GOVERNMENT DISASTER ASSISTANCE: AN EXPLORATION OF EXPECTATIONS

By

HANNAH M. VICK

Bachelor of Arts in Political Science University of Wisconsin – River Falls River Falls, WI 2010

Submitted to the Faculty of the Graduate College of the Oklahoma State University in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY December, 2020

GOVERNMENT DISASTER ASSISTANCE: AN EXPLORATION OF EXPECTATIONS

Dissertation Approved:
Haley Murphy, PhD
Dissertation Advisor
Alex Greer, PhD
Tristan Wu, PhD
Marten Brienen, PhD

ACKNOWLEDGEMENTS

As I researched and wrote this dissertation, I received support and encouragement from many, many people in my academic, professional, and personal life.

First and foremost, sincere thanks to the chair of my dissertation committee, Dr. Haley Murphy, for her continuous encouragement and support. I know she did many things behind the scenes to smooth this process and I appreciate her commitment to my success (and all her other students, as well). Dr. Murphy always gave wonderful, down-to-earth advice that saw me through to the end. I would also like to thank my advisor, Dr. Alex Greer, for going above-and-beyond in his assistance. He continued to advise, support, and guide me even though I was no longer his student! Dr. Greer was always steady when I stumbled and provided terrific ideas when I was lost. I am grateful for his insightful mentoring, his optimism that I could dig deeper and think harder, and his unwavering belief that I could contribute something to the field.

I would also like to thank my colleagues for their support and friendship. There are too many people to mention who bought me coffee, gave me inspiration, and took time to give me feedback as I wrestled with ideas. In particular, my co-worker Rob Schweitzer assumed extra work when I took leave to finish my data analysis, for which I am eternally grateful. And, huge thanks to my beloved boss, Carlos J. Castillo, who pushed me along with his encouragement and kindness. I would not have finished without you.

Finally, I would like to thank my parents and my sister for their unending love and support. They were always there to celebrate every success I had – no matter how small. All three of them encouraged me, prayed for me, and kept me going. Thank you for everything.

Name: HANNAH M. VICK

Date of Degree: DECEMBER, 2020

Title of Study: GOVERNMENT DISASTER ASSISTANCE: AN EXPLORATION OF

EXPECTATIONS

Major Field: FIRE & EMERGENCY MANAGEMENT

Abstract: Several scholars have raised concerns that individuals' expectations of government disaster assistance are outsized and do not align with reality. The purpose of this dissertation was to explore participants' expectations of government disaster assistance, how they form those expectations, and how those expectations compare to actuality. Using a phenomenological approach, 24 participants who are unfamiliar with government disaster assistance were interviewed using fictional vignettes of disaster scenarios. This study found participants' expectations of government disaster assistance are based on direct and vicarious experiences, as well as their beliefs about roles and responsibilities. These expectations are influenced by the nature of the disaster event, the participants' level of trust in the government's intent and capacity, and their general beliefs about personal responsibility and the role of government. Overall, the participants' expectations of government disaster assistance were modest with pessimistic overtones. Additional research is needed to explore perceived responsibility and its role in household-level decision making before, during, and after disasters.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
Background	2
The Problem	
The Research Questions	
The Rationale and Significance of this Study	11
II. THE LITERATURE REVIEW	14
What is Expectancy?	15
Beliefs	21
Experiences	30
Recovery and the Disaster Assistance Experience	37
What's Missing?	44
III. U.S. DISASTER ASSISTANCE POLICY	47
FEMA's Individual Assistance Program	49
The Small Business Administration's Disaster Loans	52
The Department of Housing & Urban Development's CDBG-DR	53
The National Flood Insurance Program	54
Other Government Assistance Programs	55

Chapter	age
IV. METHODOLOGY	57
Research Design	
Data Collection	
Duta / Mary 515	00
V. FINDINGS	87
Experiences	
Perceived Responsibility	
Trust in Government 10	
Attributes of Expected Government Assistance	
Role of Government	11
VI. DISCUSSION & CONCLUSION	17
Discussion	19
Limitations	27
Future Research	
Practical Implications	
Conclusion	35
REFERENCES13	37
APPENDICES17	71
Appendix A: Institutional Review Board Approval17	
Appendix B: Institutional Review Board Consent Form	
Appendix C: Institutional Review Board Face to Face Recruitment	
Appendix D: Example Participant Follow-Up Email	
Appendix E: Recruitment Ad in Community Newsletter	
Appendix F: Interview Guide17	/6

