goleman, Boyatzis, and McKee's (2002) key concepts of emotional intelligence (discovering the emotional reality, visualizing the ideal, and sustaining emotional intelligence) as applied to library leaders by Herron, Giesecke, and Alire (2007), fit well with appreciative inquiry's 4-D cycle of questioning, creating another clear tie to the two constructs. For example, "Discovery" is the first "D" of appreciative inquiry questioning and dovetails with the emotional intelligence concept of "discovering the emotional reality" of an individual or an organization. Another key concept of emotional intelligence is "visualizing the ideal" which touches upon "Dreaming" and envisioning what might be as well as "Designing" and determining the ideal. The third key concept in

emotional intelligence is “sustaining emotional intelligence” which fits with the fourth D of appreciative inquiry, “Destiny” and sustaining what will be based on empowerment, adjustment, and improvisation. Goleman, Boyatzis, and McKee’s (2002) three key concepts of emotional intelligence mesh and overlap with Cooperrider, Whitney and Stavros’ (2008) appreciative inquiry 4-D cycle to create a harmonious, congruity between the concepts of each construct. Figure 4 depicts the concordance between the three emotional intelligence key concepts with the appreciative inquiry 4-D cycle of questioning.

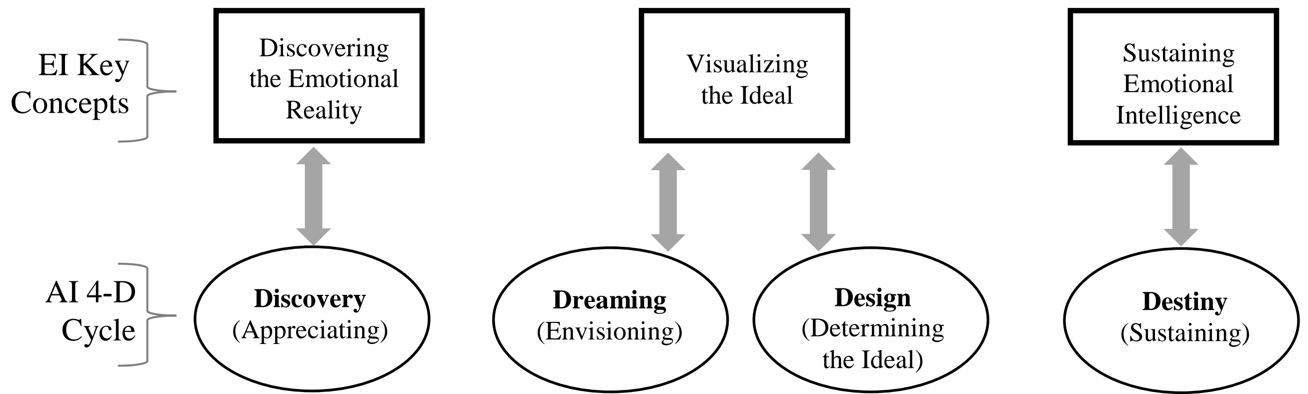


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Figure 4. Concordance between Emotional Intelligence and Appreciative Inquiry

Based on what I discovered in the literature, I found the notion of exploring emotional intelligence competencies of library disaster team members who led the recovery process, by using appreciative inquiry interviewing to be a logical, well-reasoned way to conduct, new, invigorating, and meaningful research. Further, I hope that my research will invite future research combining these two compelling concepts.

Summary of How the Literature Informs This Study

The disaster literature began to emerge slowly in the early 20th century. By the mid-20th century through the early 21st century, the literature produced on natural and human-caused disasters, scattered across various disciplines, is enormous. The sub-set of literature on higher education is based on the cumulative work produced in sociology, anthropology, geography, psychology, public administration, education, organizational development and management, and many other disciplines. Both the higher education and the library disaster literature reveal many descriptions of how colleges and universities, as well as their libraries, have responded to disasters. The authors provided informative accounts of what happened to cause the disaster, they chronicled the events and actions that transpired during and after the disaster, and they asserted the importance of planning for a disaster. Much of this literature is experience-based practitioner literature, and includes a smattering of empirical research. Both emotional intelligence and appreciative inquiry are relatively new constructs, only existing for a scant two decades, yet they each have an abundance of popular and research-based literature written about them, including how they contribute to the workplace.

Noting all the aspects reviewed and studied throughout the literature on disasters, my study begins to fill a gap in the research by using an appreciative inquiry questioning protocol to explore the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster. Further, my study adds to the body of research literature by also considering which emotional intelligence competencies emerged in disaster team members during the disaster response and

recovery process; the unique meaning individual team members make of various emotional intelligence competencies that emerged during the disaster response and recovery process; the emotional intelligence competencies that are the most common among team members; and the emotional intelligence competencies that these disaster team members consider to be of greatest importance in leading the disaster response and recovery process.

CHAPTER 3

RESEARCH DESIGN AND METHODS

"I think metaphorically of qualitative research as an intricate fabric composed of minute threads, many colors, different textures, and various blends of material."

~~ John W. Creswell

Introduction to the Research Study

All entities in higher education are experiencing rapid change (Baker & Wiseman, 2008; Benjamin, 2003; Holley, 2009; Kezar, 2009; Loomis, 2009). This phenomenon is especially true of academic library leaders whose libraries are recovering from a natural or human-caused disaster. Awareness of the problems associated with recovering from a disaster is increasing in the academe. One survey of college libraries found that 75% of respondents had experienced an emergency and several reported multiple disasters (Thomas, 2009). Meeting the challenges and seizing the opportunities during disaster recovery require increased understanding, preparation, and skill on the part of the staff that will respond to the disaster event, but how is this accomplished and what elements are the most critical for recovery?

The purpose of this qualitative research study was to understand the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members at two universities who responded to and led their libraries to recover from a disaster. In addition, this research contributes to the understanding of team members' emotional intelligence by providing

insight into which emotional intelligence competencies emerged during a library disaster response and recovery process, the unique meaning individual DRAT members make of the emotional intelligence competencies that emerged, the emotional intelligence competencies that are the most common among these team members, and the emotional intelligence competencies that these team members consider to be of greatest importance in leading the emotionally charged disaster response and recovery process. This study is the first of its kind to use an appreciative inquiry protocol to examine the connection between emotional intelligence and the personal attributes of library disaster team members at academic libraries that experienced a disastrous event.

Research Questions

The central research question and the four sub-questions that guided this research study are:

- What is the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members who responded to and led their library in its recovery from a disaster?
    - Which emotional intelligence competencies emerged in DRAT members during the disaster response and recovery process?
    - What unique meaning do individual DRAT members make of various emotional intelligence competencies that emerged during the disaster response and recovery process?
    - Which emotional intelligence competencies are most common among DRAT members?

- Which emotional intelligence competencies do DRAT members consider to be of greatest importance in leading the disaster response and recovery process?

This chapter describes the research design that I used to answer the research question and sub-questions above.

Positionality of the Researcher

I am a senior library administrator, holding the faculty rank of professor, at the University of New Mexico, University Libraries. As a faculty member, I have conducted both quantitative and qualitative research, completing several IRB applications and reviews as a university researcher. I have over twenty years of experience in academic libraries, authoring five books and numerous articles, giving presentations and workshops, and serving on or chairing national, regional, and local committees.

Since 1996, my portfolio has included preparation of the University Libraries' *Emergency Preparedness and Recovery Plan*. I also chair the University Libraries' Disaster Response and Recovery Team (DRAT). During this time, the Libraries have experienced three major disasters: two floods and a fire, and barely missed a fourth major disaster: a mold outbreak. I have led the emergency response and provided administrative oversight for all phases of the recovery for each of these disasters.

Since I am an academic librarian who has experienced a library disaster, I was an insider on my study to some degree at both the University of Iowa (UI) and the University of New Mexico (UNM). This is true simply because I am a fellow librarian who has dealt with disaster response and recovery. However, in the most literal sense, I was an outsider at the UI since it is not my home library. Even at my home library,

because I am a senior administrator, I remained somewhat of an outsider with some employees, especially those who had not worked with me closely in the past. Having a semi-insider's knowledge of library employees and their roles during the disasters at UNM where I am employed provided the opportunity for heightened insight, but also the inevitability of bias. Therefore, to borrow a term used primarily by cultural anthropologists, I provide an emic account as I describe the data concerning the human behavior of library disaster team members since I am "one of them" at my home institution (Creswell, 1998); however, I do not provide an emic account about the data at UI. I needed to be keenly aware of the issue of bias at both organizations, but especially at my home library. I also needed to self-monitor throughout the process of gathering and analyzing the data in an attempt to minimize bias and dutifully report the words and themes of the participants. Further, I took care when a participant's response was not completely clear not to assume that I knew what that person meant by substituting my own understanding about what was said. Instead, I used techniques such as asking for examples or restating/paraphrasing responses to either get confirmation or to gather different perspectives than my own.

Pike (1967) and Harris (1976) have argued that cultural insiders and outsiders are capable of producing either emic (subjective/insider) or etic (objective/outsider) accounts of their culture. I consciously chose to design my study using two disaster teams, one at my home institution and one that was not, to provide me with aspects of both emic and etic perspectives. Nonetheless, even with careful self-monitoring, I understand that I am still not providing a true, totally etic description of my data because of my position as an academic librarian who has experienced a disaster (Creswell, 1998).

Research Paradigm

My research question examined the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members. Given this question, my research paradigm was primarily constructivist because the paradigm's "central purpose is to make sense of human experience and to understand and derive shared meaning within a particular context," (Guido, Chávez, & Lincoln, 2010, p. 15) in this case, the personal attributes of library disaster team members as they led a disaster recovery effort.

Constructivism was the most appropriate paradigm to guide my actions as I conducted this research because the basic tenets of constructivism include understanding the experiences of individuals in the context of their lives, exploring the meaning of phenomena within the context of a research study, and listening to multiple participant voices and experiences (Guido, Chávez, & Lincoln, 2010), all of which are key components needed to address my research question. Constructivists believe that "the knowable world is that of the meaning attributed by individuals" (Corbetta, 2003, p. 24). Further, constructionists assume that there are many possible interpretations of the same data, all of which are potentially meaningful (Guba & Lincoln, 1989). These assumptions resonate with me.

Through my research questions, I sought to learn about the attributes of the library disaster team workers as they dealt with the crisis. Although the norm for most emotional intelligence relationship research seems to have been conducted using either quantitative or positivist quantitative data analysis of subjects' scores on emotional intelligence tests, for me, it was far more compelling to study disaster team member's personal attributes

and the possible relationship with emotional intelligence by making meaning of their stories. My primary data analysis used emergent thematic coding, which is a purely constructivist approach. My secondary data analysis used predetermined concept choice mapping, which is a more positivist approach; however it aided in answering my research question and sub-questions.

The aim of inquiry in constructivism is understanding and reconstructing the meanings that both the researcher and those being researched hold. The researcher plays the role of participant and facilitator, which was the best fit with my positionality in this study. Further, the constructivist paradigm grants greater significance to the mutual construction of data by the researcher and participants in the process (Schram, 2006). Constructionists are therefore not separate from those who make the constructions – they “are not part of some ‘objective’ world that exists apart from their constructors” (Guba & Lincoln, 1989, p. 143). Again, these features were important to my study design.

The constructivist paradigm embodies a basic set of philosophical assumptions and values with implications for practice. These assumptions include: ontological assumptions, which ask the question, what is the nature of reality; epistemological assumptions, which seek to answer, what is the relationship between the researcher and that being researched and what is the nature of knowledge; and axiological assumptions, which consider, what is the role of values (Creswell, 1998; Schram, 2006)?

The nature of reality is constructed, ontologically, by the individuals involved in the study – those individuals responding to library disasters. As such, their constructions are not more or less true, they are only more or less informed because knowledge and truth are socially constructed. A dominant ontological characteristic is that reality is

subjective and multiple for the study participants (Creswell, 1998). Multiple realities existed among the researcher (me), the library employees who participated in the study, and for the audience that ultimately reads and interprets the study. Based on the socially constructed multiple realities of the study participants, my study explored which emotional intelligence competencies emerged, which are most common, and what meaning the participants make of them now and as they led the library toward recovery. The answers to these questions are “real” because they are constructed in the minds of the participants (Guba & Lincoln, 1988).

Epistemologically, research in the constructivist paradigm assumes that I as the researcher will interact with the library employees that I study. Epistemology addresses the relationship between me, as the researcher, and those individuals that I study as interrelated, not independent (Creswell, 1998). Thus, as the researcher I sought to minimize the objective separateness between my role as a researcher and the library employees being researched (Guba & Lincoln, 1988). My positionality as an investigator in the study helped to specifically address this issue because as a librarian who has experienced a disaster, I was an insider to some degree and have engaged emotional intelligence competencies myself as I dealt with a disaster in my library. Further, the constructivist paradigm assumes that the knower and the known are interactively linked and that findings are created as the research proceeds. This assumption informed my emergent research design and guided the formation of my interview questions and perhaps more importantly, it guided my probing follow-up questions.

Axiological assumptions involve the role of values in the study – the inquiry is value bound. I, as a librarian-researcher, acknowledge the value-laden nature of the

information gathered as I studied the attributes of library employees who were recovering from a disaster (Guba & Lincoln, 1988). I interpreted the experiences and behaviors of study participants through my value systems, the paradigm I employed, and the social and cultural norms of the study participants. Again, my position as a researcher/library leader in this study along with my own values aided me in addressing the issues that emerged in the study (Creswell, 1988).

Mode of Inquiry

In the constructivist paradigm, the qualitative mode of inquiry predominates and it was the one I chose to conduct this research study. Qualitative research, broadly defined, means “any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification” (Strauss & Corbin, 1990, p. 17). In this mode, the researcher explores relationships using textual and perhaps non-textual visual data, rather than predominately quantitative/numerical data. The ability of qualitative data to provide a richer, move evocative description of a phenomenon through textual data is an important consideration not only from the researcher’s perspective, but for the consumer of the research as well. According to Lincoln & Guba, “If you want people to understand better than they otherwise might, provide them information in the form in which they usually experience it” (1985, p. 120). These characteristics were critical components of my study. Quantitative data could not begin to convey the depth of emotionally intelligent leadership needed during a library disaster. The richly detailed stories that are told as part of the qualitative research process comprised the heart of my study.

Qualitative research is a field of inquiry that cuts across disciplines, using an interpretive, naturalistic approach to its subject matter in which researchers study phenomena in their natural settings and attempt to make sense of these phenomena in terms of the meanings people bring to them (Lincoln & Guba, 1985). Qualitative research has an emergent, as opposed to predetermined, design (Patton 1990). The qualitative mode seeks understanding based on distinct methodological traditions of inquiry in which the researcher builds a complex, holistic picture, analyzing the words of informants (Creswell, 1998). For these reasons, qualitative research is widely used in general social sciences research and its use has increased considerably over the last two decades in library science research (Pickard & Dixon, 2004), making this mode of inquiry ideally suited and well supported for my library multi-site research study.

Merriam (1988) described several aspects of qualitative inquiry that speak directly to my values, and perhaps biases, for qualitative research. Qualitative inquiry involves fieldwork – physically going to the site(s) where the people are located in order to conduct the research in its natural setting. I traveled to one of the sites in my study and I work in the other institution. These face-to-face encounters with the participants in my study were imperative in order to gather their stories. As a qualitative researcher, I am concerned more with process than with specific outcomes or products. I became the "main research instrument" in my study through my questioning and interacting with the participants (Glesne & Peshkin, 1992, p.6).

In this study, I was concerned with the process of gaining a deep understanding about library disaster team members' personal attributes (emotional intelligence) as they led their library's recovery efforts. This topic required exploration because its variables

are not easily identified and theories needed to be developed to learn about the attributes of the participants during disaster response and recovery (Creswell, 1998). Further, Strauss and Corbin (1990) asserted that qualitative methods can be used to better understand any phenomenon about which little is yet known, as is the situation with my research. Qualitative researchers are also interested in how people make sense of their lives, experiences, and structures in the world. To accomplish this goal, I used an inductive approach to develop theory, examining the data generated from the study of a population of library disaster team members to build an understanding of their behavior as it emerged from the data (Tashakkori & Teddlie, 1998).

Advantages of qualitative methods for exploratory research are many. This form of inquiry provides both depth and detail, known as thick description, opening up "…a world to the reader through rich, detailed and concrete descriptions of people and places…in a way that we can understand the phenomenon studied and draw our own interpretations about meanings and significance" (Patton, 2002, p. 438). A major advantage of qualitative methods is the emergent nature of the data analysis, allowing the researcher to compile detailed information about a much smaller number of people and cases (Yin, 2003). These advantages further cemented the qualitative approach's suitability to address my specific research question by allowing the data to emerge in rich, thickly described stories that told about the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their libraries in their recovery from a disaster.

Methods

I used the case study method to conduct qualitative inquiry about the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster. Unlike quantitative methods, case study research expands and generalizes theories, called analytic generalization, which was the goal of my research, rather than enumerating frequencies called statistical generalization (Yin, 1994). Further, case study traditions have a long and storied history of use in many disciplines such as psychology, sociology, education, anthropology and political science as well as medicine and law (Creswell, 1998).

Another scholar who conducted research on a disaster in an academic library found the case study method most appropriate for this type of research (Parker, 2007). Although Parker's study dealt with academic library employees' mental models of change following a disaster rather than their emotional intelligence competencies as my research does, her study is the only other dissertation-length research study of academic library employees who responded to and recovered from a disaster. Her research exemplifies the suitability of case study as the most appropriate methodology to examine a specific issue that a particular case or cases demonstrates (Stake, 1995).

Schram (2006) considered the case study to be defined by "…an analytic focus on an individual, event, activity, episode, or other specific phenomenon" (p. 106). Creswell (1998) described a case study as "…an exploration of a 'bounded system' or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context" (p. 61). Yin (2003), a recognized leader in case

study research design, described case study as an empirical inquiry in which a researcher explores that relationship between context and a phenomenon. My research question and sub-questions were explored within the distinct contexts of two cases as opposed to broadly interviewing library employees who experienced a disaster at various universities across the country. Studying these bounded systems or cases allowed critical details to emerge such as the unique meaning that disaster team members made of the emotional intelligence competencies that emerged during the disaster at their library – something that would not have been possible through disconnected interviews from library employees at various random university libraries.

Yin (2003) has further attested that "…case studies are the preferred strategy when "how" or "why" questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon within some real-life context" (p. 1). The latter two reasons apply to my research study. Yin asserted that case studies investigate a contemporary phenomenon within its real-life context and support understanding of complex social systems while retaining the holistic and meaningful characteristics of real-life events such as organizational and managerial processes, such as those in my study. Yin has argued, "…you would use a case study method because you deliberately wanted to cover contextual conditions – believing that they might be highly pertinent to your phenomenon of study" (p. 13). These definitions and characteristics of the case study methodology lent themselves well to addressing my research question and sub-questions including which emotional intelligence competencies emerged in the disaster team, which are most common, and which ones do the team members consider to be of greatest importance in leading the recovery process in their library.

In addition, case study methods attempt to shed light on a phenomenon by studying in-depth a single or multiple case example of a phenomenon such as an event, group, or institution over a finite period (Leedy & Ormrod, 2005), which is consistent with the components of my research design. Also, case studies usually include a small sample size (Yin, 2003), which was most appropriate for my study due to the limited number of disaster team members at my study sites. Further, Creswell (1998) contends that the choice of the case study method is appropriate to study a case or cases with clear boundaries. I chose to study two academic libraries, one that experienced a flood and one that experienced a fire to address my research question more fully than a single case would provide, while still keeping my study small enough to ensure its completion given my time line and resources.

For these reasons it is not surprising that, “case studies have become one of the most common ways to do qualitative inquiry” (Stake, 2000, p. 435) and that it is the method that I chose to conduct my research. However, as I have learned about various methodologies, I have discovered that what constitutes case study is a matter of considerable debate. Some scholars write that it is a method and not a methodology. Stake (2000, p. 435) contends that case study is “not a methodological choice but a choice of what is to be studied.”

Specifically, my research strategy supported the use of instrumental case study since it refers to the idea that a case can facilitate insight into an issue through the case to explore and understand the phenomenon in depth (Schram, 2006; Stake, 1995, 2000). Stake (1995) further posited that instrumental case study is most appropriate when the case is used to understand more than what is obvious to the observer. For these reasons,

instrumental case study methodology differs from the somewhat more familiar intrinsic case study, which is concerned with studying a particular case in order to learn about the details of that specific case (Yin, 1993). Case study research may include multiple cases, which are sometimes referred to as the comparative case methodology (Yin, 2003); however, the instrumental case study methodology can also include more than one case. I used two case studies in my research study, both of which are major research institutions; however, one case is located in the mid-west where the library experienced a flood and the other case is located in the southwest where the library experienced a fire. Although the primary purpose of my study was not to compare the emotional intelligence competencies that emerged in disaster team members at one library verses the other, I discussed the patterns found between the libraries that came to light. Finally, the use of instrumental case studies has increased in other social sciences and education in the past decade (Lundholm, 2004), further supporting my decision to use it for my higher education/library science research study.

Sites of the Study

In my study, I used the example of two instrumental cases from two major research academic libraries at two public universities, each located in a different part of the country with each experiencing a different type of disaster. Although each library shared a number of similar characteristics, each case had some significant differences. After considering a number of potential libraries to study, I selected these two libraries partly for these "balancing" reasons (their similarities and differences) and partly due to the degree of willingness on the part of the library Deans for their library's disaster team members to participate in my research. In that sense, these sites comprise a convenience

sample; however, my sample was also a purposeful one because the participants were preselected according to criteria relevant to my research questions. The sites/cases include: the University of Iowa (UI) that experienced a flood (natural disaster) in 2008 and the University of New Mexico (UNM) that experienced a fire (human-caused disaster) in its Zimmerman Library in 2006. The following is a brief description of each university, its library, and the city/state where it is located.

UI is located in Iowa City, IA. With a population of nearly 70,000, Iowa City, located in Jefferson County, is the fifth largest city in Iowa. The Iowa City metropolitan area reports a total population of nearly 150,000 (Iowa City Area Chamber of Commerce, n.d.). In June 2008, much of the state of Iowa experienced severe flooding when nine rivers reached all-time record flood levels. Eighty-five of the state's ninety-nine counties, including Jefferson County, were declared disaster areas. The UI is a large, public research university, earning a Carnegie Classification of Institutions of Higher Education ™ of RU/VH: Research Universities/very high research activity, and having a student population of nearly 29,000 (Carnegie Foundation for the Advancement of Teaching, n.d.). As a result of the flood, the University suffered an estimated damage of $743 million, with forty-two campus buildings being flooded. The University Libraries at UI are a member of the Association or Research Libraries and house over five million volumes. At the time of the flood, these collections, along with over one hundred and eighty employees occupied twelve campus libraries. The flood directly affected three libraries: the Main Library, the Rita Benton Music Library, and the Art Library (Baker, 2010).

UNM is located in Albuquerque, NM. With a population of over 500,000, Albuquerque is the largest city in New Mexico and the thirty-fourth largest city in the United States. The Albuquerque metropolitan area boasts a population of nearly 900,000 (Greater Albuquerque Chamber of Commerce website, 2010). Like UI, UNM is a large, public research university, earning a Carnegie Classification of Institutions of Higher Education ™ of RU/VH: Research Universities/very high research activity (Carnegie Foundation for the Advancement of Teaching, n.d.). Its student population is over 27,000. Also, like the UI Libraries, the UNM Libraries is a member of the Association of Research Libraries; however, the UNM University Libraries house just over two million volumes (UNM Fact Book 2008-2009). On April 30, 2006, a fire started in the basement level of the Zimmerman Library – the main library – causing over 30,000 volumes to be destroyed, approximately 100 employees to be displaced, and the basement facility to be closed for repair for nearly two years (Castillo-Padilla, Dennis, Lewis, & Wilkinson, 2010).

Data Collection Methods

Due to the nature of qualitative research, I sought to observe and interpret the meanings found in the data as they emerged. Therefore, as my research progressed, the design evolved and I slightly modified my techniques to maximize my understanding of the study phenomena (Guido, Chávez, & Lincoln, 2010). Due to that reality, it was neither possible nor desirable to finalize my exact research strategies before my data collection began (Patton, 1990); however, prior to beginning my research I outlined my general plans for data collection strategies.

Adhering to case study method, I employed three methods of data collections: semi-structured open-ended interviews with individual participants, focus group interviews, and reviewing any related secondary data such as documents, manuscripts, artifacts, and other materials at each library in the study (Yin, 1994). The data gathered using these methods provided the rich, thick description that can be found in personal reflection and accounts as well as in the documents and other materials produced by library employees about the disaster.

Sampling of Participants and Documents

Definitions of disaster response teams and their membership vary by institution. For purposes of this study, the participant population included both formal members of the disaster team – typically with team titles such as Facilities & Security Coordinator, Collections & Preservation Coordinator, Communications & Media Coordinator and so forth (Wilkinson, Lewis, & Dennis, 2010) – as well as individuals who were extensively involved with the disaster response and recovery effort, generally added to the team for that disaster either immediately after the disaster struck or as the recovery was underway, making them associated members of the team. Both employees who were still employed at the library and those who left subsequent to the disaster (when they could be located) were invited to participate in the study. Although I was prepared to interview some employees who had left the library via Skype or via telephone, I was able to interview all participants in person. A few individuals who were involved with the disaster process chose not to be included in the study either because they had left the library or they were not interested in participating; thus, I could not use complete sampling.

Creswell (1998) contended that purposeful sampling, which groups participants according to preselected criteria relevant to a particular research question, is an acceptable method of selection to address qualitative research questions. Further, many qualitative researchers believe that purposeful sampling is important because the deepest understanding derives for the most diverse and balanced sample of participants (A. F. Chávez, personal communication, January 26, 2011; Creswell, 1998). Due to these considerations and since only some members of the population who responded to their library's disaster participated in my study, the most appropriate sampling technique for my research was purposeful sampling. More specifically, the type of purposeful sampling that I employed was criterion sampling because all participants will be persons "meeting a specific criterion" (Creswell, 1998, p. 119) – each participant was involved in the disaster response and recovery effort at their academic library.

I conducted document analysis using snowball sampling, also known as chain referral sampling. Snowball sampling is considered to be a type of purposive sampling (Heckathorn, 1997). This non-probability sampling technique typically works like chain referral (Castillo, 2011). Although this method of sampling is typically used to identify people to be studied, in my research I used it to study documents by initially reviewing known documents and artifacts and then adding new materials as I learned about their existence through references in the initial documents I reviewed and from asking study participants to identify and suggest documents and other materials for me to consider.

Selection of Participants

I asked the Dean at each university to provide a list of disaster team members and other library employees who participated in the disaster response and recovery process.

Since I was the Interim Dean at the University of New Mexico during the majority of the disaster response and recovery, I asked a designate, the Associate Dean of Facilities and Access Services, who also served as the special assistant for disaster recovery during the fire recovery, to provide the list. I invited each person on the list of disaster team members at the University of New Mexico to voluntarily participate in either an individual interview or to be part of a focus group, giving each individual the choice of which format they prefer. I asked each of the other library employees who were identified as participating in the disaster process to voluntarily participate in a focus group. Nearly all chose to participate in either a one-on-one interview or a focus group. With choice, hopefully, the participants felt more comfortable and participated more fully in my study. At the suggestion of the Dean of the University of Iowa, the Dean there conducted this solicitation process, with scheduling done by the Dean's assistant, rather than being done by me.

The interview and focus group data for my research study comes from twenty-seven participants at two university libraries. All participants were either disaster response assistance team members before the disaster struck their library, or they joined or became affiliated with the library's disaster team at the time of the disaster or as the recovery was underway. At the University of Iowa, I conducted one-on-one interviews and follow-up interviews with four library disaster team members, all current employees, and conducted one focus group with six current library employees who participated in the disaster response and/or recovery. At the University of New Mexico, I conducted one-on-one and follow-up interviews with six library disaster team members (four were current employees and two had retired after the fire but were employed in pivotal positions at the

time of the fire). I conducted three focus groups with current employees at the University of New Mexico Libraries: two focus groups consisting of three participants each and one focus group with five individuals. Each interview and focus group took approximately one hour and was conducted in person.

The participants in my study were representative of the various roles and responsibilities assumed by disaster response assistance team members, including the library dean/director, disaster response assistance team leader, communications and media coordinator, facilities and security coordinator, human resources coordinator, administrative and financial coordinator, library services coordinator, systems/IT coordinator, and collections and preservation coordinator.

Case study design is not intended to be generalized; each case is considered unique. According to Stake (1995), even a multiple case study cannot ensure that findings are typical, but instead may establish likely commonalities, thus, the participant pool in my study did not pose a problem, especially since I interviewed many members of the possible sample either individually or in focus groups. These participants were sufficient to address my research question, while small enough to ensure the completion of the study given my time line and resources.

Interviews. The first method I used is individual interviews, including an initial interview and a follow-up interview (see Appendix A, Interview Guide). I used a constructivist approach to conduct semi-structured, open-ended hour-long in-person initial interviews with disaster team members who were involved in the disaster response and/or recovery process from two public research university libraries.

I asked probing questions when they were warranted based on the participant's response to any of the overarching interview questions (Lincoln & Guba, 1985). The probing questions included: could you say something more about that, can you give a more detailed description of what happened, and do you have further examples of this? (Kvale, 1996, p. 133). The individual interviews were particularly useful to get the rich, in-depth story behind the interviewees' experiences during the disaster response and recovery process.

In preparation for the follow-up interviews, I asked participants to jot down ideas, feelings, and stories as they remembered them between the two interviews. I also asked interviewees to bring any documents or artifacts that they felt were important with them to the follow-up interview.

Interviews are one of the most important sources of case study information. Yin (1994) offers a table, depicted in Table 2, to show the strengths and weaknesses of interviews. I remained mindful of these strengths, and especially of the weaknesses, of this method as I conducted the interviews.

Table 2

Interviews: Strengths and Weaknesses

Source of Evidence	Strengths	Weaknesses
Interviews	• targeted - focuses on case study topic • insightful - provides perceived causal inferences	• bias due to poor questions • response bias • incomplete recollection • reflexivity - interviewee expresses what interviewer wants to hear

Source: *Case study research: Design and methods*. Yin, 2003, p.80.

I used appreciative inquiry 4-D cycle questioning techniques. Appreciative inquiry is based on postmodern constructivist theory that reality is socially constructed. "Appreciative inquiry interviews focus on the positive: that which gives life to an organization. AI interviews are designed to reveal organizational successes, what people value, and what they hope and wish for to enhance their organizational vitality" (Yoder, 2004, p. 49). Appreciative inquiry interview questions avoid focusing on problems or negativity. Instead they ask for storied descriptions of what has worked well in the past and what is most successful in the present (Cooperrider, 1990). Due to the stressful nature of disaster response and recovery efforts and the emotionally charged memories that the experience typically holds for the library employees that I interviewed, focusing on the positive aspects of the experience proved to be a vital component to uncover richer, more meaningful data. In addition, this appreciative inquiry style of questioning may have had a healing impact on participants as they told me their stories about the disaster from a more positive perspective.

The appreciative inquiry 4-D cycle includes the following components: discovery, dream, design, and destiny (Cooperrider, 1990). *Discovery* occurs through engaging participants in comprehensive interviews to articulate strengths. The discovery component is designed to reveal positive capacity by recalling past experiences of interviewees when they felt that either they or the organization was operating at its best. The *dream* phase is facilitated by a formation of vision statements. The dream component asks interviewees to use their experiences to envision a desired reality using practices and experiences that were successful in the past to develop a picture of optimum success for all. The *design* phase is intended to affirm each participant's capacity and positive core.

This component allows interviewees to bring the new reality to life in the present to affect change in the future. The final phase of the process, *destiny*, enables participants to sustain momentum for ongoing positive change and promotes the attaining of desired vision, goals, or outcomes. The destiny component is the attaining of the desired goal or outcome (Cooperrider, Whitney, & Stavros, 2008). These four components constitute the unique interview process of appreciative inquiry. Creswell (1998) recommended designing an interview protocol with approximately four to five open-ended questions. In my research study, I asked a multi-faceted, overarching, open-ended question for each of the four appreciative inquiry components (see Appendix A, Interview Guide).

In addition to the initial interviews, I also conducted a one-hour follow-up interview with each participant within a week after their initial interview to glean any additional thoughts that might have been triggered or any stories that participants would like to share after having the opportunity to think further and perhaps more deeply about their experience. When possible, I conducted these follow-up interviews after I conducted the focus group interviews at each institution, so that I could ask additional probing questions about stories shared in the focus groups as well as from the initial interviews. At the end of the follow-up interviews, I gave participants my contact information so that they could easily reach me with any additional information that they remember later. This initial and follow-up interview process provided the rich, thick description that I sought to answer my research question and sub-questions.

Kvale (1996) stressed the importance of advance preparation and planning for enhanced interviewee participation. I offered to interview participants at their library to make the process more convenient for them. I obtained permission to conduct the

interviews in the library and the Dean provided a private, quiet space/room in which I conducted the interviews. However, I also offered interviewees the option of being interviewed at an alternate site, such as their office or at a location outside of the library, such as a room elsewhere on campus or a quiet corner of a coffee shop or park (where recording is possible with minimal background noise), to increase their comfort level. Two interviewees accepted my offer to be interviewed off campus.

I provided each study participant the opportunity to review and correct interview statements (member checking) before my final analysis. This process added trustworthiness to the study (Lincoln & Guba, 1985; Lincoln, 1995). The interview transcript was sent to each participant via e-mail and, after their review, returned to me, with any amendments, via e-mail. Although some researchers believe that member checking is a more positivist practice, most researchers consider it an important component of qualitative research to ensure that the participants have actually said what they meant to convey (A. F. Chávez, personal communication, January 16, 2011).

Focus groups. The second method I used was focus group interviews. I conducted group interviews, called focus groups, a process that entails systematically and simultaneously asking questions of multiple participants (Fontana, 2002). Keeping the number of participants in each of the focus groups small (they ranged from three to six participants) was essential to ensure that each person had the opportunity to express opinions (Greenbaum, 1998). Even with the relatively small number of interviewees in the focus groups, I “encourage[d] all participants to talk and monitor[ed] individuals who may dominate the conversation” (Creswell, 1998, p. 124).

I posed the same semi-structured, open-ended appreciative inquiry style questions to focus group participants that I asked the one-on-one interviewees (see Appendix B, Focus Group Guide). An advantage to focus groups is that a group setting can make participants more willing to share their insights. Also, focus groups interaction often leads to spontaneous reactions as well as memory triggers which might not occur during individual interviews (Kvale, 1996); this appeared to be the case in most of the focus groups that I conducted. The focus groups provided an opportunity for me to understand what participants think and how they make meaning of each other's perceptions (Denzin, 1978). Also, I found that the group's discussion produced information and insights that would be less accessible without the interaction found in a group setting because listening to each other's experiences seemed to stimulate memories. This process is also known as the group effect where group members engage in "a kind of 'chaining' or 'cascading' effect; talk links to, or tumbles out of, the topics and expressions preceding it" (Lindlof & Taylor, 2002, p. 182); however, I strove to facilitate the focus groups in ways that encouraged multiple perspectives and avoided groupthink (Janis, 1972).