LIST OF TABLES

Table	Page
Participant Characteristics and Length of Interview	75
2. Emergent Themes from the Data Analysis	

LIST OF FIGURES

Figure	Page
1. Janzen et al.'s (2006) conceptual model of expectancy formation	18
2. Olson, Roese and Zanna's (1996) model of expectancy processes	20
3. Types of Social Capital by Aldrich (2012)	43

CHAPTER I

INTRODUCTION

According to Roberts, Ward and Wamsley (2012), the challenge of U.S. disaster management has more to do with "citizen exasperation" than operational capability (p.253). Citizens are exasperated, they argue, because of ever-expanding expectations of government responsibilities. The way the disaster management system works and the way individuals think it should work are separated by a gulf of unfulfilled expectations (Roberts, Ward & Wamsley, 2012). In opinion poll after opinion poll, individuals express their frustration with politicians, bureaucrats, and government recovery efforts (Roberts, 2015; Clement, Zezima & Guskin, 2018; Weber, 2017; Roberts, Ward & Wamsley, 2012). These frustrations spark a chain reaction of increased media coverage, obstructive political maneuvering, and inappropriate policy changes (Roberts, Ward & Wamsley, 2012; Sapat et al., 2011). Expectations of government disaster assistance are complex and nuanced, especially for those with little hazard experience (Schneider, 2011; Landry et al., 2020; Chamlee-Wright & Storr, 2010; Rivera, 2019). What these individuals believe the government should do during a disaster event is often different than what they experience, a phenomenon Schneider (1992) calls the expectation gap.

This dissertation explores this gap by asking individuals about their expectations of government disaster assistance. While other studies have investigated expectations using case studies or surveys after the disaster occurred, the purpose of this research is to deeply explore what a person expects before a disaster strikes. What individuals expect and why they hold these expectations are central to this exploratory, qualitative study. Using a phenomenological approach, 24 participants who are unfamiliar with government disaster assistance were interviewed using fictional vignettes of disaster scenarios. This study found participants' expectations of government disaster assistance are based on direct and vicarious experiences, as well as their beliefs about roles and responsibilities. These expectations are influenced by the nature of the disaster event, the participants' level of trust in the government's intent and capacity, and their general beliefs about personal responsibility and the role of government. This study's findings contribute to the field's knowledge base by exploring the deeper, fundamental reasons why individuals expect certain actions and assistance from the government during a disaster event. In this introductory chapter, I provide background, the problem, the research questions, the study's rationale, and its significance.

Background

Are expectations out of sync with actuality?

Individuals make choices about risk based on their expectations of government assistance (Wachinger *et al.*, 2013; Terpstra, 2011; Cameron & Shah, 2015; Eisenman *et al.*, 2012; Lindell & Hwang, 2008), but those expectations may not align with what is feasible, possible, or appropriate for the government to do (Schneider, 2011). Schneider (2018; 2011) has explored this phenomenon since the 1990s and argues U.S. disaster policies and practices

are often out of sync with individuals' expectations. In many cases, individuals expect the government to provide disaster assistance more efficiently, generously, and expansively than what the law allows (Schneider, 2018; Blanchard-Boehm, Berry & Showalter, 2000; Kunreuther & White, 1994). In large-scale, catastrophic incidents, expectations increase while the government's capacity to perform decreases (Schneider, 2011). Media attention can amplify these expectations and convey an availability of assistance that is not necessarily accurate (Kousky & Shabman, 2012).

Disaster assistance for households by any level of government is often narrowly defined by statute and only available to a subset of the affected population (Blanchard-Boehm, Berry & Showalter, 2000; Kousky & Shabman, 2012). In many cases, relief efforts by local governments are quickly exhausted by the scope of the damage (Smith, 2012). State and federal governments may offer assistance programs but beyond immediate emergency and sheltering relief, these resources are bureaucratic in nature with eligibility requirements, application processes, and minimal funds (Schneider, 1992; Kamel & Loukaitou-Sideris, 2004; Sylves, 2014; Smith, 2012). The majority of these programs are only available when the President provides a major disaster declaration for a community, which only applies to certain situations (Blanchard-Boehm, Berry & Showalter, 2000).

Government disaster assistance in the U.S. is based on a limited-intervention model of recovery (Phillips, 2009; Comerio, 1998) to augment household recovery, but not fund it entirely (Phillips, 2009, p. 197). While the maximum amount a household may receive from the Federal Emergency Management Agency (FEMA) is \$35,500¹, the average amount is

¹ The maximum amount of eligible assistance for disaster affected households is adjusted each year, based on the Consumer Price Index. In October, 2019, FEMA announced the maximum amount of Individual Assistance

between \$4,000-\$7,000 (Calder, 2016; Reese, 2016). Most households are referred to the Small Business Administration (SBA) for long-term loans, which are often unwanted (Brown, 2018). Assistance from the Department of Housing and Urban Development (HUD) and state-run programs can have extensive wait times and limited options (Spader & Turnham, 2014). These realities can be surprising for disaster survivors, who may be dealing with personal losses that far exceed the assistance for which they qualify (Spader & Turnham, 2014; Kousky & Shabman, 2012; Schneider, 1992). Kousky & Shabman (2012) suggest this surprise is exacerbated by media reports of millions or billions of allocated disaster dollars for a community or state (much of which is meant for infrastructure repair) and can make the "small" amount of individual assistance feel inadequate.

This misalignment of expectations can lead to feelings of betrayal from disaster survivors (Horlick-Jones, 1995; Schneider, 1992; Schneider, 2018; Lachlan & Spence, 2007; Jasper, 1998). Several researchers have examined outrage after major disasters, often from the perspective of public policy and political change (Malhotra & Kou, 2008; Schneider, 2008; Maestas *et al.*, 2008). These feelings emanate from unmet expectations and can result in operational failures, poor policy decisions, and decreased trust in government (Veil & Anthony, 2017; Ewart & McLean, 2014; Nigg, Barnshaw & Torres, 2006; Kartez & Lindell, 1987; Miller, 2016). Government entities encounter problems with operational decision-making and intergovernmental coordination when mired in the "blame game" (Veil & Anthony, 2017; Ewart & McLean, 2014). Hasty policies can be pushed through to solve immediate, "public-facing" problems with long-lasting, detrimental consequences (Ingram *et*

to households increased to \$35,5000 housing assistance and \$35,500 for other needs assistance. This was a significant change to previous policy, which allowed roughly \$35,000 maximum for both housing assistance and other needs assistance (FEMA, 2019).

al., 2006; Nigg, Barnshaw & Torres, 2006; Kartez & Lindell, 1987). For example, Sapat et al. (2011) found post-Katrina FEMA policy changes to its housing program were meant to address "lessons learned" but only exacerbated housing shortages after Hurricanes Gustav and Ike. These were directly tied to "the gap in expectations and understanding between survivors, state and local government officials on one side, and FEMA officials on the other, [which] began to grow wider, rendering the disaster response and recovery process even more difficult" (Sapat et al., 2011, p. 43). Schneider (2011) argues the expectation gap influences decision-making and plays a role in a myriad of short-term and long-term plans made by individuals and officials during and after the disaster.

Are expectations rising?

For decades, practitioners, researchers, and policymakers have said expectations of government disaster assistance are rising. In his book, *The Culture of Calamity*, Rozario (2007) describes a U.S. Army Corps of Engineers Lt. General in 1955 trying to stem residents' expectations by repeatedly saying government flood assistance was only supplementary, not a cure-all (p. 158). After the Midwest floods of 1993, Hickox (1994) argued expectations of disaster assistance were too "widespread" and growing, alarmed that "[survivors] not only expect, but demand, federal assistance" (p. 27). In 1995, Quarantelli mentioned the issue of rising expectations when discussing challenges of housing and sheltering, suggesting cultural change as the culprit:

(3) Changes in social expectations about disaster help and relief. Since the late 1960s and early 1970s certain values have become more mainstream in American society than they once were. Many of these are associated with notions of participatory democracy and categorical entitlement to certain rights. These more general expectations have spilled over and will increasingly be manifested in the specific problems of disaster sheltering and housing. Much of the disaster assistance which

was once accepted gratefully if offered is now seen as a mandated right. (p. 47).

Quarantelli's observations dovetail with Moss (1999), who suggests rising expectations are tied to the increasing role of the government as a risk manager. Through programs like the National Flood Insurance Program (NFIP), agriculture subsidies, workman's compensation, unemployment insurance, and even environmental regulations (p. 323), the federal government has transferred risk from the individual to the public sphere. This risk transfer, according to Moss (1999) and Michel-Kerjan and Volkman-Wise (2011), has increased the expectations of government assistance for all types of hazards. Individuals now make decisions based on the expectation that the government will assume part or all of the risk through subsidies or liability coverage (Moss, 1999; Platt, 1999; Michel-Kerjan & Volkman-Wise, 2011). With a government "safety net" of subsidized risk, people may be less likely to buy insurance or take preparedness actions (Michel-Kerjan & Volkman-Wise, 2011; Platt, 1999; Sylves, 2014). Communities may be less inclined to prioritize mitigation projects, since they believe the federal government will fund them in the future (Sylves, 2008; Moss, 1999, Michel-Kerjan & Volkman-Wise, 2011, Burby, 2006).