Morgan (1997) contended that focus group interviews "…typically add to the data that are gathered through other qualitative methods, such as…individual interviews" (p. 3). However, focus group interviews also share the weaknesses of individual interviews (Yin, 1994). See Table 1. Interviews: Strengths and Weaknesses. On balance, I believe that the additional data gathered from the focus groups at the two university libraries served to confirm and further enhance my research findings.

Document analysis. The third method I used was a review and analysis of documents, archives, artifacts and other secondary materials. Yin (1994) identified six primary sources of evidence for case study research, adding that not all these sources of data are essential in every case study. However, the importance of multiple sources of data in a study is well established (Stake, 1995; Yin, 1994). While these scholars stress that no single source of data has a distinct advantage over others, the use of multiple data sources is often complementary when used in tandem to either strengthen other data or add new data to the mix. In this study, in addition to individual and focus group interviews, I used three other data sources identified by Yin (1994). These document analysis data sources include documentation, archival records, and physical artifacts. Yin (1994) offered a table, depicted in Table 3, to show the strengths and weaknesses of each type of material (p. 80). As with the interviews, I remained mindful of the strengths, and especially of the weaknesses, of these methods as I conducted this part of my data collection and analysis.

Table 3

Types of Evidence for Document Analysis: Strengths and Weaknesses

Source of Evidence	Strengths	Weaknesses
Documentation	• stable – repeated review • unobtrusive - exist prior to case study • exact - names etc. • broad coverage - extended time span	• retrievability - difficult • biased selectivity • reporting bias - reflects author bias • access - may be blocked
Archival Records	• same as above • precise and quantitative	• same as above • privacy might inhibit access

Physical Artifacts	• insightful into cultural features • insightful into technical operations	• selectivity • availability

Source: *Case study research: Design and methods*. Yin, 1994, p.80.

I reviewed any of these available material types as they pertained to the disaster response and recovery process at both university libraries. Specifically, I located items including written material such as published articles and chapters in a book about the library's disaster, internal unpublished documents, memoranda, agendas, and disaster plans as well as any available photographs, poems, drawings, and other ephemera such as a hand-made book of remembrances, decorated hard hats, and a quilt. I checked the provenance of the documents so as to avoid incorrect data being included in the study. I reviewed the documents and other materials for any themes that might emerge. I paid special attention to any references to emotional intelligence attributes or competencies mentioned in the documents or inferred from the artifacts.

I anticipated that certain aspects of the disaster process might have significant recorded details while other aspects of the process might have received virtually no attention and this proved to be the case. Nevertheless, documents, archives, and artifacts about the disaster and the process of responding to and recovering from it proved useful in providing a behind-the-scenes look at some aspects of the disaster that was forgotten or not mentioned by the interviewees and/or focus group participants. In addition, documents and other materials were useful to corroborate evidence gathered from other sources (Yin, 1994). Thus, these data further enhanced my research findings.

Research Protocol

I had previously contacted the library Deans at each university that I planned to study. Once my research plan was approved, I asked the Dean or designate at each university to provide a list of names and contact information of all disaster team members and other library employees who participated in the emergency response and/or disaster recovery process. The Dean at the University of Iowa did the initial contacting of potential participants at that institution.

Using my Script for Initial Participant Contact (Appendix C), I contacted each employee at the University of New Mexico (either by phone or e-mail) who was currently working at the libraries and any who had left since the disaster (when they could be located), regardless of job classification or title, to provide them with an overview of the study process and to invite them to participate. I followed up with the employees at the University of Iowa who were initially contacted by the Dean there. I informed these potential study participants that participation in my research study was entirely voluntary, with no incentives provided beyond their interest in furthering research about the disaster response and recovery process in academic libraries. I assured their confidentiality by not using their names in the study. I included this information on the Purposive Sampling Grid. A blank version of the grid is shown in Appendix D. The Dean at the University of Iowa (and/or her assistant) scheduled the one-on-one interviews and focus group session there. At the University of New Mexico, I gave each disaster team member who agreed to be interviewed the choice of participating in either an individual interview or to be part of a focus group, using semi-structured open-ended appreciative inquiry style questions. At both institutions, study participants who assisted in the disaster process but were not a

standing disaster team member were assigned to a focus group. I asked all participants to read and sign the Consent to Participate in Research Form (Appendix E) and gave them a copy of the form for their records.

Although there is no ideal number of individuals needed to participate in qualitative research (Patton, 2002), I conducted in-person interviews with four library employees at the University of Iowa library and six library employees from the University of New Mexico library who were willing to discuss their perceptions and experiences about the disaster at their library. Each initial interview lasted approximately one hour, with each set of questions in the appreciative inquiry 4-D cycle constituting approximately a quarter of the interview, although some questions took more or less time to fully answer. Each interview was audio recorded using a Sony ICD-UX512 2-GB Flash Memory Digital Recorder so that the exact words of the interviewees were faithfully represented. I also conducted a face-to-face, follow-up one-hour interview with each participant, usually within a week, which was also audio-recorded. I did not conduct follow-up meetings with focus group participants. I asked the same overarching questions of each participant using appreciative inquiry protocol; however, much of the follow-up interview was devoted to probing questions and information that participants had jotted down between the two interviews (Interview Guide, Appendix A).

I conducted one, one-hour focus group at the University of Iowa library and three at the University of New Mexico library, with each consisting of three to six participants. At the University of Iowa, I conducted one focus group consisting of six participants. At the University of New Mexico, I conducted three focus groups consisting of three, five, and three participants respectively. The focus groups were also audio-recorded (Focus

Group Guide, Appendix B). When possible I conducted the individual follow-up interviews after I conducted the focus group interviews, so that I could ask additional probing questions about stories shared in the focus groups.

After the individual interviews and focus groups were conducted at each institution, I sent the digital files to a transcriptionist that was recommended by the College of Graduate Studies at the University of New Mexico. To accomplish this task, I converted each voice recording into an MP3 file and downloaded each file onto my personal computer from my digital recorder by connecting the recorder's USB port to my personal computer's USB port. Since the digital MP3 files were too large to send through my e-mail provider, I copied them and sent them as an attachment to my transcriptionist via a secure FTP server provided by a commercial file sending service called YouSendIt.

I did not wait until I had conducted all the interviews and focus groups to begin this process, rather I sent each digital recording to be transcribed after each interview in an attempt to ensure prompt return of the transcripts in order to meet my time line. Regretfully, due to family illness, my transcriptionist was not able to complete some of the transcripts, while the completion of others was significantly delayed. Therefore, I transcribed about half of the recordings myself. This was the main difficulty encountered in the process. After the audio files were transcribed and the transcripts were coded, all copies on my digital recorder, my personal computer, and the commercial file service were deleted, per my research protocol.

Once I received the transcribed interview or transcribed the interview myself, I forwarded it to the interviewee, giving him/her the opportunity to add, remove, or revise the information that they previously provided. This process is known as member

checking. This respondent validation via member checking is needed to ensure that the transcripts accurately reflect the interviewees' meaning (Merriam, 1998). The interview transcripts were sent to each participant via e-mail and returned to me, with any amendments, via e-mail. Most interviewees made no changes to their transcripts; however, three participants suggested fairly minimal changes. I incorporated all interviewee feedback and changes into the data. Focus group participants were not asked to review those transcripts, since responses were not attributed to specific individuals.

I also studied documents, archives, and other materials by reviewing those that were known to me and then adding new materials as I discovered them. Study participants brought to my attention many items such as personal e-mail, notes, and photographs and other artifacts. These materials were also added to the Purposive Sampling Grid (Appendix D) as well as to the Data Collection Grid (Appendix F).

I conducted my data analysis of the individual and focus group interviews as well as of the document analysis and prepared my results, conclusions, and recommendations. Finally, I provided copies of my final report to those who requested a copy of it.

Data Analysis

Data analysis of qualitative research consists of examining, categorizing, recombining, and tabulating data to address the research question. Miles and Huberman (1994) reminded us that data analysis is not an off-the-shelf process, but it is custom-built, revised, and choreographed. Data analysis of case study is one of the least developed aspects of the case study method; therefore, as a researcher using case study method I needed to partially rely on my instincts and on the literature as my guide to present the data in various ways, using various interpretations, and learning as the process

unfolded (Yin, 1994, 2003). Dey (1993) concurred that qualitative researchers learn by doing. However, Creswell (1998) provided some guidance for data analysis using the case study research method (that Creswell referred to as a tradition), which I used in my research analysis and representation of the data.

Since there is no "prescribed" approach for analyzing case study data, I engaged two types of analysis to code the data that I gathered from the individual and focus group interview transcripts at each university library: emergent thematic coding (a constructivist approach) and mapping emotional competencies (a more positivist approach). For reviewing various documents and other materials related to the disaster at each university library, I used emergent thematic coding, since the nature of the documents did not lend themselves to mapping emotional competencies.

Emergent Thematic Coding

The first type of analysis that I applied was emergent thematic coding. Thematic analysis is a general method for qualitative analysis of transcripts or other similar text data sources, using "…a process of segmentation, categorization, and relinking of aspects of the [data] prior to the final interpretation"(Grbich, 2007, p. 16). Thematic analysis/coding is commonly used with many methodologies of qualitative research and serves to summarize issues emerging from the data (Grbich, 2007). For interview data, I began my preliminary data analysis "as each data segment is collected [and transcribed]…to summarize issues emerging [as well as] to identify further questions [or probes] which need to be asked [in follow-up interviews] in order to gain holistic data" (Grbich, 2007, p. 16). To the extent possible, I also conducted preliminary thematic coding on documents as I identified them. I made notes and formed preliminary codes.

I initiated a thorough, final thematic analysis to code my data once all of it was collected. I coded the data by hand, rather than using one of the many computer-assisted programs available because after reviewing several programs and trying out a couple of programs using data from another study I conducted, I felt more comfortable and closer to my data when I coded it manually. As I combed through all the data, carefully rereading the transcripts of each individual interview, follow-up interview, and focus group interview; listening to the digital audio recordings of the interviews to further enhance my understanding of participants' comments; as well as reviewing all the documents and other material I collected, I made additional notes, formed codes, and established patterns of categories (Creswell, 1998).

Specifically, I prepared for coding by making a copy of each interview transcript, formatting them with extra wide margins and triple spacing them to provide room for notes and codes. I prepared my notes about documents and other materials in a similar manner. Next, I coded the text into "meaning groupings" using a block and file approach so that I could keep fairly large chunks of data, representing a category, intact (Grbich, 2007); however, to find these chunks, I read through all the data line-by-line, phrase-by phrase, and by single words (Coffey & Atkinson, 1996).

I coded each data grouping with a word or brief phrase to represent its category for ease in later tracking and organization. These words and brief phrases formed basic categories, patterns, or themes. I prepared a summary of themes and then reviewed the data again, comparing each statement with the theme words or phrases identified in the data to ensure that the theme adequately and accurately expresses the original meanings (Anzul, Downing, Ely, & Vinz, 1997). Some phrases included several themes and were

coded accordingly. I also sought to establish patterns and looked for a correspondence between categories to show the relationship between emotional intelligence and the attributes of library disaster team members (Stake, 1995).

Finally, I was able to match answers given by the participants to one or more of the specific questions asked in the interviews and focus groups with my research question and its four sub-questions. This process allowed me to answer my research questions. The relationship grid is depicted in Table 4 and Appendix F.

Table 4

Data Collection Grid for Interview and Focus Group Questions

Research Question: What is the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members who responded to and led their library in its recovery from a disaster?	Interview/Focus Group Question #: Potentially all questions.
Which emotional intelligence competencies emerged in DRAT members during the disaster response and recovery process?	Interview/Focus Group Question #: 1a, 1b, and 2a.
What unique meaning do individual DRAT members make of various emotional intelligence competencies that emerged during the disaster response and recovery process?	Interview/Focus Group Question #: 2c, 3a, 3b, and 4a.
Which emotional intelligence competencies are most common among DRAT members?	Interview/Focus Group Question #: 1a, 1b, 2a, 3c, 4b, and 4c.
Which emotional intelligence competencies do DRAT members consider to be of greatest importance in leading the disaster response and recovery process?	Interview/Focus Group Question #: 1c, 2b, 3c, 4b, and 4c.

Predefined Concept Choice Mapping

The second type of analysis I applied to my data was a form of mapping similar to conceptual mapping, which uses either a few words or brief summaries of the issues that emerge in a study (Grbich, 2007). However, in the mapping part of this analysis, I used a predefined concept choice system, meaning that I coded only from a predefined set of emotional intelligence categories. To accomplish this part of my analysis, I mapped the categories and themes found in the data against Goleman's 2001 model of emotional intelligence. Their model uses a framework to define the construct of emotional intelligence which he divides into four behavioral groups or domains including self-awareness, self-management, social awareness, and relationship management, with twenty emotional competencies including emotional self-awareness, accurate self-assessment, self-confidence, emotional self-control, trustworthiness, conscientiousness, adaptability, achievement drive, initiative, empathy, service orientation, organizational awareness, developing others, influence, communications, conflict management, visionary leadership, catalyzing change, building bonds, and teamwork and collaboration (Goleman, 2001).

Since I mapped emergent categories or themes that were identified in the data to predetermined emotional intelligence attributes in the second part of my analysis, some readers may question if this part of the research is considered a constructivist or positivist mode of inquiry. Many researchers would argue that the mapping aspect of my data analysis does shift this part of my study toward the positivist side of the continuum, while remaining qualitative overall. While I agree with that view point, I contend that no matter where mapping falls along the positivist-constructivist continuum, applying

predetermined concept choice mapping to the data in my qualitative study serves to provide a valuable, additional layer of understanding about the relationship between emotional intelligence competencies and the personal attributes of academic library disaster research team members.

Empathetic Neutrality

As I interpreted, coded, and mapped the responses in the transcripts and data from the documents, I strove for empathetic neutrality, which is a quality of qualitative researchers who strive to be non-judgmental when compiling findings (Patton, 1990). As I demarcated the pertinent and meaningful themes and patterns in my data and mapped Goleman's emotional intelligence attributes, I posited answers to my research question about the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster, and to my research sub-questions, including which competencies emerged during the disaster, which are most common, and which are considered to be of greatest importance. I explored the themes and patterns that emerged for each institution as well as across institutions. I depicted my findings in tables and figures developing naturalistic generalizations from which others can learn (Creswell, 1998).

Qualitative Rigor

As one application of rigor in the naturalistic paradigm, I pursued goodness as an integral and embedded component throughout my research process. Goodness in qualitative research can be seen "as a means of locating situatedness, trustworthiness, and authenticity" (Tobin & Begley, 2004, p. 391). Goodness may also be seen as

developmental – leading to growth of understanding, surfacing of clarity, and emerging of criteria (Lincoln, 1995). Thus, goodness "becomes an overarching principle of qualitative inquiry and an interactive process that takes place throughout the study" (Tobin & Begley, 2004, p. 391). In addition, since goodness is also how thoroughly a researcher designs the research within their research philosophy (A. F. Chávez, personal communication, January 16, 2011), I carefully designed my study in congruence with qualitative principles. For example, I used semi-structured open-ended questions to elicit responses from study participants and conducted an emergent analysis of the data.

I meticulously applied rigor at the start of my data collection and I continued to apply it throughout my data analysis of the transcripts of participants' interviews and focus groups, as well as the secondary documents (Bastic, 2003) related to emotional intelligence competencies. Applying rigor enabled me to arrive at "thick description," which is a rich and extensive set of details concerning methodology and context provided in a research study. Rich descriptions are the hallmark of sound qualitative research and the basis for qualitative data analysis (Denzin, 1989). First used by Ryle (1949) and later by Geertz (1973), thick description refers to detailed accounts of field experiences in which the patterns of relationships are put into context by the researcher (Holloway, 1997).

As another critical application of qualitative rigor, I pursued trustworthiness throughout my research endeavor. Trustworthiness is demonstrated through credibility, which is comparable with internal validity, transferability, which is comparable with external validity, dependability with is comparable with reliability, and confirmability, which is comparable with objectivity or neutrality (Lincoln & Guba, 1985; Silverman,

2001). Credibility is “an evaluation of whether or not the research findings represent a ‘credible’ conceptual interpretation of the data drawn from the participants’ original data” (Lincoln & Guba, 1985, p. 296). Transferability is the degree to which the findings of the research can apply or transfer beyond the bounds of the study. Dependability is an assessment of the quality of the integrated processes of data collection, data analysis, and theory generation. Confirmability is a measure of how well the inquiry’s findings are supported by the data collected (Lincoln & Guba, 1985). In my research study, trustworthiness was advanced through the strategies outlined below.

The credibility of qualitative research findings relies heavily on the confidence readers have in the researcher’s ability to be sensitive to the data and to make appropriate decisions in the field (Patton, 1990). Theoretical sensitivity refers to a personal quality of the researcher that indicates an awareness of the subtleties of the meaning of data – “the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't't” (Strauss & Corbin, 1990, p. 42). Strauss and Corbin (1990) believed that theoretical sensitivity comes from a number of sources, including professional literature, professional experiences, and personal experiences. Thus, my theoretical sensitivity – my credibility – is enhanced by my extensive review of the literature pertaining to my study as well as my personal and professional experiences with responding to disasters in an academic library setting and conducting scholarly research.

As with all qualitative research that is conducted in a natural setting (field focused), studying unique events, and with a small sample size, I did not focus on generalizability to other settings and situations (Collis & Hussey, 2003). Instead, I used

thick description as the foundation for my analysis and reporting to achieve some level of transferability to other times, settings, situations, and people (Tobin & Begley, 2004).

Through my use of thick description I believe that I was able to foster dependability as I converted my data into a coherent, comprehensive, and detailed account of the emotional intelligence competencies and personal attributes used by library disaster response assistance team members as they responded to and led the library to recover from a disaster, thus taking the reader into the setting being described by the participants. Specifically, I feel that I achieved a level of dependability by maintaining a self-critical account – or self-audit – to ensure that the process I used in my research was logical, traceable, and clearly documented so that others can examine my documentation of data, methods, decisions, and end product. This process also facilitates confirmability by establishing that my interpretations of the findings are clearly derived from the data I gathered (Tobin & Begley, 2004).

This thoroughness of method and thick description hopefully increased the goodness and trustworthiness of my research, supporting the argument that my study's findings are "worth paying attention to" (Lincoln & Guba, 1985, p. 290), and allowing the results of my research to be accepted with confidence (Lincoln & Guba, 1985).

An additional method of qualitative rigor is triangulation – the use of multiple and different sources, methods, and theories to corroborate evidence by cross-checking data through different sources (Creswell, 1998; Glesne & Peshkin, 1992; Lincoln & Guba, 1985; Merriam, 1988; Patton 2002). Case studies in particular use multiple sources of data for triangulation as a means of improving trustworthiness (Leedy & Ormrod, 2005). In this research study, I used two methods of triangulation as described by Denzin (1984)

and Patton (2002) to establish a high level of corroboration of my data. They are referred to as methods (or methodological) triangulation which is when one approach is followed by another to increase confidence in the interpretation; and data source triangulation, which is when the researcher looks for the data to remain the same in different contexts. For example, in my study I asked the same semi-structured open-ended appreciative inquiry style questions in each individual interview and focus group (with variant context-appropriate probing questions) and I used three categories of data sources (individual interviews, focus groups, and document review) to gather data for each case study. By using these triangulation processes for my data collection, I was able to draw conclusions from the data by comparing and analyzing data from one source against data from other sources (Denzin, 1978).

Ethical Considerations

As a researcher at the University of New Mexico (UNM), I have completed the Collaborative Institutional Training Initiative: CITI Social/Behavioral required training for investigators involved in human research. The CITI program provides research ethics education to all members of the research community. CITI draws its training about research ethics from the universally accepted National Commission for the Protection of Biomedical and Behavioral Research, The Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects Research (1979).

I applied for Internal Review Board (IRB) consent for this study from the UNM Human Research Protections Office and my study was approved. The University of Iowa (the other site of my study) did not require a separate IRB to conduct human subjects

research at that institution since I completed one at UNM. I did, however, secure a letter of permission from the Deans of each of the libraries where I conducted my study.

I understand that ethical issues must be carefully considered and addressed for interviews and focus groups due to the personal nature of these methods (Patton, 2002). When conducting human research, the well-being of research participants was my top priority. In addition, the Belmont Report (1979) outlines three core ethical principles that must be adhered to when conducting research: respect for persons which requires a commitment to ensuring their autonomy, protecting them from exploitation, and respecting their dignity; beneficence which requires a commitment to minimizing risks, including social and psychological ones; and, justice which requires a commitment to ensuring a fair distributions of risks and the benefits of the knowledge gained from the research. I maintained awareness of and arduously followed all criteria set for human subjects as I collected data from research participants in interviews and focus groups at both universities.

Informed Consent

All research participants were informed about the purpose of the investigation and the main features of its design (Kvale, 1996). Participants in the study were volunteers and had the freedom to withdraw from the study at any point. They were informed that their names would be kept confidential when reporting their data. They were also informed that they would have the opportunity to review the transcript of their interviews to make any needed corrections. As part of my research protocol, each participant received and signed the Consent to Participate in Research Form (Appendix E) outlining

all the above points and delineating any risks associated with participating with the research prior to taking part in either interviews or focus groups.

Timeline for the Study

This study took approximately one and one-half years to complete. It began in the Spring 2010 semester with the development of my research question and sub-questions, review of the literature, preliminary design of the study, and initial contact with the Deans of the two academic library sites for the study. The study concluded in the fall 2011 semester with the written analysis of my research findings being completed in early 2012.

Summary

This research study primarily used a constructivist perspective with a qualitative mode of inquiry to enable me to gain a deep understanding of the relationship between emotional intelligence competencies and disaster response assistance team member's emotional experiences and personal attributes while leading a disaster response and recovery process. I described how my research followed an instrumental case study methodology to explore and understand this relationship.

The population I sampled consisted of members of the disaster teams and other library employees who participated in the disaster process from two libraries. I used purposeful criterion sampling to select participants for individual interviews and focus groups. Each participant had been involved in the disaster response and recovery effort at his/her academic library. I used appreciative inquiry protocol for the interview and focus group questions. I conducted my document analysis using snowball sampling in which I began by reviewing known documents and added new documents as I learned about their

existence either from study participants or through references in the initial documents that I reviewed. Finally, I discussed how I analyzed the data by applying emergent thematic coding, a purely constructivist qualitative approach, and how I completed my analysis by mapping the data attributes to Goleman's (2001) Framework of Emotional Competencies, a primarily positivist qualitative approach.

CHAPTER 4

EMERGENT THEMATIC CODING PRESENTATION AND ANALYSIS: A TAPESTRY EMERGES

"The achievements of an organization are the results of the combined effort of each individual." ~~ Vince Lombardi

Introduction

The steps involved in disaster planning, response, and recovery processes are well-documented in the literature (Alire, 2000a; Corrigan, 2008; Fortson, 1992; Kahn, 1998; Todaro, 2009; Wilkinson, Lewis, & Dennis, 2010). What is not well known is what internal resources – the emotional wherewithal – the disaster response assistance team (DRAT) members draw upon as they move through the disaster response and recovery processes. Since I helped lead a response to and recovery from several major disasters at the academic library where I work, I had a deep personal understanding of the emotional competencies that I drew upon to deal with the rollercoaster of emotions that I lived from day-to-day. The compelling stories of twenty-seven disaster team members at the Universities of Iowa and of New Mexico where I conducted my research study took the participants and me back in time.

Summary of Findings

I engaged in two types of analysis to code interview and focus group data gathered from professionals at the University Libraries in my study: emergent thematic coding and predefined concept choice mapping of emotional intelligence competencies. A deep tapestry of stories, images, and artifacts emerges from analysis of participant

narrative, documents, archival records, and physical artifacts associated with response to disasters at the University of Iowa (UI) Libraries and the University of New Mexico (UNM) Libraries. In Chapter 5, I present data from mapping the emotional intelligence competencies participants described in their stories.

The themes that emerged tell a rich, complex story about the relationship between emotional intelligence competencies and personal attributes of academic library response assistance team members. The overarching theme that emerged was one of disaster team members creating a culture of camaraderie, sharing responsibility to cope with the disaster, exemplified through teamwork, collaboration, and initiative. A more complex finding involved my realization that leadership during the disaster was largely carried out through teamwork and collaboration, not predominately emanating from a single, top leader. Even more complex was my discovery that although leadership was clearly exhibited by the traditional, top leader(s) in these libraries, it was most often manifested through the initiative of other individuals on the disaster team or by the team as a whole. These disaster team members took responsibility for various aspects of the recovery process at different times and made quick decisions in the moment, as opposed to waiting for the Dean or another senior administrator to make those decisions. The participants at both libraries, including the Deans themselves, were adamant about the notion that leading the disaster could not be a top-down process, that leadership was shared, and that everyone needed to “leave their ego at the door” and “step up.” Other major, interwoven themes that emerged were communications, trust/trustworthiness, and adaptability/flexibility. I also discovered several associated concepts occurring within the major themes. These additional aspects provided a fuller sense of what the disaster team

members experienced as they faced the many challenges and opportunities brought about by the disasters. Finally, my research suggests that there is a strong relationship between emotional intelligence competencies and the attributes of library disaster team members.

Context of Disasters at Two University Libraries

What immediately follows is an overview and timeline of events as a flood slowly approached the UI Libraries and as a devastating fire suddenly struck the UNM Libraries. Although these two disasters were quite different, the emotional responses to them were not so different. My intent with this overview is two-fold: to paint a picture for the reader about thoughts, experiences, and responses of disaster team members as well as to aid the reader in understanding the urgency of disaster response – whether you have warning of a disaster's approach or it strikes suddenly – and why this work differs from everyday practice. My hope is that this overview will set the stage and provide context for a comprehensive discussion of my findings that forms the heart of my research.

Long Time Coming: The University of Iowa Flood

The following are excerpts from two documents related to disaster response at the UI Libraries: Nancy Kraft's blog, *Preservation Beat*, and an unpublished manuscript she shared with me (Kraft, 2008). Her manuscript included extensive quotes from her blog. Nancy Kraft is the preservation librarian. From her manuscript:

> Nothing was more extreme in Iowa than the record flooding in June 2008 that caused billions of dollars in damage and impacted more than 300 communities. Nine rivers in Iowa reached all-time record flood levels, and 85 of the state's 99 counties were declared disaster areas…The Iowa River flooded as well, coming up slowly, giving us time to prepare. It, too, exceeded all previous records but,

fortunately, did not get as high as the worst case projections. The Iowa River came up slowly and went down slowly…I work at the University of Iowa [in Iowa City] which is thirty miles from Cedar Rapids and on the Iowa River…Several major libraries [including the University of Iowa's library] and museums were affected by the flood, and a number of cultural institutions were devastated. Fortunately, training and long-established networks greatly enhanced our ability to respond to the unprecedented flooding…Some disasters are sudden events that occur with little to no advance warning. With floods, you often have some time to get ready for the event. Preparing for the disaster — working right up until the time to evacuate — adds another layer to disaster response. It's been my standard practice to keep a log whenever I am dealing with a disaster. This time, I converted my log to a blog.

Initially, through Nancy Kraft's blog (Kraft, no date) and later, through several observations made by other library disaster team members that I spoke with, readers can gain a better understanding of the events, fears, and apprehension as the flood waters slowly approached the library and as water finally seeped into its basement on Friday, June 13, 2008.

From the *Preservation Beat* blog:

Thursday, June 5, 2008: Forecast of Rain – With forecast of continuing rain over the next few days…I began collecting phone numbers for a phone tree, wallet sized.

On Friday, Nancy Kraft mentions that she attended a "Save Our Stuff Conference" with a timely session on disaster response and recovery. She noted "on my

drive to [the conference]…the ground is saturated, there is water everywhere and my sense of foreboding deepens." On Saturday she went shopping with her daughter for rain boots.

More from the *Preservation Beat* blog:

Monday, June 9, 2008: Flood Alert! – The University put out a call for assistance with sandbagging low lying buildings on campus. An announcement is sent out "The University of Iowa has suspended normal activities on the arts campus due to anticipated flooding."

Tuesday, June 10, 2008: Flood Alert Continues – The UI Libraries disaster response team begins meeting every morning at 9 AM…wallet-sized emergency phone numbers were distributed. We welcomed staff relocated from the Art and Music libraries. Sandbagging continues.

Wednesday, June 11, 2008: Flood Prep Continues – We met with the water utilities engineer…to discuss flood levels and options for protecting the Main Library…His figures show the library at high risk of flooding…staff started moving special collections material shelved in the basement to the upper floors.

Thursday, June 12, 2008: Constantly Changing Picture – In the morning we were told that there are no current plans to evacuate the Main Library…In the afternoon we learned that…we are under a 5 PM Friday deadline for what we need to move from the basement…Our attempt to organize sandbagging of the library dock to keep flood waters from entering the lower level is having its ups and downs…At 5 PM, our library director received word that the Main Library will be closed to the public, Friday, June 13 at 5 PM for an indeterminate period of time…it took 2

> 1/2 hours to get home [then]…the unbelievable sight of downtown Cedar Rapids under water. Seeing our home town under water, it is hard not to cry.

From the tone of Nancy Kraft's blog readers can get a sense of how fears about approaching flood waters worsened with each passing day leading to an evacuation on Friday the 13th. She describes the scene on that ominous Friday in her blog as follows:

> *Friday, June 13, 2008: Evacuation of the University of Iowa Main Library* – At 6AM, I sent the following e-mail to library administrators: "After seeing the Czech/Slovak Library/Museum under water almost to the roof top and water to house rooftops and church steeples and watching flood level forecasts, I'm thinking we should revise our scenario of about 1 foot of water in Main [library] to 5 feet"…We had a very brief [library] meeting around 8 AM…One of my staff arrived in tears as she was concerned that her house would be flooded. We agreed that after all equipment and materials were out of the preservation department, preservation staff would assist her in sandbagging her house…On Thursday, we were told we had two days to evacuate — Friday and Saturday…Later in the day, we were told that we could not come back on Saturday — actually, we were told to stay home for a week. News reports resulted in the arrival of hundreds of volunteers of all ages, including faculty, students, and local citizens…Our evacuation was phenomenal. I've never seen anything like it…We used carts and elevators, human book chains snaking the collection up the stairwells, and box brigades. We had a hard time keeping up with our volunteers. We'd identify a section for packing out, point them to it and they'd swoop in like locusts to empty the shelves…We kept 3 and 4 human chains going at a time, with volunteers

> sometimes belly to belly…We...evacuated all staff (150), over 100 computers, all special collections material up to 4-5 feet from the basement floor…It was incredible. We worked until 8:30 PM…Almost all roads were under water and closed.

An observation made by another library disaster team member about the events and emotions as the cresting river waters approached the Main Library follows:

> The word at that point, from ourselves, was maybe we ought to move some books…It was very team oriented, as it had to be, because no one person can take care of all this…by afternoon, we had all those volunteers moving all those books out of here and I felt like we were doing everything we could at that point.

Another person echoed these observations, during a focus group, commenting that:

> We did not want to stop, we just wanted to keep going and work, the volunteers, too. We all just worked together as a team all of equals with no real hierarchy. We were supposed to stop at 4:30 and close the building, but we just kept getting extensions and kept everyone, and the volunteers too, we all just kept going together.

Out of Nowhere: The University of New Mexico Fire

As the team leader of the library's disaster response assistance team, and the Acting Dean, I was the first library responder on the scene on the night of the Zimmerman Library fire. The following is a description of my initial reaction to learning of the fire; talking with Russ Cole, the library staff member who evacuated the building; talking by phone with library administrators, including the Dean, Camila Alire, who was away in Washington, D.C. at the time; my thoughts as I waited throughout the night with

Ed Padilla, the library's Facilities Manager; and my hopes for recovery. This free-form narrative was included in the *Zimmerman fire: (re)collections* commemorative book and copied below (Wilkinson, 2008).

> *April 30, 2006, Thoughts*
>
> Phone rings. It's late. After 11 p.m. This can't be good. Zimmerman is on fire! Could it be a false alarm? No. Is everyone out safely? Yes. I am told: Come now! Come quick! Meet UNM chief of police there. I call Ed to meet me there. Grab Emergency Response and Disaster Preparedness and Recovery Plan. Drive to campus. Many thoughts. Shock. Disbelief. How could this happen? Will Zimmerman still be there? It has to be! I park by campus police. Walk toward Zimmerman. What will I find? People everywhere. Walking. Running. Pointing. Talking. Is it chaos? No, a ballet. Fast. Then in slow motion. Then fast again. Police. Firefighters. Physical Plant personnel. Provost. Media quickly taken to ROTC parking lot. Must find Russ. Students from dorms in pajamas. Watching. Smoke. Water. More smoke coming from broken skylight. Talk to Russ. Look at floor plans with Ed, police, firefighters. Answer questions. Call Johann, Teresa, Nancy. Talk to Camila in Washington, D.C., again. She'll be back tomorrow afternoon. Talk to Ed. More smoke. A gray ghost fills up the T-area – eerie iridescent smoke. Can't see furniture or anything anymore. No! The West Wing cannot burn. Minutes pass. Or was it years? Time stops. Time within time. More thoughts. Someone says the fire is under control. Yes! Only a few hot spots. Give thanks. Then wait. People leave. People come. Someone tells me the State Fire Marshall is on his way. More phone calls. Morning will come. Employees will

come. Students will come. More calls back and forth. Re-read Disaster plan. Make plans. Activate phone tree to tell employees. DRAT to meet in CSEL at 8 a.m. Service can't stop. Talk to Ed. More calls. Brief quietness. Sit in parking lot. Tired. Sadness. Random thoughts. We did nothing to deserve this. Why did this happen? Could it be arson? No! Maybe? But who would do such a thing to this special place on the campus, in the state, in our hearts. Thoughts interrupted. The State Fire Marshall asks: Do we want to go into the building? Ed and I. Yes! Adrenaline. Want to see it. Don't want to see it. Have to see it. Smoke burns my eyes. Smoke burns my throat. Smoke makes me cough. Go to basement. Water. Soot. Zimmerman 3, dark. So dark. Can barely see. Burned bound journals. Burned carpet. Ceilings. Walls. Everything. More water everywhere. Can't breathe. Must hide it or they will make me leave. Breathe through my sweater sleeve. Thoughts a jumble. Is it a dream? This is surreal. No. This is real! Shock. Anger. Such sadness. I want to cry. No time now. Mourn later. We all will in our own way and time. Determination. We must rebuild. Make it right. But can this ever be made right? Later I will know. We will all know how. Walk through all floors. Everywhere. Reference is bad. Center is safe. Just smoke. Outside now. Air. I can breathe. More phone calls. Questions from everyone. Told to meet with campus administrators at 7 a.m. at campus police station. Then quiet in the parking lot. So quiet. Looking at Zimmerman. More thoughts. People coming soon. Expecting normal. So much to do. We cannot fail. We are stronger than we think. So much to do. We can do it. Together. So much to do. Mourn. We know the unimaginable can happen. Eyes open. So much to do. Rebuild. Better. Maybe?