The overarching consequence of this trend is twofold: 1.) individuals may take on risks (either knowingly or unknowingly) because they expect the government to cover losses and, 2.) the government is trapped in a cycle of providing more and more assistance as the risks grow larger. Numerous researchers suggest disaster assistance provides a tempting political advantage (Michel-Kerjan & Volkman-Wise, 2011; Platt, 1999; May, 1985; Moss, 1999; Sylves, 2014) and each federal action sets a statutory precedent for what assistance can be expected during future events (Michel-Kerjan & Volkman-Wise, 2011; Platt, 1999). After

every disaster, there is a "ratcheting up" effect where expectations – based on the assistance provided for the last disaster – becomes the new baseline of expectation for the next disaster (Michel-Kerjan & Volkman-Wise, 2011). As federal disaster assistance dramatically increased over the last five decades, so too have the expectations of congressional members, governors, community leaders, and individuals (Michel-Kerjan & Volkman-Wise, 2011; Platt, 1999; May, 1985; Moss, 1999; Sylves, 2014). This situation, according to Michel-Kerjan & Volkman-Wise (2011), is creating an unsustainable financial and political burden for the U.S. disaster management system.

Expectations influence personal decision making and behavior

When disaster survivors respond to public safety messages or seek government assistance, they engage in a complex cognitive and social process to predict the future and take action (Lindell & Perry, 2012; Chamlee-Wright & Storr, 2010; Nerlich & Halliday, 2007). These activities are grounded in expectations of what the government will do and should do to help them. Expectations – whether met or unmet – of the government can influence personal and household-level decision-making during every phase of the disaster cycle (Wachinger *et al.*, 2013; Terpstra, 2011; Cameron & Shah, 2015; Eisenman *et al.*, 2012; Lindell & Hwang, 2008).

During the response phase, decisions about protective actions are influenced by the perception of what the government may or may not do during the event (Miller, 2016; Lindell & Perry, 2012; Eiser *et al.*, 2012). For example, households may choose to evacuate or stay in place depending on their expectations, based on their trust in the government's public safety messaging (Lindell, Prater & Perry, 2007). The risk literature is filled with

examples of how individuals' trust in government impact their perception of risk and decision-making (Tierney, 2006; Tierney, 2014; Lindell, Prater & Perry, 2007; Miller, 2016). For example, in the days leading up to Hurricane Katrina, families made judgements based on their expectations of what the government would do if the storm was going to be catastrophic. Survivors said they did not accurately perceive the severity of the storm since the government did not send evacuation buses to their neighborhood; the expectation of what the government would do influenced both their risk perception and their decision not to evacuate (Tierney, 2006). Likewise, during the recovery phase, individuals and businesses may make financial decisions (i.e. take on debt) based on their expectations of what resources the government may provide (Furlong & Scheberle, 1998). Displaced individuals and families make choices about returning to their damaged homes based on their expectation of how much government assistance will be available (Chamlee-Wright & Storr, 2010; Bradley & Fogue, 2008).

As far as mitigation, individuals and communities make judgements about long-term risk based on expectations of government assistance (Moss, 1999; Platt, 1999; Michel-Kerjan and Volkman-Wise, 2011). Studies have shown the belief in the availability of government assistance influences the decision to buy hazard insurance and as well as the individuals' decision to protect their home and property (Landry *et al.*, 2020; Blanchard-Boehm, Berry & Showalter, 2000, p. 203; Michel-Kerjan and Volkman-Wise, 2011; Kunreuther & White, 1994; Lewis & Nickerson, 1989). Similarly, community mitigation projects, like flood walls and levees, are deeply rooted in individual expectations of local, state, and government actors to fulfill promises – explicit and implied – about long-term safety and security (Han, Hu & Nigg, 2011; Paton, 2008; Mittler, 1997; Kunreuther & White, 1994). During the

preparedness phase, scholars note the expectation of government assistance influences the level of household preparedness (Basolo *et al.*, 2009; Paton, 2003; Guion, Scammon, & Borders, 2008). A family may or may not choose to keep a go-kit or plan for emergencies if they believe the government will perform certain tasks, like restore power in a short amount of time or rescue them if needed (Basolo *et al.*, 2009; McNeill *et al.*, 2013; Paton, 2003; Guion, Scammon, & Borders, 2008).