> Never the same. So much to do. Zimmerman is far more than a building. History. Stories. Memories. We will rebuild. We will provide service to all. That's what we do. Together. Nearly one year later…acknowledge our struggles. Honor our spirit. Celebrate our triumphs. And remember. ~~ Fran Wilkinson, April 13, 2007, 3:16 a.m.

The following is an excerpt from a document that I reviewed, a book chapter offering a case study about the Zimmerman Library fire (Castillo-Padilla, Dennis, Lewis, & Wilkinson, 2010, p. 145-159). This case study, written by members of the UNM Libraries' disaster team offers a basic outline of the damage caused by a fire in 2006 and a flood in 2007. The flood re-damaged the basement level, which was being rebuilt as a result of the fire, just days before the area was scheduled to be reopened. A brief timeline of the recovery is also included to aid the reader in understanding the series of events that will be discussed by interview and focus group participants later in this chapter.

> Just before 11 p.m. on Sunday, April 30, 2006, a fire started in the east section of the basement level in Zimmerman Library completely disrupting and shutting down all library operations…The library staff on duty at the time of the fire…evacuated the building within six minutes. Many students preparing for final examinations, just two weeks away, were in the library at the time of the fire…Because finals week was approaching, the library had to begin planning immediately to meet the needs of the students as well as planning a timely response and recovery to the disaster. With the knowledge that the library had sustained significant damage, the library administration the assembled DRAT members at 8:00 a.m. that Monday morning…A detailed inventory later revealed

> that approximately 30,000 volumes were lost or severely damaged…On May 5, 2006 the library regains partial possession [of the building from the State Fire Marshall; it had been designated a crime scene and arson was being investigated], contractors begin removal of destroyed furnishings, equipment, etc…May 10, 2006 the library regains occupancy of the building, with access limited to administrative staff and DRAT members [and contractors]….On June 26, 2006 the Zimmerman lobby and West Wing are reopened to the public [other areas remain closed for reconstruction]…January 2007 the Zimmerman first floor reference area [directly above the fire] is reopened to the public…October 31, 2007 the construction is completed…awaiting certificate of occupancy [to reopen all areas to the public]. A 10" main water riser/pipe dislodges, flooding the newly rebuilt basement level [reconstruction begins again]…April 30, 2008 the official opening celebration takes place.

Discovering a Tapestry of Themes

The goal of my qualitative investigation was to understand the complex world of the individual's lived-experiences and behaviors from their point-of-view as well as the emergent themes revealed in the collective patterns of activity and emotions they experienced. To better achieve this goal, I structured my interview and focus group questions using an appreciative inquiry style because appreciative inquiry questions treat issues as opportunities for growth, change, and renewal rather than as problems (as most people would view a disaster) in an organization. My questions were specifically crafted to engage people to think about themselves and their whole system in a positive framework (Faure, 2006). Cooperrider, Whitney and Stavros (2008) further describe

appreciative inquiry as a process of questioning that involves interviewing and storytelling "to draw out the best of the past, to understand what one wants more of, and to set the stage for effective visualization of the future" (p. 4). This style of questioning progresses through a 4-D cycle framed around discovery, dreaming, designing, and destiny. Each of these four themes were explored with three questions, for a total of twelve questions, answered by the disaster team members at the two University Libraries. As I spoke with participants, I found that the positive tone set by using an appreciative inquiry 4-D design style of questioning served to lead them through the stages of the disaster – from initially responding to it through recovering from it and looking to the future – and put them at their ease as they shared their stories with me. I did not observe or received feedback that this style limited participants' responses or avoided their concerns in any way.

Each person that I interviewed, either individually or in a focus group, shared emotion-laden, informative, and interesting recounts of their experiences. Sometimes their stories were sad, sometimes humorous, and occasionally heroic, some were shared with passion and some with deep introspection, but they were always insightful and told with conviction. Each of them spoke not only from a somewhat different personal perspective, but from a different organizational perspective because they were each responsible for a distinctive aspect of the process. I visited with library employees from the Dean to the mail room; with people who oversaw the library facility and those who were responsible for human resources and business operations; and with staff who dealt with the media and those who acquired and preserved the collections.

As expected, I found that there were differences in individual outlooks, perceptions, and emotions, but I also found that there were many more striking similarities than differences, not just among the staff at the separate libraries, but across the two libraries. Although the disasters themselves were different – the UI Libraries experienced a flood from rising river water in 2008 and the UNM Libraries experience a fire from arson in 2006 – at times as I was coding the data, the words used and the feelings expressed by participants in the two settings were indistinguishable; their voices blurred in my head. As a result, I realized that although a disaster team member's role and the specific situation being shared in their story might differ, how the participants themselves were affected by the disaster and the emotional attributes they drew upon were quite similar. Further, the many documents and artifacts that I reviewed revealed strong themes of teamwork, collaboration, and communications, as well as initiative, trust, and adaptability. When interwoven these stories, documents, and artifacts formed a rich, vivid tapestry depicting a culture of camaraderie that extended throughout the disaster process.

Through the tapestry of themes that unfolds as I present my findings in the coming pages, both myself and the reader can begin to understand the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members, which emotional intelligence competencies emerged in these team members, what meaning they made of these competencies, which emotional intelligence competencies were most common, and which competencies these team members consider to be of the greatest importance in leading the disaster response and recovery process.

A Culture of Camaraderie Emerges

As I coded emergent themes in the interviews, focus groups, documents, and artifacts, I discovered an overarching theme of camaraderie running through all of these materials. During the crisis, people at both institutions exhibited this camaraderie by temporarily rising above their typical modes of behavior and self-interest to engage in extraordinary degrees of teamwork/collaboration, communications, trust/trustworthiness, adaptability/flexibility, and initiative not found at other times.

This theme of camaraderie in crisis was palpable at both institutions. I sensed it as I spoke informally, outside of the interview process, with staff at the UI Libraries. One person spoke of it as we sipped tea on the steps of the main library on a warm, humid day in June. Another person mentioned it as he brought some photographs that he wanted to share with me to the interview room I used. One photograph in particular from UI served as a highly evocative example of camaraderie, teamwork, and trust. The photographer was unknown, but the photo showed a long line of very diverse individuals installing a sandbag wall by the UI main library. These individuals were not just diverse in terms of gender, age, race, and/or ethnicity. Individuals in that line included campus faculty, staff, and students, community members, children, an Amish man, and someone in an orange jumpsuit, all cooperating with each other, standing together, passing sandbags hand-to-hand, stacking them, and seemingly performing this act without any prejudice or class distinction. In my opinion, it spoke well of humanity and it was one of the most hopeful and heartening photographs I viewed at UI.

In a more formal setting, an interview participant at the UI Libraries observed:

> So, as you are going through these things, you want, in one sense, to kind of cherish the moment because people were never more understanding of inconvenience than they are then…There was a feeling like everything was OK, but I think you probably really can't sustain that. I wish you could sustain that lack of complaining…and just that feeling of camaraderie…in the team.

Another interviewee spoke of "Iowa way" and asserted:

> I think another one is, I mean people joke about the "Iowa way," it's a phrase that came up a lot during the flood, but the team has this culture that I think is a community culture of people really chipping in. It was "oh, what can we help you do," and I think there was a real willingness to think of the good of the organization as a whole. It was interesting.

As I viewed hundreds of documents and artifacts related to the flood, I remained mindful of the strengths and the weaknesses of this process as outlined by Yin (1994), especially the tendency for bias on my part both by the materials that I selected and my interpretation of their meaning, thus, finding what I wanted to find. I also checked the provenance of the materials to the extent possible so as to avoid incorrect data being included in my study.

Especially compelling to me were the photographs from the flood depicted in many sources including the UI Libraries' paper and online archives; Nancy E. Kraft's blog, *Preservation Beat*; various newspaper clippings; and photographs either taken or provided by interviewees and focus group participants. Many of these photographs were of the flood waters, damaged buildings or books, people performing various preservation treatments on books, and the like, but the most evocative, and I believe the most relevant,

photographs depicted individuals communicating with each other or collaborating as trusting, adaptable teams to accomplish a task such as moving the books located in the basement to higher ground within the library or installing a line of sandbags around the library to keep the flood waters out. Several photographs of the "human chain" of people who passed the books and manuscripts up the library staircase depicted facial expressions of determination, conscientiousness, and camaraderie.

A one minute forty-seven second video on YouTube (a video sharing website that displays a wide variety of user-generated video content), entitled "Volunteers evacuate books from University of Iowa library" http://www.youtube.com/watch?v=ddhs82z7-IU (GazetteOnline.com video by Stephen Schmidt, dated June 14, 2008, but recorded on June 13, 2008), featuring a brief interview with library Dean Nancy Baker, and comments by members of the "human chain" of volunteers, mostly students, further demonstrated the strong sense of camaraderie that was present that day as people passed the books from hand-to-hand upward toward safety.

At my own library, at UNM, I have often discussed the culture of camaraderie phenomenon with colleagues over coffee at the Starbucks in the Zimmerman Library lobby or after a meeting when some off-hand comment brought it to mind. I experienced this phenomenon anew as I combed through hundreds of photographs and pages of documents about the fire. One photograph in particular, provided to me courtesy of Associate Dean Nancy K. Dennis, at the UNM Libraries, depicted four disaster team members, two women and two men, all wearing hard hats with respirators covering the lower half of their faces. They were standing together, side-by-side, in the midst of the rubble in Zimmerman Library's burned-out basement. In the background, I could see

burned walls, floors, and ceilings as well as collapsed shelving due to the heat intensity of the fire. From what could be seen of their facial expressions, they were saddened by the enormity of the destruction, but also determined and pleased to be doing the work to begin to restore the library – taking pride in performing their work even in such deplorable conditions. I spoke with two of the people in the photograph and they confirmed my assessment. In my opinion these people embodied the spirit of teamwork and exemplified the culture of camaraderie through the cooperation, collaboration and the closeness that they developed. To me, this photograph powerfully demonstrates the cliché that "a picture is worth a thousand words," starting with the word "camaraderie."

I have also frequently speculated with fellow disaster team members about why this feeling of camaraderie was so immediate and so strongly felt during the disaster recovery and why it seems to have faded as the months and years have passed. One focus group participant echoed these sentiments and mused that:

> There is a certain camaraderie when people work together under stress. A bond forms and the trust piece is huge. It reminded me a little of how groups in the military work, the camaraderie and the trust was so strong then. It helped. I wish it could always be that way.

Another member of the disaster team noted in an e-mail to me that she felt that some groups, such as the fire watch team, developed a lasting sense of camaraderie as a result of their work together. She wrote:

> Throughout the time that library staff were performing the fire watch patrols [employees were required by the state fire marshal to walk through all areas of the library during all hours that it was open to the public to look for possible fires

until its fire suppression system was again working], communications, teamwork, and flexibility were the tools that made it successful. As a result of volunteering for this duty, I am sure that the fire watch team developed a permanent camaraderie and sense of trust from the experience" (L.Skye, personal communication, October 19, 2011).

In addition to these thoughts, comments, and written documents, two unusual artifacts from the UNM Libraries added further to the culture of camaraderie theme. These artifacts were decorated hard hats, both created by Linda Skye, assistant to me, the Interim Dean and DRAT Chair. As a member of the disaster team herself, Linda Skye was a socio-emotional leader, keeping the morale of the group high throughout the response and recovery process. She created one of the hardhats, post-disaster, for the "Fire Witch Party." This party was a private tongue-in-cheek celebration held about a year after the fire and given by library employees to show appreciation for each other, to acknowledge those whose efforts were exemplary, and to celebrate the successful recovery that brought so many unexpected improvements to the library's spaces, systems, and services. As part of the festivities, employees were encouraged to share an item to commemorate the fire watch process. The fire watch had been a significant team effort, adding to the culture of camaraderie in the libraries as well as being a necessary part of the library's recovery. The result was a group of artifacts, including a fire watch helmet, which was made from a simple hard hat painted gold and embellished with symbols for fire and personal initiative (L. Skye, personal communication, October 19, 2011). The feeling of camaraderie among the participants at this Fire Witch celebration, which I attended, was palpable.

The other hard hat artifact created by Linda Skye was made for me personally the weekend after the fire. Linda Skye describes that hat and what led to her creating it as follows:

> I worked alongside [her], assisting her and ensuring that she had the resources and information and energy that she needed. We had worked together two and a half years by the time of the fire and had developed a strong sense of trust in each other, a bond of partnership, and her devotion to the Libraries had fully rubbed off on me (L. Skye, personal communication, October 19, 2011).

Linda Skye and I were a team within the larger disaster team and we shared a strong sense of camaraderie with each other, the DRAT, and with everyone assisting with the recovery effort. I often wore the hard hat she made for me as I went about my various duties in the early weeks after the disaster. As highly visible DRAT members, I feel that we supported, nurtured, and lived the culture of camaraderie that emerged during that challenging time. This bond continued and deepened after the disaster recovery was concluded.

Some of the bonds formed within the DRAT team at UNM continued while some changed or were temporary. That seemed to be the case for disaster team members at UI as well. This phenomenon was discussed in various contexts and themes throughout participants' interviews and focus group sessions at both institutions, often with a sense of regret that the camaraderie experienced during disaster response and recovery seems to be fleeting.

During the disaster process, taken together, the many voices, documents, and artifacts speak strongly of this culture of camaraderie. This phenomenon can be seen as

both an overarching theme that runs through every facet of the disaster response and recovery process as well as a theme that serves as the underpinning that supports all the activities, thoughts, competencies, and emotions of the disaster team members.

Teamwork: Working Together Toward a Common Goal

The theme of teamwork and collaboration, which can be described as a cooperative or coordinated effort on the part of a group of persons acting together as a team or in the interests of a common cause, was by far the most common and arguably the most powerful theme that emerged in the interviews and focus groups as well as in the documents and artifacts at both institutions. Teamwork was mentioned 29 times by 10 participants from the UI Libraries and 46 times by 17 participants at the UNM Libraries, for a total of 75 times. This finding was not especially surprising to me given that I was interviewing disaster *team* members; however, what proved intriguing to me was that when the concept of leadership was discussed – almost without exception – it was either in the context of teamwork and collaboration or initiative and did not emerge as a separate major stand-alone theme.

Several associated themes emerged within the major theme of teamwork at both institutions. The first was that shared leadership and decision making by disaster team members was not only supported, but encouraged from the top administrators down. Also, this leadership was fluid, assumed by various team members based on needs as the situation changed. Person after person spoke about the strong spirit of cooperation, collaboration, and closeness among the members of the disaster team – a culture of camaraderie – that spilled over to the various teams within teams. These teams within teams were like raindrops causing ripples in water, some radiating out from the libraries'

core disaster team to the broader campus disaster team and beyond, as well as other raindrops creating smaller, sometimes separate and sometimes overlapping circles, encompassing the smaller teams within the libraries' disaster team that were tasked with addressing specific areas or situations. A final associated theme was the nearly universal agreement among team members that there was no place for egos on the team, leadership was shared and cooperation and collaboration were sacrosanct. However, because the leadership shifted as needed within the team, personal initiative was supported and emerged as another major theme.

Fostering shared leadership. Listening to the voices of the participants, it became clear to me that team leadership was supported and nurtured by the Libraries' top administrators at both institutions. As one participant at the UI Libraries noted "So, I would say just teamwork in general from the library staff and you'd have to get that from the top, [Name, the Dean] and the folks around her." A disaster team member from the UNM Libraries agreed, saying "[Name, the Interim Dean] and [Name, the Associate Dean] did not try to impose their leadership on the team. Sure they made decisions, especially big ones, but it was clear that they trusted everyone on the DRAT to make decisions, too."

Fluid leadership across the disaster team. An interview participant I spoke with at the UI Libraries expanded on the concept of shared leadership during the disaster response and especially during its recovery by sharing a story about the fluidity of leadership across the team. She said:

> Well, I worked with several different teams because there were different structures. Everyone was willing to take their part and not worry about who was

> leading and who wasn't. An example is it was obvious we had neglected to, and I should know better because I provide training in this, but we neglected to provide food and water for our volunteers. You know, we were just thinking about getting those books out and I mentioned it to one of the directorates and they asked if they should take care of it and I said "yes" and we had no system in place, so a couple of directorates went out with their own credit cards and bought the food, so that was simple. But that's the way a team needs to work is you're sometimes shifting roles; sometimes a team participant needs to become a leader for a while. Sometimes they end up doing what in the normal day would be something that someone way down would do and one person who usually doesn't [takes] kind of a leadership role. I think teams work really well when they can be fluid.

A focus group participant at the UI Libraries echoed the sentiment that leadership shifted among team members and roles changed by commenting that:

> For the most part it was the library assistant who knew the collections and its locations and placement and what was needed to function someplace else. It was [Name] who knew those parts better than I knew them and [Name] was the one who organized that part of it and I just went where he pointed and that worked fine. And then when it came time to do policy and things, when things settled down, that reversed. We were like a team and we did it together without talking about it, it just happened.

Another focus group participant from that institution added:

> But it was important for the usual leaders, managers, supervisors, and administrators to just show up and work together to do whatever was needed like

> alphabetize journals into boxes or whatever. Just everyone working together.
> Leadership might shift around in the team and that just happened.

While yet another focus group participant told me that "It was one of those situations where everything is even on the team, we didn't have to turn to a manager for every decision, and so there was nothing holding people back."

Focus group participants at the UNM Libraries agreed. One stated that "… there was not a lot of hierarchy in the team, it really was a team and worked that way." Another team member noted, "We were able to make decisions just between us and with no disagreements. We all led things at different times as part of the team." Yet another participant concurred that the team shared leadership and made decisions, adding "Pulling together different people who normally didn't work together to get everything done like a team and just deciding what to do together and not check on every little thing with a supervisor. That felt successful." Yet another focus group member observed:

> The team was formed and worked with equality, where everybody had equal authority within some parameters. It was more like who to go to for information than a strict hierarchy where you had to get permission. We knew what to do and just got on it.

A spirit of cooperation, collaboration, and closeness. Person after person at both institutions spoke at length about the disaster team working together in a spirit of cooperation, collaboration, and closeness. These factors were echoed throughout the documents and artifacts that I reviewed and consequentially emerged as the essence of teamwork.

An interviewee at the UI Libraries commented, "I think the feeling that we were all in it together was a team attribute." Another said, "You just call on all your skill to deal with it and work together as a team." Yet another interviewee there spoke about everyone working together, including people outside of the disaster team, saying:

> We evacuated an incredible amount of material in a very short time and that was because everyone was working together, from students to volunteers to staff. I've heard horror stories and, thank god, I've not been in those, but if your team's not working together, you're not going anywhere.

Another interviewee told me about creating teams of people who did not normally work together.

> I think that having a plan is one thing and making it work is different, but that it would work because lots of great staff would work together and even making teams of people who aren't normally teams and they would work together well like a real team that had been together for a very long time.

Several focus group members at the UI Libraries spoke about the team working together toward a common purpose. One person told me that "We all felt united as a team…and we were all working towards this goal to get stuff out of here and deal with everything as much as we can while we can and [we] didn't get flustered." Another focus group member there commented on this concept of sharing a clear, common goal, stating:

> A little bit about these teams verses other kinds of teams is that we had a very clear goal, it was an easy concept. People knew what they were going to do like sandbagging [to keep the water from reaching the library], just put on your grubbies and go help, or move out the books. At first, we were focusing on it as a

> university event and not so much as a library event, but then it was a library event. But it was an easy concept for the teams to understand and act on. It wasn't a hard concept. People helped and just felt good about themselves and each other. It was fun to help and just be part of it.

Yet another participant there remarked about not succumbing to the silo-effect due to sharing a common goal:

> We here at the University of Iowa can be very silo-ed, but then I really saw the teamwork and it was working. Everybody just had this goal and we didn't want to stop. We just worked together and the volunteers came and we got food to share and worked together as a team to get it all done.

Many interview participants at the UNM Libraries shared and expanded on these views. In answer after answer they spoke to me about collaborating, cooperating, and the feelings of closeness that the team shared. One interviewee stated, "[I had] a real strong sense of being part of the team, and again, I think in my work career that's probably the first time I've really felt that really strongly." Another said, "So, I think commitment to the team – commitment to something bigger than themselves – was a real attribute." Another person simply stated "I was just impressed by how the team worked really well together," while someone else observed, "I think the group coalesced into more of a team environment."

The spirit of teamwork was also an important theme in a book, the *Comprehensive guide to emergency preparedness and disaster recovery* (Wilkinson, Lewis, & Dennis, 2010), authored by employees at the University of New Mexico Libraries, with case studies from various other university libraries that experienced a

disaster, discussed the importance of teamwork, collaboration, and cooperation as well as selecting team members with appropriate characteristics to carry out their roles and duties. Individuals who comprise the disaster teams in large academic libraries often do not work closely together on a day-to-day basis; however, they are brought together by a common purpose during a disaster. In the first chapter, the authors set this tone by stating, "Establishing a team that will respond to emergencies is essential (p. 5). Two chapters in this book: "Case study 6: University of New Mexico: Zimmerman Library 2006 fire that lead to the 2007 library flood: an overview" (Castillo-Padilla et al., 2010), which I shared excerpts from to provide context to the fire and "Case study 7: University of New Mexico: Zimmerman Library fire: a case study in recovery and return of library collections" (Schultz & Neely, 2010) both discuss – at length – the essential nature of teamwork and collaboration when responding to and recovering from a disaster. The authors hope that as other libraries use their book to plan, respond, and/or recover from a disaster, the strong message in the manuscript about the spirit, nature, and value of disaster teams will be enlightening and useful.

A participant at the UNM Libraries, when I asked about the attributes she recalled when the disaster team was functioning at its best, remarked on the closeness of teams working toward a common purpose: "I consider [when] all the library personnel [were] working as a cohesive group. Everyone in the library working as a team, dependent on one another…for a shared reason" Another person speaking about team cooperation commented:

> I alluded to the fact that there were so many people down working in the basement [on its remediation], maybe 100-150 people, that it just looked like an

> ant colony down there, but we all had to work together and figure out what each team had to do the make it work. We all cooperated very well.

Individual disaster team members at the UNM Libraries shared hundreds of pages of unpublished documents and reports, e-mails, memorandums, and meeting agendas from their personal files. Many of these documents showed strong teamwork, cooperation, collaboration, and leadership both on the part of individuals and the team as a whole. The close bond that disaster team members developed was also evident in several e-mails. One team member wrote to another, “This situation has really gotten us to cooperate so well with folks we never even had occasion to talk to before.” Another person wrote, “I can’t believe how well we are cooperating. I am feeling really close to [Name, Name, and Name]” Another team member took the feeling of cooperation and collaboration as step further, writing “I have come to depend on you as a teammate and now as a friend, too.”

An interview participant at UNM spoke of the knowledge and specifically the emotional intelligence of disaster team members as they bonded. She recalled:

> There were team meetings every morning, and what I saw was individuals bringing every bit of knowledge and experience they had together and “I think they continued to bond as a team…I thought they displayed really good EI characteristics...They worked really, really well together.

When I asked about what was most successful when the team functioning at its best, a participant concluded that:

> …the pulling together as a team, the sense of commitment, the understanding that we were in it together and we had to make some hard decisions and not to take things personally and I think the real urgency of the situation helped with all that.

One participant spoke to me about the impact of having cooperation in the team, offering the following thoughts:

> So, I think the impact of having a good team was that everyone was moving forward and there was time and understanding enough to say somebody needs to stand back and catch their breath, but others are going to pick-up and move on. Then, once you've caught your breath and you come back in and then the next one needed to go back and take a break or had to go home and do some laundry. It came down to that sort of stuff; time in the day to just go to the grocery store and reconnect with your family and things like that…I think everyone came through the process, for the most part, with a strong sense of respect for our colleagues and what they could accomplish. Maybe that's one of the major accomplishments.

When remembering the lessons learned from the past, one participant concluded that her hopes and wishes for a successful future disaster recovery would focus on:

> …having an excellent DRAT would be critical. They would be able to work well as a team, understanding that some days one person will have a high and another day that same person might have a low, but they would be really mindful of each other…If you have a really good team put together, and they understood each other's strengths and weaknesses, and they would be very mindful of each other, then I think that you could do real well for a disaster response, and a response team disaster I should say.

When asked what would be happening if the disaster team was functioning at its best another participant thought, "At its best, everyone would be moving into action…they can move in as needed and help out in other areas. Be functioning as a team."

A focus group member at the UNM Libraries opined about the closeness of the disaster team members, noting, "It was like we were telepathic with the team so many times. We could finish each other's sentence after a while." Another focus group member there recalled how the disaster changed employees at the library, helping them to become a close-knit team:

> The fire changed us a lot. We became a very close group and worked very well together. It did help us. We were close in the Centennial [Science and Engineering Library (CSEL)] flood, but not the way we were in the fire. We became a close team and you give us anything and we can do it.

When asked what caused the difference in team closeness in the fire versus the flood at the UNM libraries, the participant was unable to explain the difference, beyond saying that "Maybe just because the fire impacted nearly everyone in all the libraries because many of us in Zimmerman were sent to the branches to work while it was rebuilt. It was just everybody that was involved, while at CSEL it didn't hit so many people?" Another person added, "Zimmerman is the heart of campus. It's old, it's historic, just everybody loves it and has memories there, and plus too, all of tech services and administration is there, that's all."

An article touched on the theme of teamwork and cooperation when chronicling the details of the fire in UNM's Zimmerman Library and the recovery process that

ensued; it states: “An earlier flood in the underground science and engineering library had prompted the creation of a disaster plan and the formation of a recovery team. As a result, the library was prepared to handle a disaster of the magnitude of the fire” (Gugliotta, 2006, p. 61). Actually, the UNM Libraries first disaster plan was produced in 1996; however, the CSEL flood prompted a greatly enhanced disaster plan.

Although the intent of the extensive, highly detailed *Emergency Preparedness & Recovery Plan*, a.k.a. the *DRAT Manual* initially appears to be to communicate information; however, its theme throughout the document is one of leadership through teamwork and collaboration. Further, perhaps the CSEL flood served not only to make UNM library employees better prepared for a disaster, it may have provided the opportunity for the disaster team to begin bonding as a group and experiencing a shared sense or cooperation leading to a genuine spirit of closeness across the team.

Other focus group participants from the UNM Libraries felt that the cooperation among the team members was a major success of the team. One spoke to me about “A willingness to just step up with the team and just do whatever needed to be done. What you saw everywhere was people cooperating and just working together.” Another participant shared a story about an accomplishment of the disaster team due to everyone cooperating and working together. She said:

> I think when a decision was made to do something the team may have had some stragglers [at first] not really thinking we could do it or whatever, but we did it. The biggest thing that comes to my mind was when [name] came back and said ‘we will have a paging system in place’ in so many hours from then. We somehow figured out how to do it. I don’t know how we did it. I’m sure that I

> wasn't the only one, but the team just pulled together and did it. We got a system in place, got the people together, and pulled out the books, and we got the reserves out, too. Just whenever a decision was made to do something we got a team together and did it.

Still another participant there noted that disaster team members cooperated with each other quickly and without complaint to accomplish the goal of recovery from the disaster, saying:

> I noticed that people were able to keep it pulled together and get going quickly. The team moves so smoothly, just their ability to mobilize fast and their willingness to do whatever without complaining. Everyone forgets their petty differences and squabbles and moves for the good of the library. They just don't complain; they just do it.

Yet another focus group member there felt that team members did not merely cooperatively work together toward a shared purpose, they came to genuinely like each other, speculating:

> I think, whether it was or not, and I can only speak for myself, we liked each other and we were willing to work with each other like a real team. Everything was put to the side and we got on with the business of doing what was needed. We all had the same goal and I think that was big. We got the elephant out of the room.

An administrator from the UI Libraries observed about the disaster team's teamwork and collaboration: "Their team spirit and the way they worked together was superb." An administrator at the UNM Libraries concurred, positing that the disaster team's most successful attribute was:

> … the indomitable team spirit that got the DRAT through the ups and downs, especially when just days before reopening the basement after the fire, it was flooded by the fire-suppression system of all things! What a crushing blow, but they never missed a beat in the re-recovery process.

This spirit of teamwork, expressed through cooperation, collaboration, closeness, was also evident in some of the documents I reviewed both from UI Libraries and from the surrounding community of Iowa City. Teamwork and collaboration was central in both Nancy Kraft's blog and her unpublished manuscript (2008), which I quoted extensively from to provide context to the Iowa flood. Teamwork was also woven throughout various newspaper clippings from the *Iowa City Press Citizen* (dated June 5, 2008-June 8, 2009), the *Iowa Source* (various dates in August 2008) and the *Daily Iowan* (dated June 4, 2008-November 10, 2009). These newspaper articles initially carried stories of devastation and the hopes of individuals for recovery, but later, the stories they reported switched to heartwarming human interest pieces about the teamwork and cooperation that went into the recovery efforts.

Teams within teams. Another aspect of teamwork is that there were teams within teams, both inside and outside of the disaster teams at the two University Libraries. As one participant at the UI Libraries shared:

> I guess I can kind of speak from a team concept in different areas, I mean you have a library team, and you have a campus team, and you have the outside disaster teams that were on campus…And people that can work well together with a purpose in mind and that seem to rise above everything else at least for that short period of a few weeks or whatever. It always seemed evident that there was

> a mission or a goal and everybody was focused and headed in the same direction, and nice teamwork from all levels, whether it would be the facility folks on campus, public safety, the library staff.

One interviewee from the UI Libraries spoke to me about the larger campus team and about how the bond that he and others had built with people outside of the library helped. He said:

> For me, I have relationships with the people that I think are sort of my peers around campus. I think for different people on the team having their own circles [teams] that sometimes overlapped and sometimes didn't, and I think that really everybody, but particularly [Names] having their own go-to people really expanded that network.

Another participant there talked about how during the disaster his IT team functioned like a smaller disaster team concentrating on IT, within the larger library disaster team, yet still interdependent with it. He shared:

> It's funny in a way that the unit, whatever the team is, and for us it was this library IT group, becomes a microcosm of a full organization. What I mean by that is I mentioned external relations, but suddenly, even though our professional area was doing IT, all of a sudden we need a PR person and basically a shipping person.

An interviewee at the UNM Libraries simply said about the experience of working on multiple teams, "Well, I was able to work on several different teams…It was a really positive experience." A focus group participant at that library commented about library disaster team members working with outside contractors, saying, "It was good to see how

well [Names] worked as a team together with the outside contractors to get materials removed from the basement."

There is no ego in team. Participants at both libraries shared a strong belief that disaster team members must "leave their egos at the door" to achieve their common goal. One interviewee at the UI Libraries summed this sentiment up well by emphatically stating:

> You'd certainly want a group that could work together and just be dedicated to the cause at hand, and by and large at every turn. Being able to work together and not let the egos or personalities get in the way…But just general teamwork, and listening, and communicating, and not throwing up barriers, or getting into little spats that there's no place for in a situation such as this.

A focus group member at the Iowa library was just as clear when saying, "There is absolutely no place for egos in a team with such an important goal. Park your ego at the door when you enter or don't come at all!"

Interviewees at the UNM Libraries continued the theme. One person said: "I think everyone checked their egos at the door on most days, and it was just, 'all right, the team's got to move eight thousand boxes of books today'…let's get it done." Another participant, when remembering the lessons learned for the fire and considering what ideal competencies should be present in the future, spoke about the importance of teamwork as "the elimination of turf and boundaries; focusing on getting things done and [a] focus on getting back operationally as best as possible and moving on to the full recovery." Another person, when considering what team qualities would have the most impact suggested that:

> …anyone that wants to be part of the team, who wants to contribute, who can set their own personal needs and deficiencies aside or strengths aside, and be part of the team. I think the more you develop that in an organization, the more successful it will be.

A focus group member from the same library spoke to me about lack of ego involvement for team members by stating:

> Everyone was cooperating. We were on the same page then. We were on the same wavelength the whole time and we were there to do a job. There were small teams within larger teams and time was not a factor. No one complained. If we got hungry, we would just go eat and come back. We just got it done, if someone wasn't there someone else stepped in without even having to ask and just did it. There were no egos involved we just did it by focusing on the goal and helping each other.

Another focus group member passionately added:

> I think as managers, people have different strengths. And I think that was part of it. If they asked me, I would have gone there if they asked me even if the fire was still burning! Whoever picked those people, they picked the right people. We worked as a team and did not let egos get in the way like we do at other times. No complaints just go in and do it.

While participants agreed that individual egos had no place in the disaster teams at either institution, personal initiative was critically important to the team's success in leading the disaster response and recovery process.

Initiative: Doing What is Needed Without Being Told

The concept of initiative, which can be described as the readiness and ability to initiate action, one's personal, responsible decision to act on one's own initiative, or an introductory act or step in leading action, emerged as another part of the tapestry of themes. I found that, like teamwork, when the concept of leadership was discussed it was often in the context of initiative and did not emerge as a separate major theme. Further, as participants spoke about their experiences, the concept of empowerment and autonomy – either formerly given or self-assumed – to make decisions and make them quickly was prominent when participants spoke about initiative. These two associated initiative themes – stepping up and doing it now – were discussed by participants at both institutions, in various contexts. Initiative was mentioned 10 times by 10 participants from the UI Libraries and 22 times by 17 participants at the UNM Libraries, for a total of 32 times. Initiative was also found in some documents at the UNM Libraries.

Step right up. Disaster team members told many stories about "stepping up and taking initiative" during the disaster response and recovery stages. Some participants felt supported while in other cases they felt empowered by their libraries' top administrators to make decisions. Some of these participants lament that decision making was different and more direct during disaster response and has returned to a more traditional top-down process after the recovery was complete.

An interviewee from the UI Libraries commented, "I wasn't really sure what to do, but something had to be done at that point and I believed that it would be ok with [the Dean], so I just did it." Another person said, "I felt empowered by [the Dean and others] to make decisions without having to consult about every little detail." A focus group

member there added, “There was no hierarchy imposed, so we all took the lead on things when we needed to. Our initiative was stronger then because we felt it was OK. I think we all felt empowered by [Name, the Dean] to do that.” An interview participant from the UNM Libraries said:

> We somehow knew that it was OK to take initiative and assume some reasonable authority to do what needed to be done. You [the Interim Dean and DRAT Chair] and [Name, the Associate Dean] showed us that somehow, but I can’t remember what you said, we just all knew it. We all felt trusted and we could be so creative and I remember so many times just taking the initiative to step in and take care of something or take the lead on something and it was OK. It felt real good then. Now it’s back to asking permission to do anything. I guess that is just the way things go in crisis or maybe its management style, I’m not sure.

A focus group member from the UNM Libraries echoed this feeling, telling me that:

> People were just empowered by the situation. You just took initiative and made your best decisions and you just went with it and things were flat [hierarchy] and you felt empowered to do it. You [the Interim Dean and DRAT Chair] and [Name, the Associate Dean] made us feel it was OK and just had faith in us so you just feel empowered to do what needed to be done, but it wasn’t always that way with some of the other administrators.

Other people that I interviewed reported that they just took the initiative to make decisions and move forward. On person from the UI Libraries informed me that “I think for me personally, [I felt] a sense of empowerment or maybe authority that I hadn’t really

tested before or thought to assume…I guess I just assumed some authority that I thought I had.” When asked what team member attributes were present when the disaster team was functioning at its best, another participant, who was part of the UI Libraries’ administration, immediately replied ,“That I can speak to pretty easily. It was at the second gathering…part of what impressed me right away is everyone would be saying ‘I will go check this’ and I didn’t have to tell them to do it.” When asked about the impact when the disaster team was functioning at its best, another administrative participant simply commented, “Our staff just stepped up and showed initiative so that things got done, so the impact is that things got done. When asked which competencies were most successful when the disaster team was functioning at its best, an administrator at the Iowa Libraries shared a story with me about team members taking initiative on the day that the flood waters reached the library. She said:

> I mean, we did [moved] 50,000 books in less than eight hours! Isn’t that amazing? Now I was, well, they say you do disaster plans not because you’re ever going to follow the plan because it’s not going to fit, but like I said, the areas in the basement housing books and manuscripts until the hundreds of volunteers started pouring in, we were just like ‘we don’t know how to do this.’ So, I guess I always call it thinking outside the box and being innovative…taking initiative.

Another interviewee there also shared a story about initiative on the first day of the flood, stating:

> Sometimes someone just has to take the initiative to get something done even if it was fairly small. One example is that we hadn’t planned on all the volunteers and even our staff working so long to get the books out of the basement. We didn’t

> even know how to go about it, then someone, I don't remember who, took the initiative to line them up and form a human chain to convey the books up the stairs. Then everyone got hungry and had to be fed. So, someone else took the initiative to go get sandwiches. Those unplanned things where someone took the initiative and just stepped up and did what was needed at the time was the most successful, I think.

The human chain to move books up from the basement and the need to feed the volunteers who formed the human chain seemed to be an iconic event in the minds of many people at the UI Libraries. Many participants repeated this story in several contexts regardless of the questions they were being asked.

An interview participant at the UNM Libraries observed that people took initiative to assume various roles, saying: "And everybody kind of took it upon themselves to assume some roles, like [Name], for example, worked with [Name] over at the SUB [Student Union Building] reference services, so I started working on the scheduling of different people." Another participant spoke to me about personal engagement, saying "I think one of the things that really got me engaged was that we were able to make decisions, right, wrong, or indifferent, and at the end of the day we could review those and there wasn't any finger pointing." A focus group member there discussed his initiative and adaptability when he told me:

> The part of my job in which I work with circulation module for Millennium for UNM and for all the consortium members. I needed to keep that going and I learned to use my laptop from just about anywhere, I did most of my work from my dinner table because there was no place to come to except for meetings. We

> all showed initiative to keep things going and we were able to maintain all our electronic services, I think, pretty effectively.

An interviewee from the UNM Libraries observed that from the beginning if one solution did not work, disaster team members would simply try something else, noting that:

> Early in the process I remember our mail room team sorting mail off the back of the pick-up [truck] while our documents librarian was herding the potential volunteers who would be patrolling the building. The initiative they took to dive in and deal with the situation and resolve whatever it was and if one solution didn't work, they tried something else, kept going until they found a solution that worked for the moment.

The two previous quotes spoke strongly not only of the initiative or these individuals, but also of the need to be innovative and adapt their work during the disaster.

Another person there spoke at her follow-up interview about initiative with misty eyes and a quivering voice when asked about what competencies she recalled when the disaster team was working at its best. She said:

> That's an easy question. I've been thinking about it a lot since the last interview. I think then I just said something about them working well together, but it was the initiative that everyone, just absolutely everyone, showed. The stories I could tell, but then I would just tear up even after all these years, so I will just say everyone's initiative and leave it at that.

When asked what ideal competencies would be evident in disaster team members if a disaster struck in the future, a focus group member from the UNM Libraries replied

that "People would be self-starters; they'd show some initiative again…no matter what level they are." Another focus group member added:

> The workers would know it was OK to take the initiative and not wait for everything to come down from the top. When we were recovering from the fire it was almost a magical time because everyone worked together and we knew we had support from [Name, the Interim Dean and DRAT Chair] and [Name, the Associate Dean]. I would like to think that the Dean now or any Dean would know that and just let us do what was needed and not make us ask permission about everything if we had another disaster.

Yet another focus group member observed, "Everyone would feel it was OK to take action when it was needed. They would know more from this disaster and they would also be creative, show initiative, think out of the box, like that."

All these statements also make it clear that sometimes innovation, ingenuity, and creative response were related factors in taking initiative to help or respond during a disaster, but it is not always necessary to be innovative when showing initiative.

Another aspect associated with taking initiative emerged in one of the focus groups at the UNM Libraries. These participants talked to me and each other about efforts to improve the library by modernizing after the fire. One focus group member said:

> We took a horrid situation and used it to reinvent the physical space in the library as we recovered. We took the initiative to make the physical space much more in-tune with what the users today want. We took it from a beat-up 1970s library to a fairly modern early 21st century library.

Another person observed, “Well, I have to say that it’s better today than it was. There was enough initiative and foresight to modernize the place when it was rebuilt. I wish there had been no fire, but it sure is better now.”

Schultz & Neely (2010) outlined examples of initiative taken by team members involved with returning materials to the Zimmerman Library basement after it had been renovated from fire damage. These authors discuss the initiative that the team took, not only to accomplish the mammoth task of returning tens-of-thousands of journals and microforms to the space, but to improve the physical arrangement of the of the space in the process. They wrote:

> Although challenging, the fire presented the opportunity to consolidate collections, previously shelved on separate floors, and in some cases in separate branch libraries. As a result, the material to be returned to the space was not limited to the collections housed there prior to the fire (p. 160).

Another participant at the UNM Libraries spoke with some passion about wishing that new library employees realized the hard work and initiative that went into rebuilding the library, exclaiming:

> We worked so hard to rebuild the library better. We really showed our initiative and we all just ran with it. Some people that weren’t here then just don’t realize the work and how much better it looks now. I get sad when they act like what we did doesn’t matter just because they weren’t here and did not do it or thought they could do it better, especially on the first floor. We added lots more computers and group study spaces. It’s so much better now. We did something very good there.

Do it now. Participants not only shared stories and opinions about showing personal and team initiative, they spoke about taking action and making decisions quickly. They made it clear that during a disaster there is no “business as usual.” They also contrasted the speed at which action is taken and decisions are embraced during a disaster as opposed to the more traditional, slower, perhaps more methodical decision-making methods typically practiced outside of disaster situations. Some participants wished that the way decisions were made during the disaster could become the norm.

An interview participant at the UI Libraries noted, “People did not hesitate if they had to make a decision on the spot. That trust was there to do it. The idea for the human chain to move books came from the Head of Preservation.” A focus group member from the UI Libraries commented about the quick decisions made on the day the library was evacuated, noting:

> The day we evacuated the building I made a lot of on the fly decisions that didn’t just affect my unit, but affected other units and made decisions for people who weren’t around, because it’s just got to happen. You have to take the initiative to do it. You maybe don’t have anyone’s permission, but you just have to do it because there isn’t time to run everything up.

A focus group member from UNM Libraries also spoke to me about quick decision making, observing:

> Making sure that the right people were in the room at the right time to make the right decisions was successful, but also you have to give people the permission and authority make decisions on the spot because there is not time to wait for a

> meeting next week. So, everyone knew they can use their initiative to make decisions fast without permission when that was needed.

When asked which disaster team competencies were most successful, an interviewee from the UNM Libraries commented about the support from the library administration, stating:

> So much about it was successful. I guess one of the best things was anyone on the team being able to take initiative without fear of getting in trouble. It was actually encouraged. I remember the support I felt in that from the top, everyone and especially [Name, the Associate Dean].

When asked what impact disaster team competencies had when the team was functioning at its best, another interviewee from the UNM Libraries speculated:

> I think that maybe the disaster team was functioning at its best when they saw something, some situation, that needed attention and they just took some initiative to deal with it without going to a manager or [Name, the Associate Dean] to get an OK, but just took care of it and went on to the next thing. I think that happened a lot and it had real impact. Maybe it just has to be that way in disasters. Too bad it can't be that way without the disaster part.

A focus group participant at the UI Libraries mentioned to me that there was no time to analyze decisions during the disaster:

> I think our tendency in this profession is to analyze things and have a plan. That can be a good thing or a bad thing. But in this case we just had to do with no time to analyze. We took initiative and made decisions on the fly and hoped they

> would be OK and they were. Nobody was terribly thrown off by what we had to do, we just had to do it.

This point of view was strongly felt by participants at the UNM Libraries. One interviewee related, "We were able to take initiative, all of us, any of us. We were able to make decisions instantaneously and not have to form six-month long review committees and talk about it forever." A focus group member there concurred with this sentiment, saying that:

> I noticed the quick decision making and sometimes it worked and sometimes it didn't, but most of the time it did. Everyone had to show some initiative, because if we had done things in the usual way we would have sat down with a committee and we would have needed six weeks to plan it, maybe we'd still be planning it…but we just got into the middle of it and went forward and it worked and turned out to be OK.

Another participant at the UNM Libraries spoke about quick decision making without analysis being a new skill for some people.

> People not in charge got to take initiative because quick decisions had to be made and then people just got on board and that was different for us. We usually have lots of meetings for weeks to talk about things. But with the fire, people were OK with deciding things fast at all levels and then moving on them fast. That was a new skill for people.

One somewhat frustrated focus group member alleged that:

> Decisions were made immediately, whereas now they aren't. We just took the bull by the horns, we just took initiative then, most of us at least, and we did not have

> to form a committee about each issue, analyze it to death, write a report, then talk about it some more, then have someone who doesn't know change it anyway. With the disaster we just gathered the information, decided something fairly quickly, and went with it. I wish we could do that now. Maybe we would if we had another big fire or flood. Maybe that's just how it happens in disaster times.

Initiative and fast action was also evident in e-mail between New Mexico disaster team members. One team member wrote to another member, "Thanks for taking the initiative to send out an update right after the meeting. I'll catch the next one." Another stated, "Way to go! … You really stepped up and got those samples to me right away. How did you get them from [the vendor] so fast? Much appreciated." Yet another team member wrote, "I think that your good humor and initiative-taking really made a difference today. Otherwise we might still be trying to figure it out. Now if you could just communicate that to everyone." The concept of communications was also woven throughout all the major themes and is explored in the next thematic section.

Communications: Listening Openly and Sending Convincing Messages

The theme of communications, which can be described as the imparting, transmitting, or interchange of thoughts; or information, views, or opinions by speech, writing, or signs, emerged as a common theme in the interviews and focus groups as well as in the documents and artifacts at both the UI Libraries and the UNM Libraries. Communications was mentioned 17 times by 10 participants from the UI Libraries and 32 times by 17 participants at the UNM Libraries, for a total of 49 times.

Communications during disasters takes many forms and emerged in multiple ways. One very powerful concept surrounding communications is "turf." Two

participants, one for each University, spoke about turf issues in the context of communicating. An interview participant from the UI Libraries observed, “I think it’s in a catastrophe that people realize they have to let go of their turf battles. Everybody knows that you need to improve communications…[and] know who’s doing what…and sort of being less turfy.” A focus group member from the UNM Libraries, thinking along the same lines asserted that “Don’t even think about bringing your big ego to work. It’s not about you in a disaster, it’s about everybody. Your turf burned up in the fire, so forget about it and share what you know, communicate well, and just be a real team player.”

Participants also spoke of the importance and urgency of communications during disasters from the top leaders at the two institutions, sharing the responsibility to communicate during this challenging time, and innovative ways to communicate during disasters as well as about successful communications, communications as an ideal attribute during disasters, positive change in the library, and the impact of communications as a disaster team quality.

Walking the talk at the top. When asked about the personal qualities and attributes she drew on during the disaster, one administrator said, “Communication is the key, being able to adapt is important, too, but I always keep communicating about every new development or bit of new information.” Another participant concurred, saying, “So, I think the attributes were risk taking, flexibility, and good, frequent communication.” Yet another participant who was not an administrator spoke about the need for communications from the top:

> Even as time went on there was still an urgent need for some timely communication from [Name, the Interim Dean and DRAT Chair] and she sure

> delivered. In spades. She was everywhere doing things and telling us what she knew was going on. I don't think she slept.

When asked about what new attributes emerged at the UNM Libraries, one top administrator told me without hesitation:

> I think the communication was [a new attribute that emerged]. I remember saying "I told them five times" and then the team would say that you need to tell them one more time…It was not a new attribute for me, but to me it really came out as having to do more than ever with that.

When asked which attributes were most successful, the theme of communications continued with a UNM participant pausing for a few seconds, then looking into my eyes and sincerely replying, "I am going to say risk taking and also the communications. I think those were the most successful." Two other interviewees felt that communications was successful at the UNM Libraries, affirming: "Good communications, very good communications among Senior Team [the administrative team] the disaster team members" and "I think there was really good communication among everyone on the team." Another participant who mentioned the importance of good, successful communications noted, "I think…it must be timely, clear, on point, and meaningful to be considered successful. Otherwise it is just noise."

Apparently, the Dean of Libraries at the UI shared a belief in the importance of communications and practiced it expertly herself. One interview participant at that library emphatically stated, "…the Dean and the folks around her, they just did a great job of getting the message out, keeping people informed and letting people know step-by-step." A focus group member agreed that the Dean did a "great job" of communicating with

library employees, contrasting the Dean's style with other leaders on the campus, observing:

> There was a real difference in how she [the Dean] handled it [communications] and how the university administrators handled it. We were all caught between that, and so the communication was so important. The university administration never would say "we don't' know something" but [Name, the Dean] had no problem with that, just saying if she did not know, but saying what she did know and sharing it every day. So, we felt that communication was really there in the library.

In a focus group discussion on individual at the UNM Libraries echoed the notion that even incomplete communications were appreciated, stating, "Everyone was so grateful for information, even if it was not complete."

Sharing responsibility to communicate. An interviewee at the UI Libraries echoed this belief about the Dean's sound communication skills, but added that communications cannot fall to just one person:

> I think the ability to lead and communicate clearly with staff, and of course, this just can't fall to one person and it needs to be spread out to the next level and those folks receive a clear message and the ability to pass that along. Key people really need to know what's going on and need to keep in touch so that they can get that word out to the next level of staff. I think communications probably, is the key and I think [Name; the Dean] and her key folks did a really good job with that.

A focus group participant at the UI Libraries who worked closely with the Dean spoke to me about sharing the communications load, disclosing:

> One of the things was that after we moved out of the main library we were dispersed all over in various libraries. I went with the Admin Group over to Business [library] and I met one-on-one with [Name; the Dean] every day, even that week the university was shut down we met every day. She needed to get a lot of information out to staff and the public and she didn't have time to compose everything herself, so I said "I'll do that for you." I felt like that was the most effective time for me personally and for my job. What I brought to that was kind of being open and taking her ideas and forming them into a communication that we could send out to a variety of people.

An interview participant at the UI Libraries spoke of staff communications, saying:

> It was just a lot of teamwork and a sharing of communications. For as chaotic as it could have been, I just think the way the staff was able to communicate and keep up with everything on a daily and almost hourly basis was incredible.

A focus group member from the UNM Libraries commented, "Every day new and important decisions had to be made and communicated. Communicating the decisions up and down the line was big." Still another participant from the UI Libraries speculated, "Maybe some of it wasn't that viable, maybe some of it was, but just communication. Keeping that communication open, and being approachable."

An interview participant at the UNM Libraries agreed that keeping communications open to staff was vital, especially immediately after the fire. He observed:

> There was so much going on; there were 150 employees, some of which were home, sitting at home wondering what was going on. So communication was a big piece of it and I kind of carved out an area that I think I contributed, which was trying to keep teams informed, helping them make decisions and then communicating that back to the management team at the time. People were also interested in seeing just what was going on. There were very few people who had access to the building. It was locked for 5 days, 6 days, something like that, for the police investigation. So anyone that had access to the building, I think, had a responsibility to communicate as much as you could out to everybody else.

A focus group participant there recalled:

> I remember the people working at the table in the SUB [Student Union Building] took and answered questions from people and just did their best to answer them. So, even the people outside the library needed and were so grateful to know what was going on, like when part of the library would reopen and stuff. So, communication was an important attribute to reduce stress for everybody.

A focus group member from the UI Libraries also spoke to me about the special need for communications immediately after the disaster, saying, "As we were waiting for information, we just didn't know, so the communication was so important to us. And it was there." Even later, during the recovery process, communicating updates to employees remains crucial. One focus group member from the UNM Libraries talked of the ongoing need for regular information when observing:

> It's really important to communicate with people and tell them what is going on. They need information, like how much longer before the basement is gutted or

rebuilt or whatever. If you told them what you knew and just communicated they would just calm down and be less stressed and work.

A UNM interviewee also mentioned the ongoing importance of keeping everyone informed saying, “Everybody had to continue to go forward and keep everybody informed. I think we did a pretty good job at communicating with each other and our community.”

The documents that I reviewed at both the UI Libraries and the UNM Libraries seemed to support the assertion that these libraries communicated often, sometimes in innovative ways, and did a good job of communicating.

I reviewed numerous internal unpublished documents, letters, e-mails, and related materials in the UI Libraries’ archives, all communicating various information. These documents were processed either in a paper archive located at the library’s Special Collections department or stored on an online archive (via Archive-It, a web archiving service for libraries). The paper archive was still being processed and was not yet open to the public when I visited the Special Collections department to view it. However, the University Archivist, David F. McCartney, C.A., made special arrangements to grant access to me to view the archive. Documents that had been processed at the time of my visit (June 2011) consisted of letters, copies of e-mails, newspaper clippings, and a brochure. The letters were from individuals, mostly presidents and chancellors from other universities, addressed to Sally Mason, the president of UI, expressing concern, offering assistance, and praising her for her leadership and dedication. The e-mails were mostly informational and/or offering support and thanks to various individuals or campus groups. They were from figures on campus such as the president of the university or from

student leaders. One example was an informational e-mail from Steven Wieland, president of student government, (dated July 14, 2008, 5:31 p.m.) communicating with the student body about financial flood-aid opportunities, short-term loans and grants for students, and work study employment alternatives.

When searching documents available through Archive-It (http://www.archive-it.org) for the University of Iowa Libraries, Flood of 2008 Collection, I found over 900,000 records; however, only forty-three of them seemed directly relevant (and had catalog metadata results). These documents were also informational in nature including a message from the UI President Sally Mason, stating, “This will be a pivotal year for The University of Iowa and for the ongoing work of flood recovery”; a call for volunteers to help move library books from flooded areas of the building; an announcement that the library servers were back online; information that broken sprinklers soaked the Art Library and closing it to the public; information about restoration of wet and muddy library books; flood recovery information; flood stories told by various people including some librarians. The archive also included photographs taken of the university and surrounding community; however, most photographs were not of the UI Libraries. The main theme that came across in most of the documents was simply communicating information about the flood.

I also viewed assorted documents for the UNM Libraries; however, I did not find nearly as many documents there as I did at the UI Libraries. The UNM Libraries do not have an official paper or electronic archive about the fire and most of the documents that I located were held by disaster team members. Sadly, many documents had been

previously discarded as team members cleaned out their personal paper files and e-mail folders over the years.

By far the strongest theme that emerged from the documents remaining at the UNM Libraries was one of communications, both internal communications within the disaster team and external communications to the vendors assisting with the recovery and to the community. I also located six short newsletter articles about the fire that were published in the New Mexico Library Association *NMLA Bulletin* and included “Fire at the University of New Mexico Zimmerman Library” (Lewis & Wilkinson, 2006), “UNM Zimmerman Library rebuilding update (Lewis & Dennis, 2007), “UNM Zimmerman Library recovery process” (Lewis, 2007a), “Fire recovery continues at Zimmerman Library” (Lewis, 2007b), “UNM’s Zimmerman Library reconstruction update” (Lewis, 2007c), and “Formal reopening ceremony for Zimmerman Library basement” (Campbell, 2008). Each of these newsletter pieces provided communications to the library community, initially announcing that there was a fire in the University of New Mexico’s main library, Zimmerman, and later providing updates about the fire recovery progress. The main theme was communications, with occasional references to teamwork, service orientation, and gratitude to the community for continued support to the library during its recovery.

Though many have been lost over time, numerous unpublished documents and reports, e-mails, memorandums, and meeting agendas still remain in individual disaster response assistance team members’ files at UNM. While all of these documents, consisting of hundreds of pages, providing the history and timeline of the emergency response to the disaster and the recovery process, with the exception of some of the e-

mail, they are mostly procedural, informational, and documentary. They show strong communications and collaboration, both on the part of individuals and the disaster team as a whole.

Communications, and to a slightly lesser degree, teamwork are the dominant themes that emerged from the surviving e-mails; however, several other minor themes and competencies can be inferred including trust in each other, the contractors, and vendors; initiative to move the process forward in a variety of ways; and adaptability, especially in planning, timelines, meeting times.

While many physical artifacts with a theme of teamwork remain, only a few artifacts with communications as their theme survived. Three signs from the disaster created by Patricia Campbell, a member of the disaster team and the communications coordinator, that still remain and are currently stored it the library Dean's Suite. Each sign was primarily informational about the recovery process in the Zimmerman Library, with one sign also communicating directions to the temporary relocation of the library's reference materials. Beyond communicating information, no other themes were noted from the signage.

Innovative communications. A library department head that I interviewed at the UI Libraries shared a story about an innovative way that he found to keep people informed and communicate when the usual technology that everyone relied on failed, as it often does during a disaster. He told me that:

> The specific action I remember doing was in my office: setting up several flip charts and dedicating them to sort of what needed to be done and leaving markers out for people, because I was not in there a lot of the time, so people could come

> and go and kind of update and share a kind of a record about what happened or about problems they ran into. And then I ended up putting one more flip chart and paper on my door about where I was at the time. That felt effective and it was a very low tech solution to a communication emergency that didn't rely on cell phones or anything. It just required my office being above floodwaters, which was a safe bet for that time. I guess I was drawing on the feeling of wanting to have a way that people could feel informed and also publicly pose a question if they needed help or something without necessarily having to find people in the moment. So, I guess I was just thinking about the importance of people feeling like they had a place to ask a question or answer a question for someone else; even if there was no one else there, they could record it, and forget about it, and move on to something else.

In a follow-up interview he spoke to me about using the flip charts to communicate back and forth with staff as well as using them for external relations, adding:

> And so I started talking about our communications with the flip charts in my office which worked great on site, but kind of realizing that we didn't have that for other library staff to know 'okay I need to know do I take my scanner with me' or something like that. I could see that in both directions, but really needing sort of an inside communications contact and it's also an external relations thing.

The UNM Libraries' pack-back team (who returned the books to the shelves after the damaged areas were rebuilt) engaged in innovative communications. These innovative communications were evident in the way that they communicated with each other to assure the relatively smooth return the nineteen semi-tractor trailer truck loads

containing pallets of journals and microform cabinets to Zimmerman Library's basement in less than three weeks' time. No process was described in the literature about how to accomplish such a feat, so the team had to create one. Several team members that I spoke with agreed that their success with the pack back was due to clear, innovative communications – through words and writing – within the team itself, the core disaster team members who were not directly involved in the process, and with the vendors who assisted initially with the removal, and later with the return of the materials. In their case study book chapter, Schultz and Neely (2010, p. 167) explained that at the beginning of the process:

> Although the library's response team was available to answer questions, we were focused on continuing our work materials in the fire area and could not directly supervise each packing team. In an attempt to ensure boxes were packed in order and labeled correctly, we developed a packing protocol…These procedures were time consuming, but we knew it was the only hope of having some type of order to the collections when they were returned to us…The recovery team kept copies of these lists as well, which proved to be invaluable in staging when the materials for their eventual return to the library.

The capable, innovative manner in which the team communicated the plan to handle the enormous process for the return of the materials, setting up a staging plan for them, and the complex process of getting approximately 24,876 linear feet of journals back on the shelves, in call number order, was inspiring. The pack back team communicated in a variety of traditional ways, meeting agendas and notes, e-mails, quick verbal updates as team members passed in the hall, etc., but they also created new,

innovative ways of planning and tracking their work and communicating these processes and plans. One example of this innovative communication was the “Zimmerman Pack Back Tool 2.0” which was “a 253 page, 11x17 inch, mammoth, color coded document based on title distribution…The tool also included notes and codes for whether a title was active, or currently in reference or in some other space to assist pack-back team members” (Schultz & Neely, 2010, pp. 175-176). The pack-back team leader envisioned this tool and her vision was translated into reality by her student intern who was a pack back team member. As a result, substantial, effective, streamlined communications were made possible through this innovative print document, eliminating hours of meetings and team members needing to locate others to ask questions.

Participants at both institutions mentioned the concept of staff “stepping up” and communicating in innovative ways. An e-mail from a UNM disaster team member read “Boy, [name] really listened today and stepped up and took the lead to get it done in a pretty creative way. Who would have thought, but good for her.” Innovation was mentioned in the context of communications by an Iowa team member who e-mailed me after my visit there saying “As I said before, I think our staff are terrific people, and they just stepped up…and I think we all communicated in innovative ways, at times there was just no other way…and they listened, too, and all that.”

The best of times. When asked what personal qualities and attributes were most successful, a focus group member from the UNM Libraries replied without hesitation:

> My ability to communicate from the time my telephone rang. I got the call from [Name, the Dean] that the library was on fire, so I had to put the wine glass down and push it away [laughs]. I had to start calling the people that I worked with and

> telling them to either not come in or come in to CSEL [a branch library]. I was asked to send out e-mails to communicate with everyone. Before I could, someone sent out one telling everyone to show up, but it was really just the people who needed to be there that should show up, so another one [e-mail] had to go out saying only some should come in. But we got it all straight and it worked out.

When asked what team attributes and competencies were most successful, another focus group member answered "We were so successful cause of communication and everybody knowing their role. A real good team."

When asked what would be happening if the disaster team were at its best, a participant at the UI Libraries told me, "I think the communications to the staff, and that's what happened the first time, that this was serious." In answering that question a participant from the University of New Mexico Libraries thought, "If the team was working at its best, they would have to be communicating well among themselves and external to the team." Another interviewee there posited, "People would know their roles and responsibilities and would be openly communicating when there were difficulties in accomplishing a particular task" while another person thought, "The disaster team functioning at its best would be a group of experienced individuals who could lead and communicate effectively." A focus group member from the UNM Libraries replied "Lots of talking and communication. There would be no sense of privilege over when, where, and how you were working. Just do what is needed to do to keep it moving and keep communicating." Yet another focus group participant there concluded:

> I think we were fairly well prepared at the time, but we are even better now. We had a disaster plan for years, but now it is even better today because there are

> more ways to communicate like Twitter and Facebook. That cuts stress – good communication and lots of ways to get it.

While yet another focus group member thought that the disaster team at its best would be "Meeting regularly. People reporting on what they are responsible for. Communicating whatever is appropriate with whoever is affected."

When asked what ideal attributes and competencies would be evident, a participant from the UI Libraries that also spoke to me about communications, explained:

> …good communications, and that's something that went on the first time and it would probably go on the next time and maybe even more so. Just key groups working together, and discussing, and planning, and then taking the information out and getting it to the other staff.

A UNM interview participant responded after carefully considering the question:

> Probably the same, I feel like I am repeating myself, but I think they would be extremely mindful of each other, OK, and they would be treating each other with respect. I think when they do that communications will flow real well inside of the team and externally outside of the team. So, I think they would be at their highest in terms of emotional intelligence with themselves and with each other. So the communication would be extremely strong.

While a focus group member there observed, "Networks have to work well so that people get the information that they need in a timely manner. Communication must flow."

The crystal ball or back to the future. When asked to look to the future and consider what might be said about how positive change is being sustained after the disaster recovery, one participant at the UI Libraries replied, "I would want the

community to say that they were kept informed about the recovery efforts…and that people feel secure and donate items because they know it will be protected." Another participant there, when asked to look to the future and then to look back on what qualities she possessed that contributed to her library's post-disaster success and overall health, also spoke to me about the library being a good care-giver of its collections. She replied:

> I hadn't even thought about that, but having a good PR sense and to keep that sustained over several months and keep the focus on the good that you're doing and to keep that goodwill going for your institution is priceless. I do have a blog and I don't know if all of that would show up in the blog, but it certainly kept us in the news and I know that's done a lot of positive [good] because every once and awhile people will say "oh yeah, I saw you on the news" or "oh, I know the University is taking care of all the materials"…so that's out there and it's created a lot of goodwill.

An interview participant from the UNM Libraries responded to this question by saying:

> Just keeping the communication going and remembering to honor the work that everybody did. Talking about that and acknowledging that the work laid some of the groundwork for where we are now, better facilities, and I think more closeness and bonding of the staff because of what we all went through together. All the good things didn't just happen last year, you know. I think the new people don't understand that and its importance, so I share that with them when I can.

A focus group member there said that the qualities that she possessed that contributed to the Libraries' post disaster success included:

> The PR side of it. How to present things to the public in a way that isn't all negative or all positive, but balanced. To communicate about it in a constructive way about what happened to let people know we were under control.

An interviewee from the UNM Libraries also thought that communications was the team attribute that had the most impact, emphatically stating, "Team member's excellent communication skills, without a doubt, had the most impact." A focus group member there looked around and mused, "Shared communication and teamwork form the basis to build trust, so I think that communication and trusting relationships are the team attributes that had the most impact."

Trust: Giving and Receiving

The concept of trust, which can be described as a reliance on or confidence in the integrity, strength, ability, or surety of a person or thing, was another common theme in the tapestry of themes that emerged in the interviews and focus groups at both the UI Libraries and the UNM Libraries as well as in some documents at the UNM Libraries. Trust/trustworthiness was mentioned 16 times by 10 participants from the UI Libraries and 31 times by 17 participants at the UNM Libraries, for a total of 47 times.

Some library administrators on the disaster team spoke about trusting and empowering others while other team members commented on feeling trusted and empowered by top administrators as well as being trustworthy and trusting themselves and their colleagues. Still other participants commented on trusting in their colleague's knowledge when responding to and recovering from the disaster.

Trust and empowerment from the top. Several top library administrators commented on the trust that they placed in the disaster team members who responded to

the disaster and empowered them to take action. These concepts of trust and empowerment also emerged when participants discussed initiative. One interview participant at the UI Libraries commented that:

> The attribute that I was drawing on then was empowering people to take charge in their areas. In any disaster plan, you try to get it set-up, but you have to trust the people to do things at the time because you can't do it all yourself.

Another participant that I interviewed at the UI Libraries simply said, "Just work with people, empower them, and trust them." A different interviewee there echoed that sentiment, "Another attribute is trust. I really trusted these folks. I honestly did." Yet another interview participant observed:

> So, I think what it really comes down to was having good people around and just trusting them. You have to trust them and not second guess things. In many cases it came down to just getting out of their way and letting them do what needed to be done. I know that may sound like a strange attribute, but it was an important one.

Another UI Libraries leader on the disaster team said that she thought of herself

> …as a catalyst to get things going and the ability to instill trust and that the person that I'm working with knows that I trust them and that it's OK for them to work on their own. I think that's one of the things that make this really successful is we had mutual trust.

An interviewee at the UNM Libraries said, "I wanted to assure that the DRAT knew they had my full trust and faith. They were empowered to do what was needed in the moment…I felt they were trustworthy."

An interview participant from the UNM Libraries spoke about feeling trust and support from two top library administrators to make decisions, saying:

> You [Name, the Interim Dean and DRAT Chair] and [Name, the Associate Dean] gave us a lot of latitude and trusted our decision making and that was really important at that time. That's another aspect of feeling connected and the ability to do things and just understand that, well if I make a mistake the world's not going to end, they're not going to throw me under a stack of burned books, and chances are they're going to let me come back to work again the following day.

Another UNM Libraries interview participant commented on being trusted to make decisions:

> You all [library administrators and DRAT] gave us the latitude to make those decisions on the spot and trust out judgment…We were trusted to make the decisions and it made an onerous job easier to do. We were never second guessed or questioned about why we did this or that, why we got rid of this or saved that [fire damaged book], but we were just trusted to get it done. And that was really helpful.

A focus group member from the UNM Libraries also shared this opinion:

> Trust is so important. I hope that will be evident in a future team like it was this time. I think you [Interim Dean and DRAT Chair] and [Name, the Associate Dean] really set that in motion. What do they say, walk the talk or something? Anyway, you both did in spades…[and] proved worthy of our trust.

Two members of the UNM Libraries' disaster team described administrative trust of the team that planned and executed the return of the library's periodical collection to the shelves in a book chapter. They wrote:

> Trust, at all levels, was also key to our success. Because many members of the team did not hold a high rank in the organization, we had to have the trust of the administrative level to work effectively. It would have been impossible to clear every small decision with higher ranking employees. The members of the team trusted each other's judgment, skills, and work ethic, regardless of the position each person held during their 'normal' job duties. We were able to work effectively with each other and to see and respect the special skills that each member brought to the overall process (Schultz & Neely, 2010, p 180).

While numerous participants commented on trust emanating from the libraries' top administrators, one interviewee from the UNM Libraries, when asked what would be happening if the team was functioning at its best, commented specifically about trusting library administrative leaders, simply saying, "Well everyone would know that they were part of the disaster team. They would know what their responsibilities are and…[they would] trust in the leadership, I think." A focus group member from the UI Libraries spoke to me about trusting administrators saying, "We have been talking about…this kind of flattening and I think since people felt that, they felt that they could trust people, like administrators, they could really trust them." Another focus group member there added, "She [the Dean] was really good about trusting people and telling people what was going on all the time and people really responded to that and they felt trust back." While yet another focus group participant there said, "Yes, she trusted us and we could

always trust the library Dean and her people during this, and we could trust each other, too."

An interview participant from the UI Libraries talked to me about fostering trust in the disaster team and the library's standing administrative leadership team, asserting:

> Within the team I think the best thing I can think of right now is trust and I think that fades over time and probably there needs to be occasional reminders that this group that you worked with has people that you can and need to trust. This was a natural disaster and nobody needed to literally trust their lives with anybody else. I guess that's something as I've thought about working with the unit heads that are now part of what I would consider in our team, our leadership group, of how important it is to build and foster that sense of trust so that when you need it the groundwork is already laid for it. And also as new people join or leave that it's hard. It's not just hard in the traditional sense of 'oh, these people have worked with each other for eight years' and there is some of that, too, but trust that people are making good decisions even though you may not agree with them and needing to live with those decisions, I guess.

An interview participant from UNM Libraries also spoke of building trust in both the disaster team and the ongoing leadership team observing:

> I think a lot of pettiness was set aside in people. They trusted each other. I think there was better trust among the DRAT team and among the leadership team. I think it's always assumed that you have trust amongst your colleagues, but you find out that maybe it's not truly there, but you put them in a situation and, again, you learned who you could trust.

Trusting yourself and each other. An interview participant for the UI Libraries paused to think more deeply about my question on which attributes were most successful when dealing with the flood. After a moment, an introspective reply came:

> When you talk about emotional intelligence, you have to just trust your gut. Sometimes there just isn't a good answer to some of these things and you just have to have trust…just trusting yourself and others to do the right thing.

An interviewee from the UNM Libraries shared this sentiment of trusting oneself, saying "Trust in myself and some of my opinions and some of my judgments. Trusting my gut in some places and some things."

A focus group member from UNM Libraries spoke to me and the group about the personal qualities that she drew upon during the fire. She shared a story about feeling trusted by her co-workers and trust in herself:

> I think it was when there were only a few people allowed to go down into the fire area [basement work area] to get things. My section trusted me and [name] to go down and get what they needed from their desks and work areas…and I trusted myself to do it right.

Another focus group member from the UNM Libraries commented on trusting herself and also trusting others, saying:

> I had no problems and I felt trusted and I trusted myself to just get the work done. Everyone was willing to work together and the fact that it was well organized just made it all easier. Everyone supported each other so that it was a good experience to be trusted in spite of the cramped room…With things as they were you had to be trustworthy for it all to work.

An interview participant from the UI Libraries spoke about being trusted to make decisions and trusting in others in his network as he recalled:

> I think I had mentioned the anecdotes about being able to make decisions and know that I was going to be backed up on that decision which was, I think, a real deep appreciation of people doing the best they can and making the best decisions they can and trusting that people are doing that, so, I guess that the informal networking at sort of that horizontal level and at the vertical level more of a real trust relationship and understanding that people are not going to make the same decisions I would make and I'm probably not making the same decisions that my boss would make, but there's a genuine good faith effort to make good faith decisions. We joked a lot about the situation being fluid and there was a flood, of course, but part of this trust of making the best decisions that you can is that the situation does change so quickly that most decisions weren't irreversible either.

An interview participant from the UNM Libraries also touched on decision making and trust, saying:

> I also got a lot of support from everybody around me to encourage me to make decisions and trusting in my decisions. And that was the first time I had ever felt that the people around me really trusted me and my sense of what was important and priorities. We don't often see that in organizations where people say "I really trust your judgment in these things.' You see it maybe in an annual review, but you don't see it at the line-level or on a day-to-day level.

Participants in all three focus groups at the UNM Libraries discussed the trust that existed in the disaster team. One member said "I had no problems, I felt trusted to just get

the work done." Another person added, "You learn to trust your co-workers, you really must to get things done." Another person there told me, "Trust is important. I got to know people better. People would step up and be patient and show trust." Yet another focus group participant there recalled:

> What I remember most dramatically, when we got in to find the books that were paged all we could see was other people we were working with who had miners hats with flash lights on them. We just all trusted each other so much.

Still another UNM focus group member quietly recalled:

> For me, I don't know if I possessed these qualities before, but having been in such close quarters for so long I have developed a real connection to those people. And I think that has helped us going forward that we all know each other, we have more of a sense of each other and we can trust people and know what their abilities are. We just trust each other more. We have an understanding of each other and that helps the success of the library as a whole and helped the recovery.

Another UNM focus group member lamented "There was so much trust in the team, I just wish we could all reproduce or recreate that feeling, but without the fire disaster part." While yet another person elaborating on that thought, sadly added:

> We trusted each other's abilities to make a decision and go with it. There was real trust and now everything is second guessed. Maybe that is just how it is when there is not the pressure of a disaster.

When answering various questions in the design and destiny sections of the appreciative inquiry 4-D protocol, interview participant after participant at the UNM Libraries became especially engaged and spoke about trust in various ways. One

interviewee said “There was a willingness to listen and trust in someone’s option.” Another interview participant observed, “Everyone was able to grasp the full picture. And the trust made it so we got it all done.” A focus group participant at the UNM Libraries commented on what would happen if another disaster struck, saying, “People would be empowered to make decisions appropriate to solve the problem. You can just act and we will trust each other. That happened last time and should be happening again,” while another person agreed adding “I think we dealt with it as well as we could then and I think next time you would see…people being trusted to make decisions and just…lots of trust and good team work.”

Other interviewees at the UNM Libraries talked to me about trust and respect when looking to the future. One person, speaking on destiny and which team qualities had the most impact, thought:

> It’s trusting each other enough to ask some of the really hard questions and being able to step back and say, ‘OK, my opinion or judgment here was wrong. You’re right. Let’s try this’ or be willing to try some things and maybe fail…[but] we learned something here.

An interviewee at the UI Libraries mentioned trusting others and being willing to work things out, saying “I think trusting each other and genuinely respecting each other’s capabilities…trusting each other and being willing to work things out among each other is the other thing.” A willingness to work things out if another disaster struck in the future was also spoken of by a participant at the UNM Libraries when she said “Even when things get a little out of hand, we’d all just have to be patient and work them out

together so you can move on with good feelings because maybe that person knows something that you don't about things."

Your colleagues do know something. An interview participant at the UI Libraries ardently stated, "This situation certainly reminded me that sometimes you can discover new talents in your own staff if you are open and trusting. Just because you have never seen it, maybe it was your expectations of them, not their abilities." A focus group participant there commented on trusting knowledgeable colleagues, saying:

> …the people here know things, like how to get resources and they have networks and are experts with knowledge of different parts so we can recover. Sometimes you forget that the people you work with know things and you can trust them, you really can.

Another person in the focus group there expanded on the concept by responding "Trusting people to do their jobs and trusting people to make the right decisions whether it is their job or not. And remembering that people you work with know stuff. "

Another person interviewed at the UI Libraries talked to me about trust, answering, "Not getting territorial and to just be able to work together and putting trust into someone that you usually don't put trust into." An interview participant from UNM concurred saying, "Don't let your ego get the better of you and make it a contest. Just trust that the person is in that job because that actually know something and may even know more about a thing than you do."

Having trust in the knowledge of colleagues was specifically mentioned in two e-mails between disaster members at the UNM Libraries. In one e-mail, a disaster team member wrote, "I'll trust your judgment on this one since that is your area of expertise."

An excerpt from another contained a note of support and trust, saying, "I will back your call on the arrangement…I trust you because I know you know your stuff and I trust you'll adapt the plan as needed."

Adaptability: Embracing Change

The concept of adaptability (used by study participants synonymously with flexibility), which can be described as comfortable with risk and uncertainty, responsive to change, or susceptible to modification or adaptation, as well as being open to new information and letting go of old assumptions, emerged as another common theme in the interviews and focus groups at the UI Libraries and the UNM Libraries and in several e-mails and a book chapter from members of the UNM Libraries. Adaptability/flexibility was mentioned 14 times by 10 participants from the UI Libraries and 22 times by 17 participants at the UNM Libraries, for a total of 36 times.

Participants' stories made it clear that no matter how well prepared disaster team members thought they were – regardless of the plan they developed or how many times they rehearsed possible disaster scenarios – team members would need to adapt their actions, views, and even their emotions throughout the emergency response and disaster recovery stages, sometimes minute-by minute.

Adaptability at all levels. As with other themes that emerged, adaptability was also modeled from the top. A focus group participant from the UI Libraries observed:

> You need to be flexible to start with, play it by ear, and just work together. That needs to be exemplified from the top. Having a university librarian like [Name, the Dean] with some of those attributes to keep people informed and having an environment of flexibility to start with.

An interview participant at the UNM Libraries mirrored this opinion about top administrators setting a flexible tone when she told me, “Well you [the Interim Dean and DRAT Chair] and [Name, the Associate Dean] were so flexible and just went with it, it helped me and us all to stay calm and focused and even be more flexible than we normally might be. That was good.” A focus group member there felt the same way, when she was asked about ideal attributes, saying, “The ability to play well with others. Flexibility and patience. The ability to just deal well with change and adapt. An example was how you [the Interim Dean and DRAT Chair] always showed us that and we all tried, too.” Adaptability was an important theme that was employed not only by administrators, but at all levels of the organization during the disaster and was pervasive among members of the disaster team. As one interviewee from the UNM Libraries observed when asked what team qualities had the most impact observed, “Probably just the ability of everyone, especially the disaster team, to be flexible and help others to be by their example, I guess.”

Adapting to change every day. Person after person talked about drawing on their personal ability to adapt – sometimes hour-by-hour – during the disaster, about adaptability emerging for some members during the disaster as a new attribute, and how successful this attribute was for them and for the disaster team as a whole.

When I asked participants asked about what personal qualities and attributes they drew upon, one focus group member for the UNM Libraries spoke to me about flexibility, answering without hesitation:

> In our situation I think it dealt more with being flexible and patient because we were totally displaced and we had none of our files and we had deadlines. We

> were provided with laptops, which had none of the right programs, we didn't have a printer; oh, it was crazy. We were sitting on the floor without resources trying to get the work done by the deadline and just be flexible and adapt to everything that was going on. And that is what our team did.

An interview participant from the UI Libraries spoke of adaptability as a new, helpful personal attribute that emerged during the disaster, commenting, "I was able to adjust and adapt and work with totally new people and new problems." Another interviewee there concurred, saying, "It was a different environment and I just think that my flexibility or ability to adapt in those situations was key." An interviewee from the UNM Libraries spoke to me about adaptability being a new attribute that emerged, observing, "I don't know if I mentioned…greater ability to adapt and shift roads and shift approaches with the methods in handling difference audiences, dealing with the faculty vs. dealing with potential donors." A focus group member for the UNM Libraries replied:

> For me, I noticed that I have flexibility and patience working in a new, very crowded work environment. At any given time you could have up to seven people working in a small room, maybe 20 feet across. So, flexibility in a very cramped work environment. For a long time I worked off of a laptop. You had to be patient in a cramped working environment.

A person I interviewed at the UI Libraries observed, "We had to stay flexible and adapt as it came. We were working on one assumption and then thinking what if it doesn't happen." A focus group member at the UI Libraries mentioned the lack of complaining as a new attribute that emerged during the disaster saying, "As things kept changing hour-by-hour people just adapted and they didn't complain about one thing or

another and did not think about it, but just moved forward." Another focus group participant at the UI Libraries shared with me and the group:

> With everything going on, we all just had to be adaptable – there we changes every few hours at first. That first week we were not sure what to expect, but we did not think the water would reach the library. Then, on Friday the 13th, it was going to and we had to change our plans fast.

A focus group member from the UNM Libraries spoke about the change brought on by the fire, saying, "I learned about flexibility because what we were accustomed to was not here anymore. You had to be focused and adapt. When things let you down you keep going and make do, you just adapt to whatever comes." Another member there described a similar experience, adding:

> I realized what I did not need from where I had been working before. You discover things that you thought you need like space, files, some information and things, but if it is not available to you, you just make do and adapt.

While yet another UNM interview participant talked to me about adaptability as being a new team attribute that emerged, remarking:

> I saw new flexibility specifically within LIT [the Library Information Technology unit]. I saw it emerge within other areas of the library as well, but I think a lot of people were very accustomed to the status quo, and the idea of change, and the impact that it would have, was just not something that was embraced by most of the University Libraries. The fire was just an external motivator and allowed people to understand that change just sometimes happens and the consequences, yes, are sometimes difficult, but as you work through the process it can also be

rewarding. I think it was good in that aspect in that change became a possibility, where before the fire it was very difficult to initiate.

As I listened to the stories told and comments made about adaptability by participants at the two University Libraries, I discovered that, like the other themes, these stories of adaptability and flexibility were nearly indistinguishable from the stories shared by disaster team members at the UI Libraries. An interview participant from the UI Libraries responded, “The ability to adjust and adapt to each day being different was most successful. Things were changing every few hours and we had to kind of focus and rethink things.” One UNM Libraries’ interviewee said, “Flexibility and thinking a little bit outside the box” was the most successful personal attribute. A focus group participant from the UNM Libraries also thought that flexibility was the most successful person attribute, saying, “Flexibility was important for me. Most people that I was working with on a day-to-day basis I had worked with before, but now we worked on different things and had new tactics and had to adapt to that.”

An interviewee at the UI Libraries thought for a moment and replied, “I guess just being flexible…not getting territorial and to just being able to work together” was the most successful team attribute. An interviewee from UNM said to me, “I think the initiative that all the teams showed in coping and their adaptability” was the most successful team attribute. Two focus group members from UNM also thought that flexibility was an important team attribute. One participant said, “Flexibility was a major thing. When things would go wrong we just regrouped and figured out how to approach it from a different angle,” while another simply said, “We had to be flexible everyday on

every level to make it all work." Yet another focus group member there told a story about how he felt that flexibility was the most important team attribute, observing:

> We were operating without a safety net on our eReserves [electronic reserved materials] and other electronic services, this was still fairly early for eReserves. It took flexibility and someone had to look at the e-mail all seven days. We adapted and we kept everything on LIBROS [an integrated library system that includes the online catalog of books, journals, etc.] going for us and the state [consortium].

Several of the documents that I located at the UNM Libraries also pointed to adaptability and flexibility being a very important disaster team attribute. One e-mail from one disaster team member to another contained a message about adaptability, saying, "I know things keep changing and it is frustrating, but we all just have to try to stay flexible about it and go with the flow. That's what will get us through." Another team member wrote in an e-mail, "We can be somewhat flexible about deadlines for some of our work as long as we pull together to get the doors open again soon." While yet another person sent an e-mail confiding "…we all just have to adapt to survive all this and remember that we are in it together."

Shultz and Neely (2010) shared some final thoughts in their case study chapter on the UNM Zimmerman Library fire. They wrote:

> For us the success of the pack out, pack back, and additional side projects can be attributed to four principles: organization, flexibility, trust, and collaboration…All team members were able to adapt to constantly changing conditions outside the team's control. The ability to plan and work in an ambiguous environment was critical. During the pack out and the planning phase of the pack back, we made

> constant rapid adjustments to the plans and procedures as circumstances required (p. 180).

Participants from the two University Libraries considered flexibility to be an ideal attribute, one that had real impact in the response and recovery process, and an attribute that would be important if another disaster struck their libraries in the future. One interview participant at the UI Libraries shared a story about flexibility being crucial not just as team members dealt with the disaster at their library, but in terms of the personal needs of individual team members, relaying that:

> I think the phrase that I used last time was the situation being fluid, but just the ability to adapt to changes that were not expected or never anticipated. But from that day, the other thing that I hadn't really appreciated, and I don't think any of us appreciated, is the need to adjust roles as the day went on and in particular, because of what was happening in the community. Different roads were getting flooded at different times and different people needed to leave to go home or they wouldn't get home. So, it never really occurred to me that you have this picture of OK, this is our disaster team right now and we're all here and everybody's present and accounted for and we all know what we're doing so let's go. But I was not really appreciating that somebody would say, 'you know, I have to go home at two or otherwise I'm not going to get home.' So, needing to account for those things.

An interviewee from the UNM Libraries also spoke about the team needing to be flexible with each other, understanding that team members have individual needs that they must

attend to in order to do their best work on the disaster team. She spoke about the need for this flexibility when she described:

> …Then once you've caught your breath and you come back in and then the next one needed to go back and take a break or had to go home and do some laundry (laughing). It came down to that sort of stuff; time in the day to just go to the grocery store and reconnect with family and things like that. So I think the impact is that we continued to maintain our momentum and respect. I think everyone came through our process, for the most part, with a strong sense of respect for our colleagues and what they could accomplish.

When discussing hopes and dreams for the post-disaster success of the library, two interview participants at the UI Libraries talked to me about the concept of associated teams and the importance of being able to adapt no matter the workgroup. One person unequivocally stated, "People have to be flexible and be willing to brainstorm and be willing to make mistakes…You're also playing a different role in those different teams at different times so you have to be really flexible and adaptable, very adaptable." Another person spoke of personal qualities that contributed to the post-disaster health of the library, saying that it was "My networks and my willingness to work with and adapt to different work groups" that helped to make a difference.

Interview participants at the UNM Libraries thought that adaptability was an essential component when considering what would be happening in a future disaster if the disaster team were at its best. One participant said, "If the team was working at its best they would…have to be responsive and be really flexible and agile and have a real high tolerance for ambiguity." Another interviewee there agreed, commenting to me, "If

the team was working at their best they would…have to be responsive and be really flexible." Still another person spoke of adaptability being the key, observing:

> And again, flexibility and understanding that you have to remain adaptable in these situations and there's situational awareness, to use the military term, to be able to know that a solution that worked today may not work tomorrow, but then again, might work the third day…Adaptability, that is the key.

Adaptability is not just for disasters. Participants at both University Libraries agreed that the theme of adaptability should continue after recovering from the disaster and that it should be incorporated more deeply into the library's organizational culture and into the leadership philosophy. One interview participant at the UNM began to comment on this concept, almost hesitantly, but became quite passionate about her feelings as she talked, and then made light of her comments with facial expressions and gestures indicating that what she had just said could never be:

> Things are just different during disaster recovery. There is a feeling of us all being in it together, a kind of team spirit, maybe a kind of camaraderie or something, because it happened to us all and we are all in it together. Most of the formal trappings of hierarchy fall away and anyone can make a decision, and you have to make it quickly, because there is not time to run it upstairs or to form a committee. You just take the initiative to take the bull by the horns and doing that is OK then. Then you let everyone know it, but again you do not have to go through channels of who to tell first or worry about some power structure and stepping on administrative toes because, at least in our case, we were trusted to have the judgment to know what was needed and do it. Time is really odd in

disasters because in some ways it moves so fast and in others it is like the world stopped and everything outside the disaster is moving in slow motion. Anyway, I think it would be ideal if the way things work during a disaster could be the way it is all the time. Top managers would trust – empower or whatever the term you want to use is – the people that work for them to make more decisions without having to clear every little thing. No manager thinks that they micromanage, but so often they do without even realizing it, even if it is just in little ways they send that message. They are so worried that they aren't "leading" or that someone will get upset about a decision, so they form committees and talk things to death until no one really cares anymore anyway. I have probably said too much, this is all confidential right, but if you could just bottle the way things work in a disaster, you would have the best system. Maybe it could be a new management style – disaster management – with a best-selling book and motivational speakers [laughs].

Other participants, perhaps not as assertively put, shared this belief. A focus group member from the UI Libraries said, "I'd like to take back that same flexibility of leadership at all levels to get things done. If we could just keep that feeling going. That just doesn't hold so much after the disaster settles." Two focus group members from the UNM Libraries also agreed. One stated that that in a future disaster, "People will be used to more changes because of what happened and be more flexible. The administration will need to be flexible, too, like it was then." Another focus group member concurred that flexibility is the attribute that would have the most impact in the future, and it would be needed at all levels, declaring, "There was a flexibility on the administration's part then

to change things if needed. Everyone was willing to compromise from the administration all the way down. That needs to still happen. It would have a big impact."

Healing from Disaster Together

Two artifacts, a hand-made remembrance, *The Zimmerman fire: (re)collections*, more commonly known as the *Fire Book*, and a commemorative quilt, both from the UNM Libraries, powerfully depicted the essence of the spirit of camaraderie through teamwork, collaboration, cooperation, communications, initiative, and trust that so many participants spoke of in their interviews and focus groups sessions, but went a step further, serving a healing purpose for many people at the UNM Libraries. One person told me that contributing an entry to the *Fire Book* and a square to the quilt gave her peace, a sense of closure, and helped her to move on "to the next stage without any lingering sense of loss or sadness" (name withheld, personal communication, November 19, 2009).

The Zimmerman fire: (re)collections was created by the Fire/Watch Book Group at UNM in January 2008. The limited edition document was distributed to all UNM Libraries' employees at the time of its creation and remains a treasured possession for many employees. The creators describe the book as follows: "This book is our collective history of the Zimmerman Fire" (p.157). One of the book's compilers describes the book as follows: "This book, it's a public conversation" (p. 156). The work includes interviews with, and artwork, photographs, poems and humor, submitted by library employees as well as timeline contributions. The free-form narrative thoughts that I shared about the events on the night of April 30, 2006 to provide context about the Zimmerman fire were taken from this commemorative work. The entries are among the most thoughtful and

poignant narratives about a disaster that I have ever encountered. As I viewed, read, and reread each of the powerful contributions from library employees, I noted that their entries capture the disaster in a hopeful, positive framework and bear a striking parallel to the appreciative inquiry 4-D cycle in that the *Fire Book* is arranged in a way that draws out the best of the past, understands what one wants more of, and sets the stage for effective visualization of the future. Like the appreciative inquiry 4-D cycle, the contributors' entries follow a path of discovery of the fire, dreaming, designing, and finally considering the future destiny of the library and those individuals who work and use it.

The emergent theme of teamwork and collaboration as well as the closeness among library employees as they recovered from the fire was also strikingly evident in a quilt that was created by members of the UNM Libraries' staff. The quilt also paralleled the appreciative inquiry 4-D cycle. This artifact immortalized the thoughts and feeling, fears and hopes, experienced by the staff who contributed squares that were lovingly sewn together by a library employee to create the quilt. The overarching concept for the quilt, measuring just under eight by ten feet, is a bookshelf consisting of several sections, 6 shelves high, either hand or machine embroidered or drawn with fabric markers. Because of its unique nature and the team effort put into to creating it by so many library employees, I have devoted significant time and space to describe and analyze it.

The "story" that the quilt endeavors to tell starts with squares depicting a pre-fire library. The next section of squares is intended to represent the aftermath of the fire, showing dark books on black backgrounds and abstract pieces with red and black quilted flames. The next section shows aspects of the early stages of recovery as the library

partially reopened, with squares showing fire horns and a Starbucks cup (there is a popular Starbucks coffee shop in the Zimmerman Library lobby). Although the squares are still done in gray tones, the colors are beginning to lighten somewhat from the darkness in the lower “shelves” of the quilt. The sections represent the recovering library, with a cream colored background and squares depicting a Christmas cactus plant on the bookshelf (representing the plant that was in the basement during the fire and that bloomed out of season in spite of the long exposure to poor air quality prior to its rescue which could not take place for some time after the fire), a fish in a tank (with fish that also survived being in the basement during the fire and for a couple of weeks afterward before they could be moved to a safe location), a dollar bill (to depict the enormous resources needed for recovery), and feathers (to indicate Zimmerman Library’s rise from ashes like a phoenix bird), and so forth. The top row of the quilt represents the library “returning to normal” with the damaged areas rebuilt at last. The signature panel on the bottom of the quilt contains forty signatures; however, not everyone chose to sign it. There were at least sixty individual contributors, but some contributors chose to remain anonymous (from a personal communication with Raelynn Richardson, December 2, 2011).

Many individuals chose to contribute squares with book titles instead of pictures or personally meaningful words. Most of these “titles” were created as tongue-in-cheek tributes, often with meanings not specifically articulated by the contributor. Some of the titles featured on the quilt included *Tower of ivory* (for those that did fire watch in the tower floors in the library), *Cats and the librarians that love them*, the *Vanished library*, *Zebraman Library* (with a zebra drawn on the square), *Diversity and communication*,

Chaos for dummies, the *Complete idiots guide to chaos*, *Was it arson?* by F.R. Marshall, *Pack of two*, the *Fire next time*, *Tour de Libros* (showing a bicycle on the square), *Joy of living*, a *Guide to well-developed services for dislocated workers*, *Budgets are due*, the *Never ending mystery*, *Stories of alarm* by Firewatch Kitty, *Out of the flood into the fire*, (representing the flood at Centennial Science and Engineering Library and the fire at Zimmerman Library that followed two years later), *Box it up: move it out* (a tribute to the work done by the library's Mail Room staff and students) *Quemando para ti: rebuilding together*, *Acknowledge, remember, celebrate, and honor*, and *All ye book harmers be warned or else you'll face a pirate's scorn*.

The process took initiative on the part of the quilt's creator and on the part of all the individuals who contributed squares that communicated deeply personal meanings – through the pictures, words, and faux book titles – that they chose to share with anyone who views the quilt. The quilt's creator is still "putting the final touches" on the quilt. Once it is finished, it will hang on a quilt rack, behind a protective, transparent covering, in the basement of the Zimmerman Library as a remembrance of the fire and a tribute to the staff who created it.

Conceptualizing and producing the UNM Libraries' *Fire Book* and the fire quilt is a clear example of camaraderie, teamwork, initiative, communications, and trust at its most creative as well as the library as a team finding a way to heal from the devastation wrought by the fire.

Although I did not discover any "healing" artifacts of this nature at the UI Libraries, I did discover some documents that may have facilitate healing. For example, I found an informational brochure in the paper archive located at the UI Libraries' Special

Collections department entitled “Under the Current: Collecting Stories from the Flood” provided a URL to learn more about an oral history project to collect stories about the flood, concentrating on the community and the campus. A phone number to call to register was also provided. The brochure stated that these stories would become part of the oral history project jointly sponsored by the University of Iowa and StoryCorps (the first born-digitally audio collection at the Library of Congress). It also provided the dates that the oral history interviews would be conducted (between September 30 and October 21, 2008); however, during a recent search, I was unable to locate this material at the Library of Congress website. Nonetheless, I believe that participating in this oral history project at UI may have provided some catharsis and healing for people on the UI campus and surrounding community.

In addition, when searching documents available through Archive-It (http://www.archive-it.org) for the University of Iowa Libraries, Flood of 2008 Collection, I found a few documents containing flood stories that dealt with themes of feelings of concern, fear, and trauma as the flood waters rose higher each day; holding on to hope; a sense of collective responsibility on the part of the campus and the community for the library as well as by the library staff to its users; a sense of “community” as being the best way to deal with the disaster; and people working together to save library books. The major theme that emerged when I coded the documents at the UI Libraries, either mentioned directly or I inferred from the various entries in the online archive, was communications along with some references to teamwork, collaboration, service orientation, and initiative; however, these stories may have also served as a healing device in some way for participants.

Summary

The findings in my research study are drawn from a relatively small sample from two academic libraries: the University of Iowa and the University of New Mexico; however, I contend that the voices of the library disaster team members that participated in interviews and focus groups as well as the documents, archives, and artifacts that I reviewed, revealed findings that serve to address my research question and sub-questions. Although I conducted either one-on-one interviews and follow-up interviews or focus group sessions with only twenty-seven participants, the knowledge and experience they gained in responding to and recovering from library disasters is substantial. Everyone I spoke with was forthcoming and candid about their experiences, actions, and thoughts. They were gracious not only with their time to meet with me, but in their efforts to locate and provide me with documents and artifacts related to the disasters at their respective libraries. The Dean at the University of Iowa Libraries, Nancy Baker, could not have made me feel more “at home” in her library.

I have taken considerable care and time to complete the emergent thematic coding of each transcript, assuring that interview and focus group participants’ answers were accurately portrayed in my discussion and analysis. I have taken the same care with the documents, archives, and artifacts to assure that these materials were faithfully coded. I found that these documents along with the participants’ stories took me back in time to the thoughts and feelings that I experienced during my own library’s disaster. Several participants told me that as they spoke with me they “re-lived” some of the thoughts and emotions they originally experienced, often for the first time since the disaster. Rather than being upset by the experience, most seemed to enjoy talking to me, and several

thanked me for the opportunity. I also believe that this may have been a healing activity for some participants. As one participant commented to me "I somehow felt that you viscerally understood and that kind of sharing was very powerful for me."

In my first pass at analyzing the emergent themes, I organized my data in the order that I asked the twelve interview and focus group questions. That process was very useful, giving me a clearer picture of the dominant themes that emerged and the way that they emerged in each part of the appreciative inquiry 4-D protocol. However, this first step did not express the emotions – the passion, pride, realizations, sadness, and joy – in the participants' stories. I also discovered that this format did not lend itself well to meaning making about the documents and artifact that I discovered. As I heard the participants' voices in my head, over and over again, and looked at the documents and artifacts, I began to conceptualize them as a tapestry of themes that I was weaving in my mind. For there, I was able to present participants' stories around the overarching theme that I discovered as a spoke with them months ago; that central theme was a culture of camaraderie, created as a result of the disaster. Within the culture of camaraderie, I found that five major connected themes also emerged; they were teamwork, initiative, communications, trust, and adaptability. Each of these themes reveals its own set of rich, descriptive interwoven components which were presented and analyzed in this chapter.

CHAPTER 5

PREDEFINED CONCEPT CHOICE MAPPING PRESENTATION AND ANALYSIS: THREADS OF EMOTIONAL INTELLIGENCE

"You may have heard the world is made up of atoms and molecules, but it's really made up of stories. When you sit with an individual that's been here, you can give quantitative data a qualitative overlay." ~~ William Turner

Introduction

The purpose of this chapter is to present the results of predefined concept choice mapping of the study data using Goleman's (2001) model of twenty emotional intelligence competencies. To accomplish this part of the data analysis, I mapped the interview and focus group transcripts of the ten participants at the University of Iowa Libraries and the seventeen participants at the University of New Mexico Libraries. Regrettably, I discovered that the documents I inspected from these two institutions were predominately informational in nature; therefore, the most pertinent inferences I drew came from photographs and other artifacts. Due to the highly subjective nature of mapping emotional intelligence competencies in these materials, I did not attempt to map them and relied solely on data from the transcripts for this part of the data analysis.

I found that the five major competencies – teamwork, initiative, trust/trustworthiness, communications, and adaptability/flexibility – that were revealed in the emergent thematic coding analysis discussed in Chapter 4 were emotional intelligence competencies. Consequently, these five themes also emerged as the dominant

competencies in the predefined concept choice mapping analysis herein. I also found that in addition to these five emotional intelligence competencies, all twenty competencies were mentioned in the transcripts.

What Is Predetermined Concept Choice Mapping

Predetermined concept choice mapping is a form of mapping similar to conceptual mapping which uses either a few words or brief summaries of the issues that emerge in a study (Grbich, 2007). In the mapping part of this analysis, I used a predefined concept choice system, meaning that I coded from a predefined set of emotional intelligence categories. Mapping, by its nature, involves recording the number of times that some construct appears in the data, in this case the number of times an emotional intelligence attribute is mentioned. This process is intended to aid the reader in knowing how often the disaster team members that participated in my research spoke about a particular concept.

The model I used provided a framework to define the construct of emotional intelligence which is divided into four behavioral groups or domains including self-awareness, self-management, social awareness, and relationship management, and with twenty emotional competencies including emotional self-awareness, accurate self-assessment, self-confidence, emotional self-control, trustworthiness, conscientiousness, adaptability, achievement drive, initiative, empathy, service orientation, organizational awareness, developing others, influence, communications, conflict management, visionary leadership, catalyzing change, building bonds, and teamwork and collaboration (Goleman, 2001).

Why Use Predefined Concept Choice Mapping

I applied predefined concept choice mapping to my data as an additional component to better understand the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members and to more fully answer one of my research sub-questions which asked “Which emotional intelligence competencies are most common among DRAT members?”

Since I mapped the emergent themes that were described in Chapter 4 through the thick, rich stories told by the disaster team members as they relived their experiences against predetermined emotional intelligence attributes in the second part of my analysis, some readers may question if this part of my research should be considered as part of a constructivist mode of inquiry. While some researchers may consider mapping to be constructivist, most researchers would argue that the mapping aspect of my data analysis shifts part of my study toward the positivist side of the continuum, while remaining qualitative. I tend to agree; however, I contend that no matter where this form of mapping falls along the positivist-constructivist continuum, applying predetermined concept choice mapping to the data in my qualitative study serves to provide an additional layer of understanding about the relationship between emotional intelligence competencies and the personal attributes of academic library disaster research team members.

Meaning Making From Mapping Emotional Intelligence Competencies

Chen (2001) contends that the most fundamental aspect of a human social setting is that of meanings. Meanings are the cognitive categories that make up a person’s view of reality and with which actions are defined. Life experience generates and enriches

meanings, while meanings provide explanation and guidance for the experience. A person gives meanings to events and experiences. Meaning is the underlying motivation behind thoughts, actions and even the interpretation and application of knowledge.

The unique work of qualitative research and data analysis in particular is to identify the contributors to the unique meaning made by an individual or group (Merriam, 1998). By its very nature, both positivist and constructivist qualitative data analysis remains a highly intuitive activity. According to Becker (1996), all social scientists, implicitly or explicitly, attribute a point-of-view and interpretations to the people whose actions they analyze and qualitative researchers always describe their interpretation of the events their respondents participate in. Becker (1996) contends that events, items, and/or activities that seem commonplace, when approached from an analytical, naturalistic perspective, can be a source of significant meaning and that qualitative data analysis provides a method for categorizing and organizing the subtleties of social phenomena in a meaningful way. I used mapping of emotional intelligence competencies as an additional tool to help make meaning about which competencies were most strongly part of the internal reality of participants and most commonly intertwined in the stories they told that I reported in Chapter 4.

Mapping the Interviews and Focus Group Transcripts for Emotional Intelligence Competencies

Five major themes emerged when the interview and focus group participants' responses were coded. These major themes are emotional intelligence competencies falling into two of the four emotional intelligence behavioral groups or domains as described by Goleman (2001). Teamwork and communications are included in the

Relationship Management behavioral group or domain and the remaining three themes, trust/trustworthiness, adaptability/flexibility, and initiative, are included in the Self-Management domain. These five major themes were found in the transcribed interviews and focus groups a total of 239 times.

Further, nearly all of the related and intertwined concepts discussed by the participants are also emotional intelligence competencies. As expected in naturalistic inquiry, in some cases the exact word(s) for a competency do not map verbatim. For example, a participant may not have said, "I engaged in accurate self-assessment," instead the respondent may have said "I always thought that I would do [something] in a disaster, and I did." In these cases, I used my judgment as a researcher to map the meaning of the response. Lofland and Lofland (1996) support this process. They describe "unarticulated meanings" as meanings that go unrecognized by respondents and are instead articulated by the researcher through the use of "typifications." The typifications are based on a range of categories of data which the researcher gives meaning to by generalizing it under one name. Thus, the data comprising the typification all point to the same general theme (competency in this case) despite the variety of details.

Visualizing the Mapped Data

To aid the reader in visualizing the themes identified in the mapping process, I created word clouds, sometimes referred to as tag clouds, based on responses from participants at the University of Iowa Libraries, depicted in Figure 5, and the University of New Mexico Libraries, depicted in Table 6. A word cloud is a weighted list of text data, shown in a visual representation. Each tag represents a word or short phrase – such as teamwork or communications – with the importance of these works or phrases shown

via the size of the font. Each cloud gives greater prominence to words that appear more often in the participants' transcripts; therefore, this format is useful for quickly perceiving the most prominent terms.

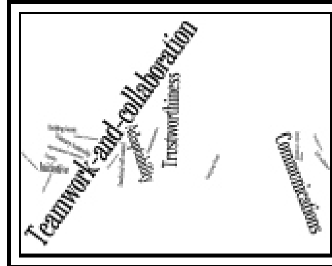

Figure 5. Word Cloud Themes from Interviews at the University of Iowa

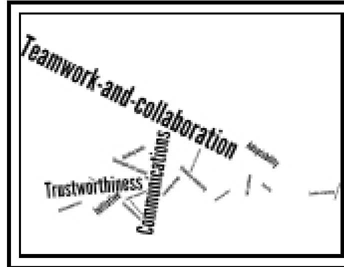

Figure 6. Word Cloud of Themes from Interviews at the University of New Mexico

Table 5 shows how often each emotional intelligence competency was mentioned by the participants at the two institutions during either their initial one-on-one interviews, during their follow-up interviews, or during the focus groups. (Appendix G, Tables 6 and 7, depict the results of the interviews and focus groups separately.) Emotional intelligence competencies were mentioned 152 times by the four interview participants and the six focus group participants at the University of Iowa and 249 times by the six interview participants and eleven focus group participants at the University or New Mexico, for a total of 401 times by the participants at both institutions.

Table 5

Map of Emotional Intelligence Competencies from Interviews and Focus Groups

Domain: **Self-Awareness**	UI	UNM	Total
Competency:			
▪ Emotional self-awareness	3	4	7
▪ Accurate self-awareness	2	4	6
▪ Self-confidence	5	6	11
Domain: **Self-Management**			
Competency:			
▪ Emotional self-control	6	8	14
▪ Trustworthiness	16	31	47
▪ Conscientiousness	5	8	13
▪ Adaptability	14	22	36
▪ Achievement drive	4	7	11
▪ Initiative	10	22	32
Domain: **Social Awareness**			
Competency:			
▪ Empathy	5	8	13
▪ Service orientation	5	7	12
▪ Organizational awareness	5	3	8
Domain: **Relationship Management**			
Competency:			
▪ Developing others	3	6	9
▪ Influence	3	2	5
▪ Communications	17	32	49
▪ Conflict management	4	7	11
▪ Visionary leadership	6	9	15
▪ Catalyzing change	4	8	12
▪ Building bonds	6	9	15
▪ Teamwork and collaboration	29	46	75
Grand total:	152	249	401

Emotional Intelligence Domains and Competencies

Simply knowing the label attributed to an emotional intelligence domain or competency does not give the reader a thorough understanding of what is meant by a

term. Therefore, I have included Goleman's (1998) and Goleman's, (2001) definitions of each term to provide a more comprehensive description of the definitions that I applied in my analysis.

- The first domain of emotional intelligence is self-awareness, which means knowing one's internal states, preferences, resources and intuitions (Goleman, 1998); knowing what one feels (Goleman, 2001). This domain comprises three emotional intelligence competencies. They are:
    - Emotional self-awareness: recognizing one's emotions and their effects (Goleman, 1998); reflects the importance of recognizing one's own feelings and how they affect one's performance (Goleman, 2001).
    - Accurate self-assessment: knowing one's strengths and limits; an ability found in nearly every star performer (Goleman, 1998); awareness of one's own abilities and limitations, ability to seek out feedback and learn from mistakes, and knowing when to improve and when to work with others who have complementary strengths (Goleman, 2001).
    - Self-confidence: a strong sense of one's self-worth and capabilities (Goleman, 1998); a strong predictor of performance (Goleman, 2001).
- The second domain of emotional intelligence is self-management which means managing one's internal states, impulses, and resources (Goleman, 1998); the ability to regulate distressing affects like anxiety and anger and to inhibit emotional impulsivity (Goleman, 2001). This domain comprises six emotional intelligence competencies. They are:

- Emotional self-control: keeping disruptive emotions and impulses in check (Goleman, 1998); the absence of distress and disruptive feelings as well as being unfazed in stressful situations or dealing with a hostile person without lashing out in return (Goleman, 2001).
- Trustworthiness: maintaining standards of honesty and integrity (Goleman, 1998); letting others know one's values and principles, intentions and feelings, and acting in ways that are consistent with them (Goleman, 2001).
- Conscientiousness: taking responsibility for personal performance (Goleman, 1998); being careful, self-disciplined, and scrupulous in attending to responsibilities (Goleman, 2001).
- Adaptability: flexibility in handling change (Goleman, 1998); comfortable with risk, change, and the anxiety that often accompanies uncertainty as well as being open to new information and letting go of old assumptions (Goleman, 2001).
- Achievement drive: persistence in pursuing goals despite obstacles and setbacks (Goleman, 1998); an optimistic striving to continually improve performance (Goleman, 2001).
- Initiative: being comfortable with novel ideas, approaches, and new information (Goleman, 1998); acting before being forced to do so by external events – taking anticipatory action to avoid problems before that happen or taking advantace of opportunities before they are visible to others (Goleman, 2001).

- The third domain of emotional intelligence is social awareness which means awareness of other's feelings, needs, and concerns (Goleman, 1998); the ability to be empathetic, read non-verbal cues, and to judge the trustworthiness of other people (Goleman, 2001). This domain comprises three emotional intelligence competencies. They are:
    - Empathy: sensing other's feelings and perspectives and taking an active interest in their concerns (Goleman, 1998); an astute awareness of other's emotions, concerns and needs as well as reading emotional currents and picking up on non-verbal cues such as tone of voice and/or facial expressions (Goleman, 2001).
    - Service orientation: anticipating, recognizing, and meeting customer's needs (Goleman, 1998); ability to identify a customer's often unstated needs and concerns and then match them to products or services (Goleman, 2001).
    - Organizational awareness: reading a group's emotional currents and power relationships (Goleman, 1998); ability to read the currents of emotional and political realities in groups – vital to the behind-the-scenes networking and coalition building that allows individuals to wield influence, no matter what their professional role (Goleman, 2001).
- The fourth domain of emotional intelligence is relationship management which means adeptness in inducing desirable responses in others as well as guiding or facilitating reaching goals (Goleman, 1998); the ability to attune

ourselves to or influence the emotions of other people (Goleman, 2001). This domain comprises eight emotional intelligence competencies. They are:

- Developing others: sensing other's development needs and bolstering their abilities (Goleman, 1998); sensing people's developmental needs and bolstering their abilities – a talent needed in leaders as well as coaches and mentors (Goleman, 2001).
- Influence: wielding effective tactics for persuasion (Goleman, 1998); handling and managing emotions effectively in other people – sensing others' reactions and fine tuning their own responses to move interaction in the best direction (Goleman, 2001).
- Communications: listening openly and sending convincing messages (Goleman, 1998); effective in the give and take of emotional information, dealing with difficult issues straightforwardly, listening well and welcoming the sharing of information fully, fostering open communications, and staying receptive to bad news as well as good (Goleman, 2001).
- Conflict management: negotiating and resolving disagreements (Goleman, 1998); spotting trouble as it is brewing and taking steps to calm those involved – handling difficult situations with diplomacy, encouraging debate and open discussion, and orchestrating win-win situations (Goleman, 2001).
- Visionary leadership: inspiring and guiding individuals and groups (Goleman, 1998); drawing on a range of personal skills to inspire

others to work together toward common goals – articulating and arousing enthusiasm for a shared vision and mission, stepping forward as needed, guiding the performance of others while holding them accountable, and leading by example (Goleman, 2001).

- Catalyzing change: initiating or managing change (Goleman, 1998); recognizing the need for change, removing barriers, challenging the status quo, and enlisting others in pursuit of new initiatives (Goleman, 2001).
- Building bonds: nurturing instrumental relationships (Goleman, 1998); balancing one's own critical work with careful chosen favors as well as cultivating relationships and building accounts of goodwill and trust with people who may become critical resources down the line (Goleman, 2001).
- Teamwork and collaboration: working with others toward shred goals as well as creating group synergy in pursuing collective goals (Goleman, 1998); ability to work collaboratively with peers – teamwork itself depends on the collective emotional intelligence of its members, as well as holding collective beliefs of trust, group identity, and group efficacy/effectiveness (Goleman, 2001).

Summary

Predetermined concept choice mapping of emotional intelligence attributes, conducted using transcripts of library DRAT members' responses in interviews and focus groups, amplified the themes found in the data analysis from the emergent thematic

coding discussed in the previous chapter. I applied this positivist qualitative approach to the data to provide another layer of understanding about the relationship between emotional intelligence competencies and the personal attributes of academic library DRAT members. This mapping process painted a fuller picture for the reader and specifically addressed one of my research sub-question which asked “Which emotional intelligence competencies are most common among DRAT members?”

I used Goleman’s (2001) Framework of twenty Emotional Intelligence Competencies to map participants’ transcripts. I depicted the resulting data in cloud maps and in a table showing the number of times each competency was mentioned by the study participants at each institution. I included Goleman’s (1998, 2001) definitions of each emotional intelligence domain and competency to provide a more comprehensive description for the reader.

In this second phase of my data analysis, I found the same major emotional intelligence themes that emerged in the first phase including teamwork/collaboration, communications, trust/trustworthiness, adaptability/flexibility, and initiative. In addition to these major themes – all of which are emotional intelligence competencies – I found that each of the twenty emotional intelligence competencies in the model were mentioned either directly or indirectly by participants from both the University of Iowa and the University of New Mexico Libraries. Participants at both institutions mentioned the twenty emotional intelligence competencies a total of 401 times, suggesting a strong relationship between emotional intelligence competencies and the attributes of disaster team members as they dealt with the disasters at their respective institutions.

CHAPTER 6

RESULTS, CONCLUSIONS AND NEXT STEPS

"All great truths are simple in final analysis, and easily understood; if they are not, they are not great truths." ~~ Napoleon Hill, 1883-1970

Introduction

When I began this research, I did so with awareness that universities are at a turnaround moment in their histories due to many factors. As a university administrator myself, I knew first-hand that everyone who has a stake in the leadership of universities at any level must plan for the future, while also responding promptly and effectively to the many challenges and opportunities that come their way daily. My personal interests reside with the university library workplace, which is also in a state of rapid change on multiple fronts; however, few events create more instability and change in an academic library than a sudden disaster.

Disasters strike libraries more often than anyone wants to consider (Heritage Preservation, 2005; Thomas, 2009). Burned or water damaged books strike a chord of sorrow and regret in almost everyone. In academic libraries, books, archives, and other materials are the underpinnings that support the university's teaching, learning, and research mission, yet disasters strike these libraries with surprising frequency and intensity (Wilkinson, Lewis, & Dennis, 2010). A library's recovery from a disaster depends on the individuals who prepare for it, respond to it, and lead the recovery process: the disaster response assistance team (DRAT) members.

Many times as I responded to disasters at my own library, I was simultaneously awed, heartened, impressed, and amazed by the sometimes heroic and other times simple activities of the disaster team members that seemed to make such a difference. So often I found my more analytic-self drawing on my sociology, psychology, and administrative background to try to understand what was driving the process in crisis situations.

I remembered learning about emotional intelligence in a very superficial way through various workshops that I had participated in over the years. As I delved deeply into the literature, I discovered that organizations are becoming increasingly aware of the dynamic of teams, the emotional intelligence of team members, and the effect emotional intelligence can have on team performance (Furnham, 2009; Prasad & Akhilesh, 2002). Gradually, I began to wonder if an individual's emotional intelligence could be a factor in the phenomenon that I was participating in and observing. I found that although the scholarly and popular literature was filled with research on the relationship between emotional intelligence and effective leadership, there was a gap when it came to that relationship during disaster response and recovery.

Using that lens, I conducted a qualitative instrumental case study of two libraries that were recovering from disasters: a 2008 flood at the University of Iowa (UI) Main Library in Iowa City, Iowa and a 2006 fire at the University of New Mexico (UNM) Zimmerman Library in Albuquerque, New Mexico. Both libraries were several years into the recovery process when I began my study, but neither had fully recovered. The UI Libraries still had not moved their music and art collections back to their respective buildings. Renovation of the art library would take months longer to complete. The music library was damaged so severely by the flood that a new facility was to be built. By the

time of my study, the UNM Libraries finished remodeling damaged spaces, but some collections were still not reintegrated and the final insurance settlement to replace the remaining destroyed journals had not been received at the time I interviewed DRAT members.

Discussion of Results and Data Interpretation

As laid out in Chapter 4, as I applied emergent thematic coding to transcripts of ten study participants' one-on-one interviews and follow-up interviews; to the transcripts of the seventeen people who participated in four focus group sessions; and to the documents, physical archives, and artifacts that I reviewed, a tapestry of themes unfolded. I immediately discovered an overarching theme of camaraderie among disaster team members running through all of these materials. During the crisis, people at both institutions exhibited this camaraderie by temporarily rising above their typical modes of behavior to exhibit a strong spirit of fellowship as they became a cohesive team. Something about a crisis situation seemed to gel the team members together in an urgent, common purpose. This all-encompassing spirit was felt so strongly among disaster team members that I came to view this phenomenon as the creation of a "culture of camaraderie" which was evident throughout the disaster response and recovery.

Based on participants' comments, this experience seemed to be immediately and strongly present at both university libraries as their disaster teams were called together to respond to the disasters and it remained strong throughout the early weeks and, for some core participants, for many months following the disasters. Curiously, for some and perhaps most DRAT members, this culture of camaraderie dissipated somewhat over time as the situation began to normalize: spaces were rebuilt, people returned to their pre-

disaster work areas, employees left, and new ones were hired. This dissipation was not a universal reaction; some study participants mentioned that lasting bonds were formed between themselves and other DRAT members as a result of working so closely during the disaster process. From personal experience, I have observed both of these changes taking place; however, my research did not delve into this phenomenon to uncover possible reasons for the shift.

A second major discovery was that although there were some differences in study participants' outlooks, perceptions, and emotions, there were many more striking similarities than differences, not just among the DRAT members at each of the libraries, but across the two libraries. The words and feelings expressed by participants in the two settings were nearly indistinguishable. As participants at both libraries shared stories about responding to the emergency – either their internal response as they learned of it or their early actions to mitigate its effects – and stories about leading various recovery efforts, there was almost no difference in the words they chose to describe their feelings. I found remarkable similarities in the way participants at these institutions were affected by the disaster and the emotional attributes they drew upon at each stage of the process. For that reason, I decided generally not to separate the two cases or to separate the stages of response and recovery as I discussed my findings from emergent thematic coding in Chapters 4 or in this chapter; however, I did compare and contrast them, noting similarities and differences throughout my analysis.

Within the overarching theme of camaraderie, five intertwined themes emerged dominantly as participants shared their stories: teamwork/collaboration, initiative, communications, trust/trustworthiness, and adaptability/flexibility. In addition, when

conducting predefined concept choice mapping for emotional intelligence competencies, as reported in Chapter 5, I found that these five major emergent themes were all emotional intelligence competencies and consequently they were the most commonly mentioned competencies. They appeared a total of 239 times in transcripts from study participants.

Further, when mapping participants' transcripts, I found that all twenty emotional intelligence competencies emerged and were mentioned a total of 401 times by participants. Fifteen of these twenty competencies were mentioned eleven or more times, while five competencies (emotional self-awareness, accurate self-awareness, organizational awareness, developing others, and influence) were mentioned between five and nine times by study participants.

As part of the mapping process, Tables 6 and 7, located in Appendix G, provide the reader with precise details about the "Results of Mapping Emotional Intelligence Competencies to Interview and Focus Group Transcripts." Appendix G, Table 6, illustrates how many times each of the twenty emotional intelligence competencies, within the four overarching domains, were mapped in interview participants' transcripts, while Table 7 maps this data for focus group participants' transcripts. These results were reported in aggregate in Chapter 5, Table 5.

Research Questions Answered

These findings directly addressed my research question, suggesting a strong relationship between emotional intelligence competencies and the personal attributes of academic library DRAT members who responded to and led their library in its recovery process. One of my four research sub-questions asked, which emotional intelligence

competencies emerged in DRAT members during disaster response and recovery. I discovered that each of the twenty emotional intelligence competencies emerged in participants' stories and were mapped in their transcripts a total of 401 times.

Another research sub-question examined, which emotional intelligence competencies are most common among DRAT members. I found that five emotional intelligence competencies were most commonly reported by participants, including teamwork/collaboration (mapped 75 times), initiative (mapped 32 times), communications (mapped 49 times), trust/trustworthiness (mapped 47 times), and adaptability/flexibility (mapped 36 times). Yet another sub-question inquired about which emotional intelligence competencies DRAT members consider to be of greatest importance in leading the disaster response and recovery. As participants' stories revealed, the five major themes were threaded through virtually every answer from every respondent, distinguishing them as having great importance to the disaster team members. My final research sub-question considered what unique meaning individual DRAT members made of the various emotional intelligence competencies that emerged. To address this sub-question, I discussed each of the five major emergent themes and interpreted their unique meaning in greater depth below.

Leading Through Teamwork and Initiative

Of the five themes, teamwork was by far the most pervasive in the documents and artifacts I reviewed as well as the most dominant in both coding and mapping analyses of participants' transcripts. In retrospect, I should not have found this result surprising since my data came from members of two library disaster response assistance *teams*. I also

found that another major emergent theme, initiative, was interwoven with teamwork in an intriguing way.

When I initially conceived this study, based on both my review of the literature and my own reasoning and observations as an administrator, I had a notion that leadership might emerge as the dominant theme. Instead, I found, almost without exception, when the concept of leadership was discussed by participants it was either in the context of teamwork or initiative. Curiously, it did not emerge as a separate major stand-alone theme. Therefore, the unique meaning individual disaster team members made of the emotional intelligence competency of leadership appeared to be that although it may be modeled, supported, and even encouraged at the top, it was primarily exhibited either jointly through teamwork or individually through initiative. Further, when leadership was exhibited through initiative, it was fluid, often done in the absence of clear authority, was assumed by various team members at different times based on needs as the situation changed, and generally involved decision making.

Some participants indicated that they felt that either they were or would be supported by senior leadership such as the library Dean, to make needed decisions. Some even said that they felt “empowered” to make decisions, but many other participants indicated that in the peak of the crisis they were often making decisions without explicit or implied authorization. Instead, they “took on” the responsibility to make decisions in the moment because confusion abounded and there was not time to seek out a senior administrator to consult, much less time to form a committee and attempt to reach consensus on what steps to take. Consensus building is often a norm in library

organizations and is commonly recognized as a solid management principle; however, in this study participants felt it was too time-consuming during a crisis response.

A few individual DRAT members seemed surprised by their own initiative-taking. Oddly, the two persons who were most surprised by this attribute in themselves (one person at each institution) were the very ones who already had considerable legitimate authority to make decisions. One interviewee confided that she had never deeply considered that she had the authority and/or autonomy to make unilateral decisions before the disaster struck because her leadership style is usually to consult with the Dean and to work with her staff to build consensus before taking any action that would have lasting consequences for the organization. Another interviewee said that he had never analyzed his decision-making actions or his legitimate autonomy to take action outside of his unit until I interviewed him. Based on our discussion, this realization served as a powerful “ah-ha” moment for him.

Communications Are Everyone’s Responsibility

Another major theme, mapped as the second most frequently mentioned by participants, was communications. This competency was also obvious in the documents I reviewed. As a central theme, communications took many forms and emerged in multiple ways. Nearly all participants spoke of communications taking on an increased importance and urgency during disasters and these aspects of communications were also evident throughout the written materials found in documents and archives. This finding was not surprising to me either. Communication was my undergraduate major and I am well-versed on its importance. Many of these interviewees and focus group members noted that although communications came in part from the top library leaders, especially for

official statements to the media and updates regarding campus-level decisions, as discussed in Chapter 4, it was also very much a shared responsibility.

Based on participants' stories and on reviewing various documents and archives, it was apparent that both formal and informal communications took place at every level in both library organizations throughout the disaster response and recovery process. Further, it became clear that communications were sometimes carried out in innovative ways such as through blogs, websites, electronic message boards, recording phone messages, and even via paper notes when technology failed.

One interviewee shared a story about setting up flip charts in his office for disaster team members and even outside vendors to leave notes to one another during the early days after the flood when internet connectivity was down or spotty on the campus. A focus group member recalled volunteering to staff an information booth consisting of a tent hastily set-up outside the burned library. From that tent, for several days after the fire, she provided information about what happened to the library's facilities and collections to people who had not heard about the disaster as well as to inform students how to locate alternate library resources during upcoming final examinations. Another focus group member spoke of updating the library's website and recorded phone message several times a day during the immediate aftermath of the fire. Some of these communications featured general information to the public, while some of it carried specific instructions to library staff about when and where to report for work.

Several participants talked of the changes that technology had brought in the few years since the flood and fire at these libraries. One person said that although Twitter was born in the spring of 2006, it was not heavily used by many people until sometime after

the disaster stuck his library. He speculated that if another disaster struck today, Twitter would be “a” major form, if not “the” major form, of communications among DRAT members. An interviewee observed that electronic journals were just becoming pervasive in 2006 when the fire struck. She noted that “it would have happened anyway, but the fire catapulted us into the 21st century where electronic journals are ubiquitous and paper is fast becoming an artifact.” She added “e-journals and e-books don’t burn.” While that holds true for scholarly journals, the content communicated through original paper manuscripts and documents, such as those commonly housed in library special collections units, will still be vulnerable to water and fire damage.

Trusting Yourself and Others

My findings about leadership being expressed primarily through teamwork and initiative have a strong connection to trust and trustworthiness. I discussed how some participants indicated that they felt supported and/or empowered by senior leadership to make decisions in the moment during the disaster. I also touched upon comments made by senior administrators about either supporting or encouraging these actions. Based on participants’ stories, this backing seems to come from senior leaders themselves being capable of and willing to place trust in individuals in the organization who in their minds have proven trustworthy.

Goleman (1998) contends that people prove that they are trustworthy by letting others know their values, principles, intentions, and feelings, and acting in ways that are consistent with them. Aspects of his assertion were woven into comments from senior administrators at both institutions as they described the trust they placed in members of their disaster teams to make the right decisions. One Dean said, “I just have the best

people and know I can trust them." She observed, "It was very team oriented, as it has to be, because no one person can take care of all of this." She added, "I am lucky because I had a head of preservation who knows exactly what needs to be done and she just kicked right into gear." This Dean went on to talk about many others on her disaster team who proved trustworthy throughout the disaster process. Another Dean spoke about how she could not be everywhere even if she tried and it was good to know that so many of her staff could be relied on. She added, "they really know their stuff and I counted on that." A senior administrator at that library commented that she knew "who to rely on…and trust" because of their principles and actions in a previous disaster. She added that she "always knew that their intentions were good" even when their decisions might not have been the same ones she would have made. These top library leaders all understood the value of trusting others. Several study participants commented on feeling that trust to support or empower their actions.

While being trusted by top library administrators was an important ingredient in the disaster team's functioning and success, my findings indicate that trusting one's self and others was also a major factor. In my study, self-trust, at least in part, appeared to spring from individuals being able to harness the emotional wherewithal to make difficult decisions on-the-spot during times of upheaval. One focus group member commented, "I don't know how I did it. I guess I just found the strength somehow to keep going…It felt like I pulled it up from my toes." Then she paused, thought for a minute, and said, "I just had to trust myself, that's all." Another member of that focus group quickly added, "Without a solid basis of self-trust I don't think the group would have trusted each other

so much. I mean, if you can't trust yourself, how can anybody else really trust you much."

Many participants shared stories about the disaster team trusting each other and its members being trustworthy. Researchers agree that trust and trustworthiness is an essential aspect for cooperation in teams (Coleman, 1988; Jones & George, 1998). This finding was not surprising to me, nor will it likely come as a surprise to anyone else. What I had not considered when I conceived this study was that some team members seemed surprised that their colleagues were as knowledgeable and trustworthy as they discovered them to be during the disaster. It seems to me that believing that your teammates have the knowledge and ability to make the best decisions would be a cornerstone of trusting them. Perhaps it is easy to forget that your colleagues had appropriate credentials in some area or they would not have been hired. Perhaps because diverse segments of the library are brought together in the disaster team for their specialized knowledge and abilities, other members of the team may not have worked closely enough with them in the past to know what capabilities they can bring to the team. Regardless of the reasons, this finding, which may simply be human nature, is an important one for anyone dealing with a disaster to keep in mind. As one participant simply, yet profoundly, observed, "This situation certainly reminded me that sometimes you can discover new talents in your own staff if you are open and trusting. Just because you have never seen it, maybe it was your expectations of them, not their abilities." This comment further serves to remind me, and hopefully others, that talents needed on the team can come from unexpected individuals if trust, and perhaps encouragement, are part of the team dynamic.

Adapting as Situations Change

No matter how well prepared disaster team members were, regardless of the plans they developed or how many times they rehearsed possible disaster scenarios, team members reported having to adapt their actions, views, and even their emotions as circumstances changed throughout the disaster. As Goleman (2001) noted "If there is any single competency our present times call for, it is adaptability" (p. 35). These authors emphasize that the ability to adapt allows individuals to remain comfortable with the anxiety that often accompanies uncertainty, allows them to display creativity in their work, and aids then in applying new ideas to achieve results. These notions seem especially apt when describing the need for and utility of the competency of adaptability.

I found that adaptability, like the other major emergent themes in my research, was also modeled from the top. For example, during the UI flood, the library Dean and other senior administrators were either on the stairs marshaling the volunteers who formed a human-chain to bring materials up from the basement to safety on the second floor or they were participating in other tasks such as sandbagging outside of the main library building. During the UNM fire, senior library administrators were present all night as firefighters fought the blaze and put out the hot spots that popped up after the main fire was considered extinguished. These same administrators and others participated in reviewing fire-damaged journals to determine which ones could be salvaged. Some administrators joined other DRAT members to assist crews with removing burned and/or water sodden (from fire hoses) equipment and furnishings from the library's basement. This ability of top administrators to adapt to changing circumstances and do whatever needed was acknowledged and seemingly admired by the entire disaster team and I

suspect by others in the organization as well. As one interviewee noted, "…these activities by [Names] helped to set the tone that we were all in it together…the hierarchy just kind of vanished for a time and everyone pitched in."

As I expected, I found that adaptability was a key theme at all levels of both libraries. I reported in Chapter 4 that person after person talked about drawing on their ability to adapt. In the early stages of the disaster, some participants commented they sometimes had to adapt hour-by-hour. A few participants observed that for some disaster team members this level of extreme adaptability seemed to emerge as a new attribute. Other individuals spoke of how successfully they and the disaster team as a whole adapted to rapid change, inconvenience, uncertainty, stress, and at times lack of rest.

Drawing on All Emotional Intelligence Competencies

Although teamwork, initiative, communications, trust, and adaptability were the most dominant themes that emerged and the most frequently mapped emotional intelligence attributes, all twenty emotional intelligence attributes were threaded in the stories that participants shared with me. As I did thematic coding of the transcripts, I looked carefully and repeatedly for any other themes. Each time I thought I had discovered a minor theme that seemed to be something other than an emotional intelligence competency, I found that when I looked deeper at the definitions, what I had found was indeed an emotional intelligence competency. For example, I discovered that patience was a minor theme mentioned by several participants; however, I soon realized that in some definitions patience is typified by the competency of emotional self-control. The only attribute I found that was not clearly an emotional intelligence competency was organization, which surprisingly was only mentioned by a few participants.

Emotional Intelligence Competency Cluster Tipping Point

My study looked at emotional intelligence competencies individually as having their own significant impact; however, McClelland (1998) believes that it is generally more useful to examine them in clusters than one by one. He posits that in clusters, it is possible to assess the synergies of strengths in several competencies that enable outstanding performance in individuals and groups. His theory is that individuals exhibit emotional intelligence competencies in synergistic groupings, often across the four domains, which allow competencies to support one another. If this theory is correct, then mastering a critical mass of emotional intelligence competencies would be necessary for superior performance (Boyatzis, Goleman, & Rhee, 2000). The notion of a tipping point, in which successful individuals and organizations interact in ways that require a multitude of emotional intelligence competencies and abilities with each proving most effective when used in combination with others, is an intriguing next step in the cluster theory (Goleman, 2001). How many competencies and domains are required to reach this tipping point? McClelland's (1998) research found this tipping point effect when people exhibited mastery of six of more of the emotional intelligence competencies and demonstrated strength in at least one competency from each of the four domains. This tipping point distinguishes top performers from average performers. The concept of a "tipping point effect" was supported by Boyatzis (1999) who found that mastery of several emotional intelligence competencies in the same domain, with competencies observed in at least three of the four domains, was necessary for success among high level leaders.

My research study was not designed to code or map emotional intelligence competencies at the individual team member level; however, when emotional intelligence competencies of these team members were viewed in aggregate, the results appear to meet most of the requirements for mastery at the tipping point for top performers, as laid out by McClelland (1998) and Boyatzis (1999). This observation offers intriguing implications for potential practice in academic libraries as well as for future research.

Implications for Practice

In the last decade, librarian researchers have begun to conduct studies on the relationship between emotional intelligence and library leaders (Hernon, Giesecke, & Alire, 2007; Hernon & Rossiter, 2006; Kreitz, 2009); however, there had been no research on the relationship between emotional intelligence competencies and the personal attributes of academic library disaster team members as they lead the change process of responding to and recovering from a disaster. My research takes a first step at filling that gap by finding that there is a relationship between emotional intelligence competencies and the personal attributes of academic library DRAT members; that five competencies – teamwork, initiative, communications, trust, and adaptability – were the most important, commonly discussed by participants; and that all twenty of Goleman's (2001) emotional intelligence competencies were mapped in the transcripts, a total of 401 times.

As with all qualitative research conducted in a natural setting and with a small sample size, studying unique events, my results cannot be fully generalized to other settings and situations (Collis & Hussey, 2003); however, the thick description I used as the foundation for my reporting and analysis may achieve some level of analytic

generalization (Yin, 1994) or transferability to other times, settings, situations, and people (Tobin & Begley, 2004).

Many of my findings translate into suggestions for practice in academic libraries. These findings may serve to enlighten library leaders about fostering emotional intelligence dynamics as they work together with the library staff to effectively manage the change brought about by a disaster. Results of my research serve as support for leaders to consider emotional intelligence competencies as a factor in their appointment of disaster response assistance teams. In addition, my findings point to a need to build an organizational culture that promotes trust, collaboration, and learning; provides opportunities and rewards for disaster teams and individuals to show initiative in decision making; and is nimble enough to adapt to change as a normal, expected condition. Library leaders should also encourage individuals at all levels to engage in effective, efficient communications during disasters. Further, my findings lend credence to the need for library leaders to provide training opportunities for individuals to learn or enhance emotional intelligence competencies as well as to practice them.

Appoint Effective Disaster Response Assistance Teams

Leaders who wish to strengthen their library's capability to prepare for, respond to, or recover from a disaster should carefully consider the insights revealed in my research as an additional mechanism to inform and aid them as they select and appoint library employees to serve on disaster response assistance teams. Typically when library administrators appoint individuals to serve on DRATs, they make their selections based on the position the person holds in the organization, such as facilities manager, collections librarian, human resources specialist, and so on (Wilkinson, Lewis, & Dennis,

2010). Their choices are made because individuals holding these titles are presumed to have the requisite knowledge, skills, and abilities (KSAs) to have attained them. Collins (2001) uses an analogy about identifying the right people and putting them in the right seat on the bus. What if this decision was not made solely on position titles and/or traditional KSAs, but instead based on emotional intelligence competencies or at least based in part on emotional intelligence competencies? This notion might be one for library leaders to consider when appointing disaster teams.

Leadership by Teamwork and Initiative

When the concept of leadership was discussed by study participants, almost without exception, it was either in the context of teamwork or initiative; it did not emerge as a separate major stand-alone theme. Top library administrators should take this key finding into consideration when they appoint individuals to populate disaster teams. From my own experience and the comments by the Deans at the two libraries I studied, library administrators take the business of “leading” very seriously. They set the tone and significantly shape the organizational culture of the library. Having worked at many levels in libraries, I understand the weight of responsibility one feels as a top administrator, but I also know the commitment and feelings of responsibility of employees at other levels in the organization. Any library administrator who attempts to “run the show” alone is doomed to failure; it must be a shared responsibility.

My findings point to the need for library leaders to create a culture of trust, especially during crises, that supports, encourages, empowers, and rewards DRAT members to use initiative to lead various aspects of the response and recovery, making decisions in the moment when necessary. Organizations with high levels of mutual trust

are more open to new ideas and initiative taking. Rather than relying on traditional administrative structures to impose new ideas and ways of working, the creative structure of teams becomes the tool to develop a commitment to create change (Shapiro, 2003).

Once discovered, this ability to engage in new ways of thinking and to assume greater authority in decision-making may prove useful after the disaster and contribute to a healthier organizational culture overall; however, I know from my own experience that individuals cannot sustain the energy of crisis-level thinking and decision-making for any length of time. This type of crisis decision making cannot become a pervasive style, but perhaps, based on the positive results during the disaster, library leaders could consider encouraging continued decision making and risk taking in general by finding new ways to facilitate and reward these behavioral dynamics, making them an integrated part of the normal organizational culture.

Effective Disaster Communications

Communications are a central component of every aspect of any disaster; however, it is time consuming to communicate during a period that requires attention in so many other areas. No one person can be entirely responsible for communications during a disaster; the responsibility for communications must be shared throughout the library. One frequently cited research study found that the relative amount of time people spend in workday communication activities, estimated by both an observational and questionnaire method, was 50%–80%, two-thirds of that was spent in talking (Klemmer & Snyder, 1972). I believe that the amount of time required for relevant, timely communications may be even greater during emergencies such as those experienced at the two libraries I studied.

Due to the amount of time required to communicate effectively, DRAT members need to carefully plan who will communicate, what and when, prior to a disaster to assure not only that it will take place but that it will be as effective and efficient as possible. Without effective communications between, among, and across the library's disaster team members and the many related teams that dealt with the disaster's aftermath, there could be little understanding about what is taking place and no real coordination of effort. Without efficient communications, cooperation is impossible, trust cannot develop, and the team cannot formulate a sound strategy to lead disaster response and recovery efforts. Any decisions made or initiative taken by individuals or the team as a whole would likely either fail or have reduced relevance and value. As the former Dean of Libraries at UNM said the day after the fire, "communication is not just critical, it is everything."

Train for an Emotionally Intelligent Organization

How can library leaders develop an emotionally intelligent organizational culture that promotes collaboration, initiative, and trust and that is nimble enough to adapt to change as a normal, expected condition? One approach is through training. A quick internet search for "emotional intelligence training" renders over four million results including various activities, books, videos, exercises, games, conferences, workshops, webinars, podcasts, and so forth, all purporting to increase emotional intelligence in individuals' personal and/or work lives. One of the earliest and most reputable resources is the Consortium for Research on Emotional Intelligence in Organizations (www.eiconsortium.org), which counts Daniel Goleman, Cary Cherniss, and Richard Boyatzis among their core members. Founded in 1996, its initial mandate was to study all that is known about emotional intelligence in the workplace. Its current mission is to

advance research and practice of emotional and social intelligence in organizations through the generation and exchange of knowledge. In addition to these resources, many universities offer training on how to develop or enhance emotional intelligence competencies in the workplace.

Suggestions for Future Research

Many of the questions I raised when discussing my research findings could serve to promote future research. For example, as I observed behavior during the disaster at my own library and as I initially coded study participants' transcripts for emergent themes at both libraries, I noted that there was something about crisis situations that gelled disaster team members together in an urgent, commonly shared purpose. I called it a culture of camaraderie that endured throughout the disaster response and recovery process, but seemed to dissipate as the situation began to normalize. Future research is needed to examine this phenomenon from a number of perspectives: Why does this culture of camaraderie form? How does it form? What elements must be present for such a culture to develop; for example, what impact does trust or lack of trust have on developing an organizational culture where camaraderie is a key component? How can the best aspects of camaraderie be maintained after an organization recovers from a disaster?

Further, library disaster teams have a clear goal that binds them together to achieve an urgent common purpose under conditions that are atypical. Future research might explore ways to harness or create this type of team cohesion when there is no disaster. Future research might also investigate if this sense of camaraderie and teamwork can be created in non-crisis situations? These studies could be done in either a library

disaster setting or in almost any disaster setting where a culture of camaraderie emerged or is desired.

My research also revealed that there were many more striking similarities than differences in study participants' outlooks, perceptions, words, and the emotional intelligence attributes they drew upon, not just among the DRAT members at each of the libraries, but across the two libraries. These findings suggest the need for additional qualitative research to be conducted at other libraries that experienced disasters to see if these similarities continue to be observed or are only found in the two cases I studied. Also, since both libraries in my study were fairly large research libraries, conducting research at smaller university libraries, community college libraries and/or other types of libraries such as public, special, or school libraries that experienced a disaster might also be appropriate and informative.

Another phenomenon that emerged from my study was that leadership was not typically mentioned as a stand-alone concept, nor was the leadership of top library administrators deeply discussed as a phenomenon. Although participants mentioned leadership fifteen times in transcripts, it was more often discussed as occurring through teamwork and initiative. Another area ripe for pursuit is why some people show initiative to become natural leaders within disaster teams, especially when they are not the legitimate team leader, and others do not. Further inquiry might also be made into the effects that occur when library leaders encourage and/or reward continued decision making and risk taking after recovery from a disaster. Do or could these efforts make initiative surrounding decision making an integrated part of the normal organizational culture?

In addition, why do some people – perhaps many people – including some leaders, put aside petty matters during crisis situations, yet engage and even instigate them during work-a-day life? Also, investigation is needed to determine if assuming authority during a disaster causes individuals to either continue, or desire to continue, leading after the disaster ends. If so, are these individuals more interested in assuming leadership roles solely due to their participation during the disaster or were they predisposed toward leadership beforehand and the disaster gave them an opportunity to experience it?

Many disaster team members also spoke of taking the initiative to make critical decisions in the moment. My study suggests that there might be a reason for additional research to determine how much of this initiative dynamic is a natural outcome of disaster response situations. Also, research might be conducted to study how people make a choice in the moment to rise or not to rise as leaders, thus, choosing to stretch and grow, or not, to become their best selves. Further, researchers may want to study why some people assume responsibility in crisis situations, but do not "step up" in day-to-day work settings. Again, these studies could be conducted in any type of library or other setting.

Nearly all participants mentioned that communications took on an importance and urgency during the disasters at their libraries. Some participants noted that when a disaster strikes there is often little time to determine how to communicate quickly and effectively with the many constituencies that require information. I recall how the UNM library Dean was accosted by the media after the fire. At one point, she was backed into a wall with nearly a dozen microphones unexpectedly thrust in her face with little time to

gather information and prepare answers to their questions. Although many library leaders are familiar with best practices for day-to-day communications, including communicating with the media, they may not be familiar with communications methods that work best during a disaster, which adds to the stress of the situation. A study to identify best practices for communicating critical information during a library disaster could prove instructive.

Participants described using both traditional and non-traditional modes to communicate with one another and with the public during the crisis. Often traditional communication streams, such as telephones and the internet, are impacted or not available during a wide-spread disaster. With increased dependence on these formats, studying how libraries communicate during extreme disasters such as hurricanes or earthquakes would add to librarian's disaster protocols. Finally, newer technologies such as Twitter have proven to be enormously effective forms of communications during disasters and uprisings around the globe. Studying their use during library disasters would be a heretofore unexplored avenue for future research.

Participants agreed that the themes of heightened trust and adaptability should continue after recovering from disasters and that these attributes should be incorporated more deeply into the library's organizational culture and into its leadership philosophy. These participants shared stories of library administrators and disaster team members showing trust in others to make the best decisions and of these leaders modeling adaptability during the uncertainty brought by the disaster. Studying the influence of these leaders in practicing, encouraging, and rewarding these kinds of attributes and

others may lead to improved organizational resilience and innovation both during crisis conditions and afterward.

Another important construct questions why some disaster team members adapt to, and in some cases thrive, on the stresses brought about by a disaster while others do not? What other factors play into this situation? Is the overall level of a person's emotional intelligence an important component or does it play a role at all?

My study and the future research that I have suggested have been mostly qualitative in mode of inquiry; however, I believe that qualitative studies can also serve to identify research questions that could benefit from a quantitative mode of inquiry and analysis. This idea opens the door to nearly endless possibilities. For example, many emotional intelligence tests exist and any number of them could be administered to potential disaster team members to determine their level of emotional intelligence. This process could aid library administrators in identifying emotionally intelligent staff to appoint to disaster teams. Testing could be done with disaster team members who have successfully led response and recovery efforts to determine which emotional intelligence attributes are strongest and/or which are more predictive of success. Although mapping participants' transcripts is generally considered a qualitative form of research, albeit a more positivist approach, mapping could be applied via a survey or some other quantitative data collection method which could include far more subjects than is usually feasible in qualitative research. In addition, quantitative research might be conducted using a control group and applying a pre-test and post-test model to determine if training disaster team members about emotional intelligence has an impact on disaster response and recovery processes.

The possibilities for future qualitative and quantitative research are many and limited only by the creativity and imagination of the researcher.

Conclusion

Through this study, I set out to understand relationships between emotional intelligence competencies and personal attributes of academic library DRAT members who responded to and led their library in its recovery from a disaster. My research suggested that there was indeed a strong relationship between emotional intelligence competencies and DRAT member attributes. Further, I found that all twenty of Goleman's (2001) emotional intelligence competencies emerged in the transcripts of interview and focus group participants from the two university libraries in my study.

Chapter 4 gave voice to the unique meaning individual DRAT members made of the various emotional intelligence competencies that emerged in themselves and in the disaster team as a whole. The rich, evocative stories told by these study participants and revealed in documents, archives, and especially through artifacts at the University of Iowa and University of New Mexico Libraries, painted a picture of the culture of camaraderie created by DRAT members who coped with the many stresses, challenges, and opportunities brought forth by the disaster.

This culture of camaraderie was exemplified through five major themes that were intricately woven throughout participants' stories of the disaster response and recovery process. The themes included teamwork/collaboration, initiative, communications, trust/trustworthiness, and adaptability. These five themes are all emotional intelligence competencies and they were mapped in Chapter 5 as being the most common and important competencies among DRAT members.

My study contributes a critical first step toward exploring relationships between emotional intelligence competencies and personal attributes of DRAT members. Many of my findings translate into suggestions for practice in academic libraries. Leaders must appoint effective disaster teams as well as support and reward initiative, innovation, and effective communications during disasters. They must develop an organizational culture that promotes trust and is nimble enough to adapt to change as a normal, expected condition. Further, my findings lend credence to the need for library leaders to provide training opportunities for individuals to learn or enhance emotional intelligence competencies as well as to practice them. Finally, my research points to new lines of inquiry and raises many intriguing questions that have yet to find answers.

References

Abraham, R. (2005). Emotional intelligence in the workplace: A review and synthesis. In R. Schulze & R. D. Roberts (Eds.) *Emotional intelligence: An international handbook* (pp. 255-270). Cambridge, MA: Hogrere & Huber.

Adams, S. (4/7/1997). Dilbert. In *The Boston Globe (Comics Section).* Boston, MA.

Adinku, S. (2005). Towards disaster preparedness and recovery planning procedures for libraries: A survey of staff and users of the Balme Library, University of Ghana. *African Journal of Library, Archives and Information Science 15*(1), 75-79.

Alegbeleye, B. (1990). Disaster control planning in Nigeria. *Journal of Librarianship, 22*(2), 91-106. doi: 10.1177/096100069002200203

Alexander, D. (1997). The study of natural disasters, 1977-1997: Some reflections on a changing field of knowledge. *Disasters, 21*(4), 284-304. doi: 10.1111/1467-7717.00064

Alire, C. A. (Ed.). (2000a). *Library disaster planning and recovery handbook*. New York. NY: Neal-Schuman, 2000.

Alire, C. A. (2000b). What do you do when it happens to you?: Managing a major library disaster. In C. A. Alire (Ed.), *Library Disaster Planning and Recovery Handbook* (pp. 3-31). New York, NY: Neal-Schuman, 2000.

Alire, C. A. (2007). Resonant leadership in academic libraries. In Hernon, P., Giesecke, J. & Alire, C. A. (Eds.). *Academic librarians as emotionally intelligent leaders* (pp. 95-103). Westport, CN: Libraries Unlimited.

Amarasiri, U. (2006). From golden water to salvation: Tsunami-affected libraries in Sri Lanka. *Alexandria, 18*(3), 119-133.

Anzul, M., Downing, M., Ely, M., & Vinz, R. (1997). *On writing qualitative research: Living by words.* London, England: Falmer Press.

Appreciative Inquiry Commons: where AI, positive change research, and organizational leadership connect for world benefit. (n.d.). Retrieved from http://appreciativeinquiry.case.edu/

Arnoult, J. M. (2003). Les bibliotheques Irakiennes en 2003: Un nouveau chapitre de l'histoire interminable des desastres. Libraries in Iraq in 2003: A new chapter in the never-ending story of disasters. *International Preservation News, 30*, 20-29.

Ashman, J. (1991). Conservation piece – disaster planning. *Scottish Libraries 28*(6), 7. Association of Research Libraries. Retrieved from: http://www.arl.org/

Báez, F., & MacAdam, A. J. (2008). *A universal history of the destruction of books: From ancient Sumer to modern Iraq*. New York, NY: Atlas & Co.

Baker, D., & Wiseman, A. W. (2008). *The worldwide transformation of higher education.* Bingley, UK: JAI Press, 2008.

Baker, N. L. (2010). Case 5: University of Iowa: Flood. In F. C. Wilkinson, L. K. Lewis, & N. K. Dennis, *Comprehensive Guide to Emergency Preparedness and Disaster Recovery* (pp. 137-144). Chicago, IL: Association of College and Research Libraries.

Balík, V., & Polišenski, J. (2004). The National Library of the Czech Republic and the floods of 2002. *Alexandria, 16*(1), 17-24.

Bar-On, R. (1997). *Bar-On emotional quotient inventory: A measure of emotional intelligence.* Toronto, Canada: Multi-Health Systems.

Bar-On, R. (2000). Emotional and social intelligence: Insights from the emotional quotient inventory. In R. Bar-On & J. D. A. Parker (Eds.). *The handbook of emotional intelligence: theory, development, assessment, and application at home, school, and in the workplace* (pp. 363-388). San Francisco, CA: Jossey-Bass.

Barrett, G. V., Miguel, R. F., Tan, J. A., & Hurd, J. M. (2001). *The Madison Avenue approach to science and professional practice.* Paper presented at the annual meeting of the Society for Industrial/Organizational Psychology, New Orleans, LA.

Bastic, T. N. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational Research, 45*(2), 143-154.

Becker, H. (1996). The epistemology of qualitative research. In R. Jessor, A. Colby, & R. Schweder (Eds.), Essays on ethnography and human development (pp. 53-71). Chicago: University of Chicago Press. Retrieved from http://home.earthlink.net/~hsbecker/qa.html

Bell, N. (1989). Guidelines for disaster planning in the Oxford Colleges Conservation Consortium: 1 – disaster prevention. *Bulletin of the Association of British Theological and Philosophical Libraries, 2*(6), 77-80.

Benjamin, R. (2003). The environment of American higher education: A constellation of changes. *Annals of the American Academy of Political and Social Science, 585*(1), 8-30. doi: 10.1177/0002716202238564

Bensimon, E. M., & Neumann, A. (1993). *Redesigning collegiate leadership: Teams and teamwork in higher education.* Baltimore, MD: Johns Hopkins University Press.

Biklen, S. K., & Casella, R. (2007). *A practical guide to the qualitative dissertation.* New York, NY: Teachers College Press.

Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership.* San Francisco, CA: Jossey-Bass.

Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Berkeley, CA: University of California Press.

Bower, G. H. (1981). Mood and memory. *American Psychologist, 36*(2), 129-148. doi:10.1037/0003-066x.36.2.129

Boyatzis, R. E. (1982). *The competent manager: A model for effective performance.* New York, NY: John Wiley & Sons.

Boyatzis, R. E. (1999). *The financial impact of competencies in leadership and management of consulting firms*. (Unpublished paper.) Cleveland, OH: Case Western Reserve University, Department of Organizational Behavior.

Boyatzis, R. E., Goleman, D., & Rhee, K. (2000). Clustering competence in emotional intelligence: Insights from the Emotional Competence Inventory (ECI). In R. Bar-On & J.D. A. Parker (Eds.). *The handbook of emotional intelligence: theory, development, assessment, and application at home, school, and in the workplace* (pp. 343-362). San Francisco, CA: Jossey-Bass.

Busenburg, G. J. (2000). Innovation, learning, and policy evolution in hazardous systems. *American Behavioral Scientist, 44*(4), 678-689.

Campbell, P. (2008). Formal reopening ceremony for Zimmerman Library basement. *NMLA Bulletin, 38*(3), 13.

Carblis, P. (2008). *Assessing emotional intelligence: A competency framework for the development of standards for soft skills.* Amherst, NY: Cambria Press.

The Carnegie Foundation for the Advancement of Teaching. (n.d.). *Carnegie Classification of Institutions of Higher Education™.* Retrieved from http://classifications.carnegiefoundation.org/

Caruso, D. R., Bienn, B., & Kornacki, S. A. (2006). Emotional intelligence in the workplace. In J. Ciarrochi, J. P. Forgas, & J. D. Mayer, *Emotional intelligence in everyday life* (2nd ed., pp. 187-205). New York, NY: Psychology Press.

Castillo, J. J. (2011). *Snowball sampling*. Retrieved from http://www.experiment-resources.com/snowball-sampling.html

Castillo-Padilla, E., Dennis, N. K., Lewis, L. K., & Wilkinson, F. C. (2010). Case 6: The Zimmerman Library 2006 fire that led to the 2007 library flood: An overview. In F. C. Wilkinson, L. K. Lewis, & N. K. Dennis, *Comprehensive guide to emergency preparedness and disaster recovery* (pp. 145-159). Chicago, IL: Association of College and Research Libraries.

Cervone, H. F. (2006). Disaster recovery and continuity planning for digital library systems. *OCLC Systems & Services, 22*(3), 173-178.

Chen, C. P. (2001). On exploring meanings: combining humanistic and career psychology theories in counseling. *Counseling Psychology Quarterly, 14*(4), 317-331. doi: 10.1080/09515070110091308

Cherniss, C. (2000a). *Emotional intelligence: What it is and why it matters.* Technical Report Issued by the Consortium for Research on emotional Intelligence in

Organizations. Retrieved from http://www.eiconsortium.org/pdf/what_is_emotional_intelligence.pdf

Cherniss, C. (2000b). Social and emotional competence in the workplace. In R. Bar-On and J. D. A. Parker (Eds.). *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace* (pp. 433-458). San Francisco, CA: Jossey-Bass.

Cherniss, C., & Adler, M. (2000). *Promoting emotional intelligence in organizations: Make training in emotional intelligence effective.* Alexandria, VA: American Society for Training & Development.

Cherniss, C., & Goleman, D. (Eds.). (2001). *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations.* San Francisco, CA: Jossey-Bass/Wiley.

Childress, S. (1994). Planning for the worst: Disaster planning in the library. *Southeastern Librarian, 44*(2), 51-55.

Chun, H. (2008). *Crisis planning at private residential institutions of higher education in Northern California* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3314128)

Clareson, T., & Long, J. S. (2006). Libraries in the eye of the storm: Lessons learned from Hurricane Katrina. *American Libraries, 37*(7), 38-41.

Coates, P. R. (1987). Planning for disaster control. In *Books in peril: Proceedings of the Symposium on the Preservation of Library and Archival Materials in Southern Africa held at the South African Library, Cape Town* (pp. 51-61). Cape Town, South Africa: The Library.

Coffey A., & Atkinson, P. (1996). *Making sense of qualitative data.* Thousand Oakes, CA: Sage.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*(1), 95-120. doi: 10:1086/228943

Collins, J. (2001). *Good to great: Why some companies make the leap…and others don't.* New York, NY: Collins.

Collis, J., & Hussey, R. (2003). *Business research: A practical guide for undergraduate and postgraduate students* (2nd ed.). Basingstroke, England: Palgrave.

Cooper, R. K. (1997). Applying emotional intelligence in the workplace. *Training and Development, 51*(12), 31-38

Cooperrider, D. (1986). *Appreciative inquiry: Toward a methodology for understanding and enhancing organizational innovation* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 8611485)

Cooperrider, D. L. (1990). Positive image, positive action: The affirmative basis of organizing. In S. Srivastva & D. L. Cooperrider (Eds.), *Appreciative management and leadership* (pp. 91-125). San Francisco, CA: Jossey-Bass.

Cooperrider, D. L., & Srivastva, S. (1987). Appreciative inquiry in organizational life. In R. Woodman & W. Pasmore (Eds.) *Research in organizational change and development,* Volume 1 (pp. 129-169). Greenwich, CT: JAI Press.

Cooperrider, D. L., & Whitney, D. (1999). Appreciative inquiry: A positive revolution in change. In P. Holman & T. Devane (Eds.), *The change handbook* (pp. 245-263). San Francisco, CA: Berrett-Koehler Publishers.

Cooperrider, D. L., Whitney, D., & Stavros, J. M. (2003). *Appreciative inquiry handbook* (1st ed.). Bedford Heights, OH: Lakeshore Communications; San Francisco, CA: Berrett-Koehler.

Cooperrider, D. L., Whitney, D., & Stavros, J. M. (2008). *Appreciative inquiry handbook* (2nd ed.). Brunswick, OH: Crown Custom Publishing; San Francisco, CA: Berrett-Koehler.

Corbetta, P. (2003). *Social research, theory, methods and techniques.* London, England: Sage.

Corrigan, A. (2008). Disaster: Response and recovery at a major research library in New Orleans. *Library Management, 29*(4/5), 293-306.

Corrigan, A. (2010). Tulane University: Hurricane Katrina. In F. C. Wilkinson, L. K. Lewis, & N. K. Dennis, *Comprehensive guide to emergency preparedness and disaster recovery* (pp. 117-127). Chicago, IL: Association of College and Research Libraries.

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: Sage.

Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Upper-Saddle River, NJ: Merrill/Prentice Hall.

Cross, J.A. (2000). Hazards courses in North American geography programs. *Environmental Hazards, 2*, 77-86. doi: 10.3763/ehaz.2000.0212

Curzon, S. C. (2006). Coming back from major disaster: Month one. *Public Library Quarterly, 25*(3/4), 17-29.

Cuthbert, S., & Doig, J. (1994). Disaster plans: Who needs them? *Australian Academic and Research Libraries, 25*(1): 13-18.

Cutter, S., Ed. (2001). *American hazardscapes: The regionalization of hazards and disasters*. Washington, DC: Joseph Henry Press.

Davaniou, R. (2005). Leading with emotional intelligence. *Graduate School of Management, Shariff University of Technology* February, 2005, 1-5).

Davis, S. (2005). Surviving Hurricane Ivan at Pensacola Junior College, Pensacola Florida. *Community and Junior College Libraries, 13*(4), 13-16. doi: 10.1300/J107v13n04_05

Day, A. L., & Kelloway, E. K. (2004). Emotional intelligence in the workplace rhetoric and reality. In G. Geher (Ed.) *Measuring emotional intelligence: Common ground and controversy* (pp. 219-241). New York, NY: Nova Science Publishers.

de Rivera, J. (1984). Emotional experience and qualitative methodology. *American Behavioral Scientist, 27*(6), 677-688. doi: 10.1177/000276484027006002

Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods* (2nd ed.). New York, NY: McGraw-Hill.

Denzin, N. K. (1984). *The research act*. Englewood Cliffs, NJ: Prentice Hall.

Denzin, N. K. (1989). *Interpretive interactionism.* Newberry Park, CA: Sage.

Dey, I. (1993). *Qualitative data analysis: A user-friendly guide for social scientists.* London, England: Routledge.

Drabek, T. E. (1986). *Human system response to disaster: An inventory of sociological findings.* New York, NY: Springer-Verlag.

Drabek, T. E. (2007). Sociology, disasters, and emergency management: History, contributions, and future agenda. In D.A. Mc Entire (Ed.), *Disciplines, disasters and emergency management: The convergence and divergence of concepts, issues and trends in the research literature* (pp. 61-74). Springfield IL: Charles C. Thomas Publisher, LTD.

Drabek, T. E., & McEntire, D. A. (2003). Emergent phenomena and the sociology of disaster: Lessons, trends, and opportunities from the research literature. *Disaster Prevention and Management, 12*(2), 97-112.

Druskat, V. U., Sala, F., & Mount, G., Eds. (2006). *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups.* Mahwah, NJ: Lawrence Erlbaum Associates.

Dryden, D. (1993). Disaster plan for a hospital library. *Bibliotheca Medica Canadiana, 14*(3), 139-145.

Dulewicz, B., Young, M., & Dulewicz, V. (2005). The relevance of emotional intelligence for leadership performance. *Journal of General Management, 30*(3), 71-86.

Dynes, R. R. (1987). The concept of role in disaster research. In R. R. Dynes, B. DeMarchi, & C. Pelanda (Eds.) *Sociology of disasters: contribution of sociology to disaster research.* Milan, Italy: Franco Angeli Libri.

Eckert, E. (2010). Learning from the tragedy at Kent State: Forty years after May 4. *About Campus, 15*(1), 2-10. doi: 10.1002/abc.20009

Eissa, M. A., & Khalifa, W. E. S. (2008). Emotional intelligence and self-efficacy as predictors of job stress among elementary school teachers in Egypt. In J. C.

Cassady & Eissa, M. A. (Eds.) *Emotional intelligence: Perspectives on educational and positive psychology* (pp. 77-92). New York, NY: Peter Lang.

Ellis, J. (2007). Lessons learned: The recovery of a research collection after Hurricane Katrina. *Collection Building, 26*(4), 108-111.

Eng, S. (2002). How technology and planning saved my library at ground zero. *Computers in Libraries, 22*(4), 28-32.

England, C., & Evans, K. (1988). *Disaster management for libraries: Planning and process*. Ottawa, Canada: Canadian Library Association.

Fallahi, C., Austad, C, S., Fallon, M. A., & Leishman, L. (2009). A survey of perceptions of the Virginia Tech tragedy. *Journal of School Violence, 6*(2), 120-135. doi: 10.1080/15388220802074017

Faure, M. (2006). Problem solving was never this easy: Transformational change through appreciative inquiry. *Performance Improvement, 45*(9), 22-31, 48. doi: 10.1002/pfi.4930450917

Fire/Watch Book Group (2008). *The Zimmerman fire: (re)collections.* Commemorative Book. Albuquerque, NM: The University of New Mexico, University Libraries. Electronic publication: https://repository.unm.edu/dspace/handle/1928/6707.

Fitzgerald, S. P., Murrell, K. L., & Newman, H. L. (2001). Appreciative inquiry – the new frontier. In J. Waclawski & A. H. Church (Eds.), *Organization development: Data driven methods for change* (pp. 203-221). San Francisco, CA: Jossey-Bass.

Fleischer, S. V., & Heppner, M. J. (2009). Disaster planning for libraries and archives: What you need to know and how to do it. *Library & Archival Security, 22*(2), 125-140. doi: 10.1080/01960070902904167

Flowers, J. L. (2000). Emotional intelligence in the workplace. *Library Collections Acquisitions and Technical Services, 24*(3), 431-433. doi: 10.1016/S1464-9055(00)00149-4

Flynn, C., & Heitzmann, D. (2008). Tragedy at Virginia Tech: Trauma and its aftermath. *The Counseling Psychologist, 36*(3), 479-489. doi: 10.1177/0011000008314787

Fontana, A. (2002). Postmodern trends in interviewing. In J. Gubrium & J. Holstein (Eds.), *Handbook of qualitative research: Context and method* (pp.161-175). Thousand Oaks, CA: Sage.

Fortson, J. (1992). *Disaster planning and recovery: A how-to-do-it manual for librarians and archivists*. New York, NY: Neal-Schuman Publishers.

Fowlie, J., & Wood, M. (2009). The emotional impact of leaders' behaviours. *Journal of European Industrial Training, 33*(6), 559-572. doi: 10.1108/03090590910974428

Fox, J., & Savage, J. (2009). Mass murder goes to college: An examination of the changes on college campuses following Virginia Tech. *American Behavioral Scientist, 52*(10), 1465-1485. doi: 10.1177/0002764209332558

Frost, G., & Silverman, R. (2005). Disaster recovery in the artifact fields – Mississippi after Hurricane Katrina. *International Preservation News, 37*, 35-47.

Fullan, M., & Scott, G. (2009). *Turnaround leadership for higher education.* San Francisco, CA: Jossey-Bass/Wiley.

Furnham, A. (2009). The importance and training of emotional intelligence at work. In C. Stough, D. H. Saklofske, & J, D.A. Parker (Eds.), *Assessing emotional intelligence: theory, research, and applications* (pp. 3-8). New York, NY: Springer.

Gardner, H. (1983). *Frames of mind.* New York, NY: Basic Books.

Geertz, C. (1973). *The interpretation of cultures.* New York, NY: Basic Books.

Gergen, K. (1990). Affect and organization in postmodern society. In S. Srivastva & D. L. Cooperrider (Eds.), *Appreciative management and leadership* (pp. 153-174). San Francisco, CA: Jossey-Bass.

Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction.* White Plains, NJ: Longman.

Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ.* New York, NY: Bantam Books.

Goleman, D. (1998). *Working with emotional intelligence.* New York, NY: Bantam Books.

Goleman, D. (2001). An EI-based theory of performance, In Cherniss C. and Goleman, D. (Eds.). *The emotionally intelligent workplace.* San Francisco, CA: Jossey-Bass.

Goleman, D. (2004). What makes a leader? *Harvard Business Review 82*(1), 82-91.

Goleman, D., Boyatzis, R., & McKee, A. (2002). *Primal leadership: Realizing the power of emotional intelligence.* Boston, MA: Harvard Business School Press.

Golembiewski, R. T. (1999). Fine-tuning appreciative inquiry: Two ways of circumscribing the concept's value-added. *Organizational Development Journal, 17*(3), 21-29.

Grant, S., & Humphries, M., (2006). Critical evaluation of appreciative inquiry: Bridging an apparent paradox. *Action Research, 4*(4), 401-418. Retrieved from http://arj.sagepub.com/cgi/reprint/4/4/401

Grbich, D. (2007). *Qualitative data analysis: An introduction.* Los Angeles, CA: Sage Publications.

Greater Albuquerque Chamber of Commerce. (n.d). *Businesses building a world class community.* Retrieved from http://www.abqchamber.com/default.asp?CustComKey=371094&CategoryKey=371098&pn=Page&DomName=abqchamber.com

Greenbaum, T. L. (1998). *The handbook for focus group research* (2nd ed.). Thousand Oaks, CA: Sage.

Griffith, B. (11/17/1996). Zippy the Pinhead. In *The Boston Globe (Comics Section).* Boston, MA.

Guba, E. G. (Ed.). (1992). *The alternative paradigm.* London, England: Sage.

Guba, E. G., & Lincoln, Y. S. (1988). Do inquiry paradigms imply inquiry methodologies? In D. M. Fetterman (ed.). *Qualitative approaches to evaluation in education* (pp. 89-115). New York, NY: Praeger.

Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation.* Newbury Park, CA: Sage.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 195-220). Thousand Oaks, CA: Sage.

Gugliotta, T. (2006). Fire at University of New Mexico Library. *Public Library Quarterly, 25*(3/4), 61-69. doi: 10.1300/J118v25n03_06

Guido, F. M., Chávez, A. F., & Lincoln, Y. S. (2010). Understanding paradigms in student affairs research and practice. *Journal of Student Affairs Research and*

Practice, 47(1), 1-22. doi: 10.2202/1949-6605.6017

Hammond, S. A. (1998). *The thin book of appreciative inquiry.* Bend, OR: Thin Book.

Harris, M. (1976). History and significance of the emic/etic distinction. *Annual Review of Anthropology, 5*, 329-350. doi: 10.1146/annurev.an.05.100176.001553

Hay/McBer (1996). *Generic competency dictionary.* Boston, MA: Hay/McBer®.

Heckathorn, D. D. (1997). Respondent-driven sampling: A new approach to the study of hidden populations. *Social Problems, 44*, 174-199. doi: 10.1525/sp.1977.44.2.03x0221m

Henson, S. (2001).Writing the disaster response plan: Going beyond shouting “help! help!” *Proceedings of the 9th Annual Federal Depository Library Conference, October 22-25* 2000. Washington, D.C.: Library Programs Service, U.S. G.P.O.

Heritage Preservation. (2005). *Heritage Health Index.* Retrieved from www.heritagepreservation.org/HHI/execsummary.html.

Hernon, P. (2007). Review of relevant literature. In Hernon, P., Giesecke, J. & Alire, C. A. (Eds.). *Academic librarians as emotionally intelligent leaders* (pp. 11-30). Westport, CN: Libraries Unlimited.

Hernon, P., Alire, C. A., & Giesecke, J. (2007). Concluding thoughts. In P. Hernon, J. Giesecke, & C. A. Alire (Eds.), *Academic librarians as emotionally intelligent leaders* (pp. 121-137). Westport, CN: Libraries Unlimited.

Hernon, P., Giesecke, J., & Alire, C. A. (Eds.). (2007). *Academic librarians as emotionally intelligent leaders.* Westport, CN: Libraries Unlimited.

Hernon, P., & Rossiter, N. (2006). Emotional intelligence: Which traits are most prized? *College & Research Libraries, 67*(3), 260-275.

Hewitt, K. (Ed.). (1983). *Interpretations of calamity*. Boston, MA: Allen & Unwin.

Holley, K. (2009). Interdisciplinary strategies as transformation change in higher education. *Innovative Higher Education, 34*(5), 331-344. doi: 10.1007/s10755-009-9121-4

Holloway, I. (1997). *Basic concepts for qualitative research.* London: Blackwell Science.

Hughes, S., White, R. J., and Hertz G. (2008). A new technique for mitigating risk on U.S. college campuses. *Journal of Higher Education Policy and Management, 30*(3), 309-318. doi: 10.1080/13600800802155226

Iowa City Area Chamber of Commerce. (n.d). *Area Information.* Retrieved from http://www.iowacityarea.com/Content/Area/Information.aspx

Janis, I. L. (1951). *Air war and emotional stress: Psychological studies of bombing and civilian defense.* Rand Corporation. New York, NY: McGraw-Hill.

Janis, I. L. (1972). *Victims of groupthink.* New York, NY: Houghton Mifflin.

Jensen, J. (2010). The argument for a disciplinary approach to emergency management in higher education. *FEMA Emergency Management Institute.* Retrieved from http://training.fema.gov/EMIWeb/edu/highpapers.asp

Johnson, A. B., Nolan, G., & Siegrist, C. (2006). Lessons learned from a bout with Hurricane Katrina: The Delgado College Community story. *Change: The Magazine of Higher Learning, 38*(5), 42-46. doi: 10.3200/CHNG.38.5.42-46

Johnson, B. D. (1996). And then the rains came. *College and Undergraduate Libraries, 3*(2), 29-35. doi: 10.1300/J106v03n02_03

Johnson, I. M. (2005). The impact on libraries and archives in Iraq of war and looting in 2003: A preliminary assessment of the damage and subsequent reconstruction

efforts. *International Information and Library Review, 37*(3), 209-271. doi: 10.1016/j.iilr.2005.07.005

Jones, G. R., & George, J. M. (1998). The experience and evolution of trust: Implications for cooperation and teamwork. *Academy of Management Review, 23*(4), 531-546. doi: 10.5465/ARM.1998.926625

Jones, K. (1998). Disaster!: Experience, recovery, mitigation. *Colorado Libraries, 24*(3), 3-36.

Jordan, P. J., Ashkansay, N. M., & Hartel, C. E. J. (2002). Emotional intelligence as a moderator of emotional and behavioral reactions of job insecurity. *Academy of Management Review, 27*(3), 361-372. doi: 10.2307/4134384

Kahn, M. B. (1998). *Disaster response and planning for libraries.* Chicago, IL: American Library Association.

Kahn, M. B., & Higginbotham, B. B. (1995). Disasters for directors: The role of the library or archive director in disaster preparedness and recovery. *Advances in Preservation and Access, 2,* 400-412.

Kennedy, M. (2004). *Emergent groups and disaster subculture: A university's response to the July 28, 1997 flood* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3160074)

Kezar, A. (2009). Change in higher education: Not enough or too much? *Change: The Magazine of Higher Learning, 41*(6), 18-23. doi: 10.1080/00091380903270110

Klemmer, E. T, & Snyder, F W. (1972). Measurement of time spent communicating. *Journal of Communication 22*(2), 142-158. doi: 10.1111/j.1460-2466.1972.tb00141.x

Kraft, N. E. (n.d.). Preservation Beat (blog). *The University of Iowa Libraries.* Retrieved from http://blog.lib.uiowa.edu/preservation.

Kraft, N. E. (2008). *Iowa flood of 2008: A case study of two cities, two rivers.* Unpublished manuscript.

Kreitz, P. A. (2009). Leadership and emotional intelligence: A study of university library directors and their senior management teams. *College & Research Libraries, 70*(6), 531-554.

Kvale, S (1996). *InterViews: An introduction to qualitative research interviewing* (1st ed.). Thousand Oakes, CA: Sage.

Lalonde, C. (2007). The potential contribution of the field of organizational development to crisis management. *Journal of Contingencies and Crisis Management, 15*(2), 96-104. doi: 10.1111/j.1468-5973.2007.00508.x

Lawrence, H., & Shafer, D. (2007). Managing disaster recovery centers on campus: The experience of Southeastern Louisiana University. *Planning for Higher Education, 36*(1), 40-53.

Leedy, P., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.). Upper Saddle River, NJ: Pearson/Merrill Prentice Hall.

Leeper, R. W. (1948). A motivational theory of emotions to replace emotions as disorganized response. *Psychological Review, 55*, 5-21. doi: 10.1037/h0061922

Lewis, L. K. (2007a). UNM Zimmerman Library recovery process. *NMLA Bulletin, 37*(2), 7-8.

Lewis, L. K. (2007b). Fire recovery continues at Zimmerman Library. *NMLA Bulletin, 37*(4), 7.

Lewis, L. K. (2007c). UNM's Zimmerman Library reconstruction update. *NMLA Bulletin, 37*(5), 9.

Lewis, L. K., & Dennis, N. K. (2007). UNM Zimmerman Library rebuilding update. *NMLA Bulletin, 37*(1), 5.

Lewis, L. K., & Wilkinson, F. C. (2006). Fire at the University of New Mexico Zimmerman Library. *NMLA Bulletin, 36*(5), 4-5.

Lincoln, Y. S. (1995). Emerging criteria for qualitative interpretive research. *Qualitative Inquiry, 1*(3), 275-289. doi: 10.1177/107780049500100301

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

Lindlof, T. R., & Taylor, B. C. (2002). *Qualitative communication research methods* (2nd ed.). Thousand Oaks, CA: Sage.

Lofland, J., & Lofland, L. (1996). Analyzing social settings (3rd ed.). Belmont, CA: Wadsworth.

Loomis, S. (2009). Institutional change and higher education. *Higher Education, 58*(4), 475-489. doi: 10.1007/s10734-009-9206-0

Lunde, D. B. (1998). The disaster at Colorado State University Libraries: Recovery and restoration of the collection. *Colorado Libraries, 24*(3), 22-26.

Lunde, D. B. (1999). What do you do with 426,500 wet books: Or, options for restoring a water-damaged collection. *Library Journal, 129* December Supplement, 6-7.

Lundholm, C. (2004). Case studies – exploring students' meanings and elaborating learning theories. *Environmental Education Research, 10*(1), 115-124. doi: 10.1080/1350462032000173733

Masland, A. T. (1991). Organizational culture in the study of higher education. In M. Peterson (Ed.), *Organization and governance of higher education* (pp. 118-125). Lexington, MA: Ginn Press.

Mastrodicasa, J. (2008). Technology use in campus crisis. *New Directions for Student Services, 124*, 37-53.

Matthews, G. (2005). Disaster management: Sharing experience, working together across the sector. *Journal of Librarianship and Information Science, 37*(2), 63-74. doi: 10.1177/0961000605055356

Mathews, G., Zeidner, M., & Roberts, R. D. (2002). *Emotional intelligence: Science and myth.* Cambridge, MA: MIT Press.

Mayer, J. D., DiPaolo, M. T., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment, 54*(3/4), 772-781. doi: 10.1080/00223891.1990.9674037

Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, & D. Sluyter (Eds.). *Emotional development and emotional intelligence: Educational implications* (pp. 3-31). New York, NY: Basic Books.

Mayer, J. D., Salovey, P., & Caruso, D. (2000). Models of emotional intelligence. In R. J. Sternberg (Ed.). *The handbook of intelligence* (pp. 396-420). New York, NY: Cambridge University Press.

Mayer, J. D., Salovey, P., & Caruso, D. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test manual.* Toronto, Canada: Multi-Health Systems.

Mayer, J. D., Salovey, P., & Caruso, D. (2008). Emotional intelligence: New ability or eclectic traits? *American Psychologist, 63*(6), 503-517. doi: 10.1037/0003-066X.63.6.503

Mayer, J. D., Salovey, P., Caruso, D., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion, 3*(1), p.97-105. doi: 10.1037/1528-3542.3.1.97

McClelland, D.C. (1998). Identifying competencies with behavioral-event interviews. *Psychological Science, 9(5*), 331-340. doi: 10.1111/1467-9280.00065

McLean, G.N., Davis, K. J., Baker, M. N., & Anguita, J. (2005). Global organization development. In W. J. Rothwell & R. Sullivam (Eds.). *Practicing organization development* 2nd ed. (pp. 467-492). San Francisco, CA: Wiley/Pfeiffer.

Merriam, S. B. (1988). *Case study research in education: a qualitative approach.* San Francisco, CA: Jossey-Bass.

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco, CA: Jossey-Bass.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook.* Thousand Oaks, CA: Sage.

Mileti, D. S. (1999). *Disasters by design: A reassessment of natural disasters in the United States.* Washington, D.C.: Joseph Henry Press.

Miller, W., & Pellen, R. M. (2006). *Dealing with natural disasters in libraries*. Binghamton, NY: Haworth Information Press.

Mochida, P. (2010). University of Hawaii at Mãnoa: Library flood. In F. C. Wilkinson, L. K. Lewis, & N. K. Dennis, *Comprehensive guide to emergency preparedness and*

disaster recovery (pp. 128-136). Chicago, IL: Association of College and Research Libraries.

Moore, H. E. (1956). Toward a theory of disaster. *American Sociological Review, 21*(6), 733-737. doi: 10.2307/2088426

Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

Morris, J. (1986). *The library disaster preparedness handbook*. Chicago, IL: American Library Association.

Muir, A., & Shenton, S. (2002). If the worst happens: The use and effectiveness of disaster plans in libraries and archives. *Library Management, 23*(3): 115-123.

Multi-Health Systems, Inc. (MHS) (2011). *EQ-i® Emotional Quotient-Inventory*. Retrieved from http://www.mhs.com/product.aspx?gr=io&prod=eqi&id=overview&gclid=CL_esu3UsqYCFQEGbAodW0Q1nA

National Commission for the Protection of Biomedical and Behavioral Research (1979). *The Belmont Report. Ethical principles and guidelines for the protection of human subjects research*. Washington, DC: National Institutes of Health. Retrieved from http://ohsr.od.nih.gov/guidelines/belmont.html

Nelson, D. B., & Low, G. R. (1998). *Exploring & developing emotional intelligence skills.* Corpus Christy, TX: EI Learning Systems.

Nevins, K., & Nyberg, S. (2006). Solinet's Gulf Coast libraries recovery projects for public and academic libraries. *Public Library Quarterly, 25*(3/4), 215-223. doi: 10.1300/J118v25n03_18

Ngulube, P., & Magazi, L. (2006). A stitch in time saves nine: Emergency preparedness in public libraries of Kwazulu-Natal, South Africa. *Innovation, 32*, 110-124. doi: 10.4314/innovation.v32i1.26516

Norton, J. (2008). Nuts and bolts of writing a disaster plan. *OLA Quarterly, 14*(4), 6-10.

Obokoh, N. P. (1989). Disaster control planning in Nigerian libraries and archives. *African Journal of Academic Librarianship, 7*(1/2), 41-48.

Obokoh, N. P. (1991). Coping with flood disaster: The experience of a university library. *Library Review, 40*(6), 22-29.

Oliver-Smith, A. (1996). Anthropological research on hazards and disasters. *Annual Review of Anthropology, 25*, 303-328. doi: 10.1146/annurev.anthro.25.1.303

Oliver-Smith, A. (2002). Theorizing disasters: Nature, power, and culture. In S. M. Hoffman and A. Oliver-Smith (Eds.) *Catastrophe & culture: The anthropology of disaster* (pp. 23-48). Santa Fe, NM: School of American Research Press.

Page, J. A. (2011). *Ten things you need to know before disaster strikes*. Retrieved from http://www.infopeople.org/training/webcasts/webcast_data/196/index.html

Parker, S. (2007). *Organizational learning, innovation, and employees' mental models of change following a disaster: A case study of the Morgan Library at Colorado State University* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3288731)

Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Newbury Park, CA: Sage.

Payne, W. (1985). *A study of emotion: Developing emotional intelligence, self-integration, relating to fear, pain and desire* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 8605928)

Payton, A. M., & Shields, T. T. (2008). Insurance and library facilities. *Library & Archival Security, 21*(2), 187-193. doi: 10.1080/01960070802201995

Pearson, C. M., & Claire, J. A. (1998). Reframing crisis management. *Academy of Management Review, 23*(1), 59-76. doi: 10.2307/259099

Pickard, A., & Dixon, P. (2004). The applicability of constructivist user studies: How can constructivist inquiry inform service providers and systems designers? *Information Research 9*(3), no page numbers. Retrieved from http://informationr.net/ir/9-3/paper175.html

Pike, K. L. (1967). *Language in relation to a unified theory of structure of human behavior* (2nd ed.). The Hague, South Holland, Netherlands: Mouton.

Prasad, K., & Akhilesh, K. B. (2002). Global virtual teams: What impacts their design and performance? *Team Performance Management, 8*(5/6), 102-113.

Preble, J. F. (1997). Integrating the crisis management perspective into the strategic management process. *Journal of Management Studies, 34*(5), 769-792. doi: 10.1111/1467-6486.00071

Preiss, L. (1999). Learning from disasters: A decade of experience at the National Library of Australia. *International Preservation News, 20*, 19-26.

Quarantelli, E.L. (2005). A social science research agenda for the disasters of the 21st century: Theoretical, methodological and empirical issues and their professional implementation. In R. W. Perry and E. L. Quarantelli (Eds.), *What is a Disaster?*

New answers to old questions (pp. 325-396). USA: International Research Committee on Disasters.

Quarantelli, E. L., & Dynes, R. R. (1977). Response to social crisis and disaster. *Annual Review of Sociology, 3*, 23-49. doi: 10.1146/annurev.so.03.080177.000323

Reed, J (2007). *Appreciative inquiry: Research for change.* Thousand Oakes, CA: Sage.

Riley, J., & Meadows, A. J. (1995). The role of information in disaster planning: A case study approach. *Library Management, 16*(4), 18-24.

Rosenstein, L. L. (2000). Emotional intelligence in the workplace. *Library Collections Acquisitions and Technical Services, 24*(4), 502-503. doi: 10.1016/S1464-9055(00)00155-X

Ross, S. D. (1972). *Moral decision: An introduction to ethics.* New York, NY: Freeman, Cooper & Co.

Rowe, S. (2009). *The influence of shootings on change in emergency planning at Texas four-year colleges and universities* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3373953)

Ryle, G. (1949). *The concept of mind.* London: Hutchinson.

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality 9*(3), 185-211. doi: 10.1080/00223891.1990.9674037

Scanlon, J. (1998). Dealing with mass death after a community catastrophe: Handling bodies after the 1917 Halifax explosion. *Disaster Prevention and Management, 7*(4), 288.

Schmidt, F. C. (1999). Disasters: Plans, clean-up, and recovery – the Colorado State experience. *Proceedings of the 8th Annual Federal Depository Library*

Conference, April 12-15, 1999.

Schram, T. H. (2006). *Conceptualizing and proposing qualitative research* (2nd ed.). Upper-Saddle River, NJ: Pearson Education.

Schultz, A. D., & Neely, T. Y. (2010). Case 7: University of New Mexico: Zimmerman Library fire: a case study in recovery and return of library collections. In F. C. Wilkinson, L. K. Lewis, & N. K. Dennis, *Comprehensive Guide to Emergency Preparedness and Disaster Recovery* (pp. 160-182). Chicago, IL: Association of College and Research Libraries.

Scott, G., Coates, H., & Anderson, M. (2008). *Learning leaders in times of change.* The Australian Learning and Teaching Council. Retrieved from http://acer.edu.au/documents/UWSACER_CarrickLeadershipReport.pdf

Seigel, L. (2008). *The effects of appreciative inquiry on emotional intelligence* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3353328)

Shapiro, A. (2003). *Creating contagious commitment: applying the tipping point to organizational change.* Hillsborough, NC: Strategy Perspective.

Shaw, G. (2003). Assessment of damage to libraries and archives in Iraq. *Library Times International, 19*(4), 11.

Shea, A. O. (2004). Under threat: Libraries in Iraq. *Library Mosaics, 15*(4), 14-17.

Silverman, D. (2001). *Interpreting qualitative data: methods for analyzing talk, text and interaction* (2nd ed.). London, England: Sage.

Silverman, R. (2006). The seven deadly sins of disaster recovery. *Public Library Quarterly, 25* (3/4), 31-46. doi: 10.1300/J118v25n03_04

Simon, H.A. (1982). Comments. In M. S. Clark & S. T. Fiske (Eds.) *Affect and cognition: the seventeenth annual Carnegie Symposium on Cognition* (pp. 333-342). Hillsdale, NJ: L. Erlbaum Associates.

Smith, R. D. (1991). Disaster recovery: Problems and procedures. *IFLA Journal, 17*(1), 13-24.

Srivastva, S., & Cooperrider, D. L. (Eds.). (1990). Appreciative management and leadership: The power of positive thought and action in organization. San Francisco, CA: Jossey-Bass.

Stake, R. E. (1978). The case study method in social inquiry. *Educational Researcher, 7*(2), 5-8. doi: 10.3102/0013189X007002005

Stake, R. E, (1995). *The art of case study research.* Thousand Oaks, CA: Sage.

Stake, R. E. (2000). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.). *Handbook of qualitative research* (2nd ed., pp. 435-454). Thousand Oakes, CA: Sage.

Stake, R. E. (2006). *Multiple case study analysis*. New York, NY: Guilford Press.

Stalker, L. (2008). Finding your sensitive side: Do we attach enough importance to the development of emotional intelligence in the workplace? *Accountancy, 1374*, 56-59.

Stein, A. A. (1976). Conflict and cohesion: A review of the literature. *Journal of Conflict Resolution, 20*(1), 143-172. doi: 10.1177/002200277602000106

Stevens, P. (1995). Planning for disasters in archives, libraries and museums. *Local Studies Librarian, 14*(1), 14-16.

Stough, C., Saklofske, D. H., & Parker, J. D. A. (2009). A brief analysis of 20 years of emotional intelligence: An introduction to assessing emotional intelligence:

Theory, research, and applications. In C. Stough, D. H. Saklofske, & J, D.A. Parker (Eds.), *Assessing emotional intelligence: theory, research, and applications* (pp. 3-8). New York, NY: Springer.

Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: grounded theory procedures and techniques.* Newbury Park, CA: Sage.

Strudwick, J. (2006). A selected bibliography of library disaster stories: Before, during, and after. *Public Library Quarterly, 25*(3/4): 7-16. doi: 10.1300/J118v25n03_02

Sung, C. H., Lenov, V. P., & Waters, P. (1990). Fire recovery at the library of the Academy of Sciences of the USSR. *American Archivist, 53*(2), 298-312.

Sussman, G. I., & Evered, R. D. (1978). An assessment of the scientific merits of action research. *Administrative Science Quarterly, 23*, 582-603.

Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology combining qualitative and quantitative approaches,* Thousand Oaks, CA: Sage.

Thomas, M., Ed. (2009). *Emergency response planning in college libraries.* Chicago, IL: American Library Association.

Tierney, K. J. (2007). From the margins to the mainstream? Disaster research at the crossroads. *Annual Review of Sociology, 33*, 503-525. doi: 10.1146/annurev.soc.33.040406.131743

TIME® (October 2, 1995). [Cover]. New York, NY: Time Warner.

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing, 48*(4), 388-396. doi: 10.1111/j.1365-2648.2004.03207.x

Todaro, J. (2009). *Emergency preparedness for libraries.* Lanham, MD: Scarecrow Press.

Tomkins, S. S. (1962). *Affect, imagery, and consciousness*. Volume 1: The positive affects. New York, NY: Springer.

TropicalWeather.net. (2010). Retrieved from http://www.tropicalweather.net/hurricane_katrina_facts.htm

UNM Fact Book 2008-2009. Retrieved from http://www.unm.edu/~oir/factbook/2008fb.pdf

Villadsen, A. W., & De los Santos, G. E. (2007). *Hoping for the best while preparing for the worst: Disasters, emergencies and the community college*. Phoenix AZ: League for Innovation in the Community College.

Watkins, J. M., & Cooperrider, D. L. (2000). Appreciative inquiry: A transformative paradigm. *OD Practitioner: Journal of the Organizational Development Network 32*(1), 6-10

Watkins, J. M., & Mohr, B. (2001). AI history and timeline. In J. M. Watkins & B. Mohr (Eds.) *Appreciative inquiry: Change at the speed of imagination*. San Francisco, CA: Jossey-Bass/Pfeiffer. Retrieved from http://appreciativeinquiry.case.edu/intro/timeline.cfm

Watson, R. I., & Evans, R. (1991). *The great psychologists: A history of psychological thought.* New York, NY: Harper Collins.

Weisenger, H. (1998). *Emotional intelligence at work: The untapped edge for success.* San Francisco, CA: Jossey-Bass.

Weschler, D. (1958). *The measurement and appraisal of adult intelligence* (4th ed.). Baltimore, MD: Williams & Wilkins.

Wessling, J., & Delaney, T. (2000). After the flood, Colorado State reaps a harvest of

invention. *American Libraries, 31*, 36-37.

Whitney, D., & Cooperrider, D. L. (2000). The appreciative inquiry summit: An emerging methodology for whole system positive change. *OD Practitioner: Journal of the Organizational Development Network, 32*(1), 13-26.

Whitney, D., & Trosten-Bloom, A. (2003). *The power of appreciative inquiry: A practical guide to positive change*. San Francisco, CA: Berrett-Koehler.

Wilkinson, F.C. (2008). April 30, 2008 thoughts. Commemorative Book. In Fire/Watch Book Group (Eds.) *The Zimmerman fire: (re)collections.* Albuquerque, NM: The University of New Mexico, University Libraries. Electronic publication: https://repository.unm.edu/dspace/handle/1928/6707

Wilkinson, F. C., & Lewis, L. K. (2008). Developing a safety training program. *Library & Archival Security, 21*(2), 77-85. doi: 10.1080/01960070802201409

Wilkinson, F. C., Lewis, L. K., & Dennis, N. K. (2010). *Comprehensive guide to emergency preparedness and disaster recovery.* Chicago, IL: Association of College and Research Libraries.

Wilson, B. (1996). Shaken to the core: Change and opportunity in crisis. *Educational Record 77*(2), 70-73.

Wolff, S. B., Preparer (2005). *Emotional Competence Inventory (ECI): Technical manual.* Hay Group, McClelland Center for Research and Innovation. Retrieved from http://www.eiconsortium.org/pdf/ECI_2_0_Technical_Manual_v2.pdf

Wong, Y. L., & Green, R. (2008). Disaster planning in libraries. *Journal of Access Services, 4*(3), 71-82.

Wood, L. (1994). 1000 easy steps toward developing a disaster recovery plan; Or, the

boss must like me because he gave me the job of writing the disaster plan. *Conservation Administration News, 58-59*, 16-20.

World Appreciative Inquiry Conference (2009). *Creating a positive revolution of sustainable change, November 16-19, 2009, Kathmandu, Nepal.* Retrieved from http://appreciativeinquiry.case.edu/intro/conference.cfm

Yin, R. K. (1993). *Applications of case study research*. Newbury Park, CA: Sage.

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Newberry Park, CA: Sage.

Yoder, D. M. (2003). *Organizational climate and emotional intelligence: An appreciative inquiry into a "leaderful" community college* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 8107419)

Yoder, D. M. (2004). Organizational climate and emotional intelligence: An appreciative inquiry into a "leaderful" community college. *Community College Journal of Research and Practice, 29*(1), 45-62.

You Tube. (June 14, 2008) *Volunteers evacuate books from University of Iowa library*. Retrieved from http://www.youtube.com/watch?v=ddhs82z7-lU.

Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *American Psychologist, 35*(20), 151-175. doi: 10.1037/0003-066X.35.2.151

Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. *Applied Psychology, 53*(3), 371-399. doi: 10.1111/j.1464-0597.2004.00176.x

Zeidner, M., Matthews, G., & Roberts, R. D. (2009). *What we know about emotional intelligence: How it affects learning, work, relationships, and our mental health.* Cambridge, MA: The MIT Press.

Appendices

A. Interview Guide

B. Focus Group Guide

C. Script for Initial Participant Contact

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Appendix A

Interview Guide

Project: Examining Emotional Intelligence and Academic Library Disaster Team Member Attributes

Participant's Name: ______________________________________ ID Code: _______

Phone Number: ______________________ E-mail Address: _____________________

Date of Initial Interview: ____________ Date of Follow-Up Interview: ____________

Introduction:

This interview is being conducted to gain an understanding of the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster. Previously, you received and signed a consent form indicating that you agree to participate in the study. As we agreed, this interview will be audio-recorded, the interview will be transcribed, and you will have the opportunity to review the transcript to verify the content of the interview. This interview will take about an hour. As we discussed, there will be a follow-up interview in a few days also taking about an hour. If you have brought any documents or artifacts with you that you feel are important I will look at them after our interview is concluded.

Do you have any questions at this point?

I am going to ask you some questions about your experience related to the [flood or fire] at your library. They are open-ended questions, with no right or wrong answers.

The interviewing protocol that I am using is based on David Cooperrider's appreciative inquiry model in which attention is redirected away from "problems to be solved" toward the "stories of success" held by the people within the organization. Appreciative inquiry questioning focuses on discovering and valuing the best of what is, envisioning what might be, co-constructing what can be, and arriving at what you hope and wish will be.

Questions: Think back through your experience as you responded to and later as you helped to lead your library's recovery from the [flood or fire].

1. Tell me about a time during the disaster process when you felt most effective, innovative, and/or engaged.

    a. What personal qualities and attributes did you draw upon?

    b. What new attributes emerged?

    c. Which were most successful?

2. Tell me about a time when the disaster team was functioning at its best.

    a. What team member attributes and competencies do you recall?

    b. Which were most successful?

    c. What impact did they have?

3. Remembering the lessons learned about what worked well in the past, consider what would happen if another disaster struck your library in the future.

a. What hopes and wishes do you have for a successful disaster response and recovery process?

b. What would be happening if the disaster team was at its best?

c. What ideal attributes and competencies would be evident?

4. Imagine that it is five years from today. You look around and see evidence of a successful disaster recovery and a thriving library.

a. What is being said about how the positive change is being sustained to give vitality and life to the library?

b. What qualities do you possess that contributed to the library's post-disaster success and overall health?

c. What team qualities and attributes had the most impact?

Follow-Up Interview

Thank you for participating in this interview. In preparation for our follow-up interview, please jot down ideas, feelings, and stories as you remember them over the next few days. Also, please bring or recommend any documents or artifacts that you feel are important. Do you have any questions?

Appendix B

Focus Group Guide

Project: Examining Emotional Intelligence and Academic Library Disaster Team Member Attributes

Participant's Name: ______________________________________ ID Code: _______

Phone Number: _____________________ E-mail Address: _____________________

Date of Initial Interview: ____________ Date of Follow-Up Interview: ____________

Introduction:

This focus group is being conducted to gain an understanding of the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their library in its recovery from a disaster. Previously, you received and signed a consent form indicating that you agree to participate in the study. As we agreed, this focus group will be audio-recorded and it will take about an hour. If you have brought any documents or artifacts with you that you feel are important please stay a few minutes after the focus group concludes to share them with me. If you think of any documents later, please contact me.

Do you have any questions at this point?

I am going to ask you some questions about your experience related to the [flood or fire] at you library. They are open-ended questions, with no right or wrong answers. The interviewing protocol that I am using for this focus group is based on David

Cooperrider's appreciative inquiry model in which attention is redirected away from "problems to be solved" toward the "stories of success" held by the people within the organization. Appreciative inquiry questioning focuses on discovering and valuing the best of what is, envisioning what might be, co-constructing what can be, and arriving at what you hope and wish will be.

Questions: Think back through your experience as you responded to and later as you helped to lead your library's recovery from the [flood or fire].

1. Tell me about a time during the disaster process when you felt most effective, innovative, and/or engaged.

    a. What personal qualities and attributes did you draw upon?

    b. What new attributes emerged?

    c. Which were most successful?

2. Tell me about a time when the disaster team was functioning at its best.

    a. What team member attributes and competencies do you recall?

    b. Which were most successful?

    c. What impact did they have?

3. Remembering the lessons learned about what worked well in the past, consider what would happen if another disaster struck your library in the future.

a. What hopes and wishes do you have for a successful disaster response and recovery process?

b. What would be happening if the disaster team was at its best?

c. What ideal attributes and competencies would be evident?

4. Imagine that it is five years from today. You look around and see evidence of a successful disaster recovery and a thriving library.

a. What is being said about how the positive change is being sustained to give vitality and life to the library?

b. What qualities do you possess that contributed to the library's post-disaster success and overall health?

c. What team qualities and attributes had the most impact?

Thank you for participating in this focus group.

Appendix C

Script for Initial Participant Contact

My name is Fran Wilkinson. I am a doctoral candidate in Educational Leadership at the University of New Mexico (UNM). I am also the Deputy Dean of University Libraries and a professor of Librarianship there. For my dissertation, I am conducting a qualitative research study about the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team members who responded to and led their libraries to recover from a disaster. UNM has approved my research proposal and the Dean of the Library at the [University of Iowa] or [University of New Mexico] supports my contacting you to ask you to consider volunteering to participate in this case study.

I plan to conduct an initial, individual interview with six employees and to conduct a focus group with six to ten additional employees who, like yourself, were part of the disaster team at your library, responding to the [flood or fire]. A few days after the initial interview, I will also conduct a follow-up interview to glean any additional thoughts that participants would like to share after having the opportunity to think further and perhaps more deeply about their experiences with the [flood or fire].

If you agree to participate, you will have the choice of whether you prefer be interviewed individually or be part of a focus group. Each initial interview and the focus group will take about one hour and each follow-up interview will also take about an hour. All the interviews will be audio-recorded and transcribed. You will be given the opportunity to review and correct the transcript before my analysis begins to add,

remove, or revise any of the information that you shared with me. The interview transcript will be sent to you and returned to me via e-mail. I will keep your identity confidential and not use your actual name in my dissertation or in any subsequent publications containing my research findings.

I hope that you will be willing to participate and assist me with this case study. Please let me know if you have any questions about the study. If you accept this invitation, I will contact you to schedule a time and place for us to meet and I will ask you to sign a consent form to participate in the study.

Thank you for your consideration.

Appendix D

Purposive Sampling Grid

Name of University: ______________________________ Date: ______________

ID Code	Name of Participant	Completed Interview	Completed Follow-Up Interview	Reviewed Transcript	Completed Focus Group

Describe Content of Documents Analyzed

Appendix E

Consent to Participate in Research Form

The University of New Mexico Main Campus IRB

Consent to Participate in Research

Examining Emotional Intelligence and Academic Library Disaster Team Members' Attributes

Introduction

You are being asked to participate in a research study that is being done by Frances C. Wilkinson, who is the Principal Investigator and her associates, from the Department of Educational Leadership. This research is studying the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members who responded to and led their library in its recovery from a disaster.

This study is new and has not been previously conducted.

You are being asked to participate in this study because of your recent experience as a library disaster team member responding to and recovering from a disaster. Approximately 15 people will take part in this study at the University of New Mexico. Approximately 15 people will take part in this study at the University of Iowa.
This form will explain the research study, and will also explain the possible risks as well as the possible benefits to you. We encourage you to talk with your family and friends before you decide to take part in this research study. If you have any questions, please ask one of the study investigators.

What will happen if I decide to participate?

If you agree to participate, the following things will happen:
You will be contacted by the Principal Investigator to arrange a convenient time and location for you to participate in either a personal interview and a follow-up interview or to participate as a member of a focus group. The interviews will take approximately one hour each and the focus group will also take approximately one hour. You may also receive correspondence or telephone communications concerning points of clarification. Prior to the interview or focus group you will be presented with this Consent Form and the contents will be reviewed with you prior to beginning any interview questions.

How long will I be in this study?

Participation in this study will take a total of two hours over a period of 7-10 days.

What are the risks of being in this study?

There are risks of stress, emotional distress, inconvenience and possible loss of privacy and confidentiality associated with participating in a research study.

For more information about risks, ask one of the study investigators.

What are the benefits to being in this study?

There will be no benefit to you from participation in the study. However, it is hoped that the information gained from this study will add to the body of research about disaster response and recovery in university libraries.

What other choices do I have if I do not want to be in this study?

Participation is totally voluntary and you may choose against participation in the study.

How will my information be kept confidential?

We will take measures to protect your privacy and the security of all your personal information, but we cannot guarantee confidentiality of all study data.

Information contained in your study records is used by Frances C. Wilkinson, in some cases it will be shared with the sponsor of the study. The University of New Mexico IRB that oversees human subject research, and the UNM faculty sponsor will be permitted to access your records. There may be times when we are required by law to share your information. However, your name will not be used in any published reports about this study.

Your name and any personal identifiers will be deleted from the final notes of the study and, at no time, will your name be listed in the final publication.

What are the costs of taking part in this study?

There are no costs to you for participation in this study.

Will I be paid for taking part in this study?

There is no payment to you for participation in this study.

How will I know if you learn something new that may change my mind about participating?

You will be informed of any significant new findings that become available during the course of the study, such as changes in the risks or benefits resulting from participating in the research or new alternatives to participation that might change your mind about participating.

Can I stop being in the study once I begin?

Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without affecting any services to which you are entitled.

Whom can I call with questions or complaints about this study?

If you have any questions, concerns or complaints at any time about the research study, Frances C. Wilkinson, or his/her associates and/or Dr. Alicia F. Chavez will be glad to answer them at 505-883- 6103 or by e-mail at fwilkins@unm.edu or afchavez@unm.edu. If you need to contact someone after business hours or on weekends, please call 505-883-6103 and ask for Frances C. Wilkinson. If you would like to speak with someone other than the research team in regards to any complaints you have about the study, you may call the UNM IRB at (505) 272-1129.

Whom can I call with questions about my rights as a research subject?

If you have questions regarding your rights as a research subject, you may call the UNM IRB at (505) 272-1129. The IRB is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving human subjects. For more information, you may also access the IRB website at http://hsc.unm.edu/som/research/HRRC/maincampusirbhome.shtml.

Consent

You are making a decision whether to participate in this study. Your signature below indicates that you read the information provided (or the information was read to you). By signing this consent form, you are not waiving any of your legal rights as a research subject.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to participate in this study. A copy of this consent form will be provided to you.

___________________________ ___________________________ __________
Name of Subject (print) Signature of Adult Subject Date

INVESTIGATOR SIGNATURE

I have explained the research to the subject and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

_Frances C. Wilkinson___________________
Name of Investigator/ Research Team Member

____ __________________
Signature of Investigator Date

Appendix F

Data Collection Grid for Interview and Focus Group Questions

Research Question or Sub-Question	Explored Through the Use of Identical Interview/Focus Group Questions and Document Analysis
Research Question: What is the relationship between emotional intelligence competencies and the personal attributes of academic library disaster response assistance team (DRAT) members who responded to and led their library in its recovery from a disaster?	Interview/Focus Group Question #: Potentially all questions. Name of Document(s) from UI: TBD Name of Document(s) from UNM: TBD
Which emotional intelligence competencies emerged in DRAT members during the disaster response and recovery process?	Interview/Focus Group Question #: 1a, 1b, and 2a. Name of Document(s) from UI: TBD Name of Document(s) from UNM: TBD
What unique meaning do individual DRAT members make of various emotional intelligence competencies that emerged during the disaster response and recovery process?	Interview/Focus Group Question #: 2c, 3a, 3b, and 4a. Name of Document(s) from UI: TBD Name of Document(s) from UNM: TBD
Which emotional intelligence competencies are most common among DRAT members?	Interview/Focus Group Question #: 1a, 1b, 2a, 3c, 4b, and 4c. Name of Document(s) from UI: TBD Name of Document(s) from UNM: TBD
Which emotional intelligence competencies do DRAT members consider to be of greatest importance in leading the disaster response and recovery process?	Interview/Focus Group Question #: 1c, 2b, 3c, 4b, and 4c. Name of Document(s) from UI: TBD Name of Document(s) from UNM: TBD

Appendix G

Results of Mapping Emotional Intelligence Competencies to Interview and Focus Group Transcripts

Table 6 shows the number of times each emotional intelligence competency was mentioned by participants during either their initial one-on-one interviews or during their follow-up interviews. Emotional intelligence competencies were mentioned 103 times by the four interview participants and the University of Iowa and 135 times by the six interview participants at the University or New Mexico, for a total of 238 times by the participants at both institutions.

Table 6

Map of Emotional Intelligence Competencies from Interviews

Domain: **Self-Awareness**	UI	UNM	Total
Competency:			
▪ Emotional self-awareness	2	2	4
▪ Accurate self-awareness	2	3	5
▪ Self-confidence	3	4	7
Domain: **Self-Management**			
Competency:			
▪ Emotional self-control	4	5	9
▪ Trustworthiness	12	18	30
▪ Conscientiousness	3	4	7
▪ Adaptability	10	9	19
▪ Achievement drive	2	4	6
▪ Initiative	7	10	17
Domain: **Social Awareness**			
Competency:			
▪ Empathy	3	4	7
▪ Service orientation	3	4	7
▪ Organizational awareness	3	2	5

Domain: **Relationship Management**			
Competency:			
▪ Developing others	2	3	5
▪ Influence	2	2	4
▪ Communications	13	19	32
▪ Conflict management	2	3	5
▪ Visionary leadership	4	5	9
▪ Catalyzing change	3	4	7
▪ Building bonds	4	5	9
▪ Teamwork and collaboration	19	25	44
Grand total:	103	135	238

Table 7 shows the number of times each emotional intelligence competency was mentioned by focus group participants. Emotional intelligence competencies were mentioned forty-nine times by the six focus group participants and the University of Iowa and 112 times by the eleven focus group participants at the University or New Mexico, for a total of 161 times by the participants at both institutions.

Table 7

Map of Emotional Intelligence Competencies from Focus Groups

Domain: **Self-Awareness**	UI	UNM	Total
Competency:			
▪ Emotional self-awareness	1	2	3
▪ Accurate self-awareness	0	1	1
▪ Self-confidence	2	2	4
Domain: **Self-Management**			
Competency:			
▪ Emotional self-control	2	3	5
▪ Trustworthiness	4	13	17
▪ Conscientiousness	2	4	6
▪ Adaptability	4	13	17
▪ Achievement drive	2	3	5
▪ Initiative	3	12	15

Domain: **Social Awareness**			
Competency:			
▪ Empathy	2	4	6
▪ Service orientation	2	3	5
▪ Organizational awareness	2	1	3
Domain: **Relationship Management**			
Competency:			
▪ Developing others	1	3	4
▪ Influence	1	0	1
▪ Communications	4	13	17
▪ Conflict management	2	4	6
▪ Visionary leadership	2	4	6
▪ Catalyzing change	1	4	5
▪ Building bonds	2	4	6
▪ Teamwork and collaboration	10	21	31
Grand total:	49	114	163