The Problem

Research suggests individuals' expectation of the government can have profound impacts on the risk-based decisions made during every phase in the disaster cycle (Landry *et al.*, 2020; Wachinger *et al.*, 2013; Terpstra, 2011; Cameron & Shah, 2015; Eisenman *et al.*, 2012; Lindell & Hwang, 2008). In some cases, especially during the response phase, these decisions can be detrimental to the immediate safety of the individual and their household (Miller, 2016). Under-preparing based on expectations of government relief can be harmful to the individual, increasing the risk of disaster damage, disruption, and financial loss (Landry *et al.*, 2020; Blanchard-Boehm, Berry & Showalter, 2000).

Yet, there is a lack of research about *what* expectations individuals hold of government disaster assistance and, more importantly, *why* they hold them. The scholars who have investigated this topic most, Schneider (1998, 2011, 2018) and Michel-Kerjan & Volkman-Wise (2011), approach the problem from a public policy perspective. Their posture is government-centric and based on case studies, which lack the individual perspective. Certain qualitative researchers have explored expectations of government during disasters, but only after the disaster occurred. While this is valuable, these studies are

retrospective in nature and do not capture pre-disaster beliefs. Individuals who have applied for government disaster assistance are influenced by the experience itself; their memories of what they believed prior to the disaster are clouded by their present predicament. When we ask disaster survivors if their expectations of government were met, their answer is an indicator of satisfaction rather than a measure of expectation fulfillment. If we want to understand individuals' expectations of what the government will do during a disaster, then we need to ask individuals about their beliefs before the disaster occurs. Additionally, if expectations of government disaster assistance are on truly on the rise and out of sync with actuality, it is imperative we attain a better understanding of what those expectations are and why individuals hold them.

The Research Questions

This study used the following research questions:

Central Question: What expectations do individuals *who have never received* government disaster assistance hold of government disaster assistance?

Sub-Research Question 1: How do individuals form these expectations? Or, on what basis do they derive their expectations?

Sub-Research Question 2: How do individuals' expectations compare to what government actually provides disaster survivors?

Definition of Key Terms

This study will use the following definitional parameters to explore expectations of government disaster assistance. The **limited intervention model** is the disaster assistance

model currently in use in the U.S., where private insurance is the primary form of risk management. The government provides limited disaster assistance through infrastructure repair and funding public services, with small amounts of financial assistance directly to households (Comerio, 1998). **Expectations** are specific beliefs held about the future (Janzen et al., 2006). For this study, expectations were oriented toward government disaster assistance, not expectations of a particular hazard or resulting damages (Chamlee-Wright & Storr, 2010; McNeill et al., 2013). Beliefs and attitudes are both explored in this study as central to expectations using social psychologists Krech and Crutchfield (1948) definitions of "a belief [as] an enduring organization of perceptions and cognitions about some aspect of the individual's world...and attitude is...an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world" (p. 150; Fishbein, & Raven, 1962, p. 40). The **government** refers to any level of government – local, state and federal – and any public sector organization or agency. **Disaster** is conceptualized as the intersection between hazards, vulnerability, and social systems (Blaikie et al., 2014; Tierney, 2014). Most disaster studies position themselves within a phase of the disaster cycle (Neal, 1997). While preparedness, response, and mitigation all make an appearance in this study, the focus was primarily on future-thinking about the recovery phase. **Disaster assistance** is conceptualized as any type of disaster relief offered or requested (Phillips, 2009). The assistance could be in the form of services (i.e. sheltering, debris removal, infrastructure repair), supplies (i.e. food, toiletries, blankets), or financial relief (i.e. cash, loans, reimbursements). The focus of this study is disaster assistance provided directly to individuals or households.

The Rationale and Significance of this Study

While much of the public policy research on the topic of expectations of government disaster assistance rely on broad generalities (Schneider, 1998; Michel-Kerjan & Volkman-Wise, 2011), this study took an idiographic approach to focus on the uniqueness of the individual. I wanted to hear directly from individuals who had little-to-no disaster experience about how they conceptualized government disaster assistance. Further, I wanted to know why they held these expectations; what were the beliefs and experiences, if any, that prompted them to say they expected the government to offer assistance? This line of inquiry naturally led to a qualitative research design using a phenomenological approach. Phenomenology was especially suited for this project since its focus on the individual's lifeworld allowed for an exploration of deeply held beliefs about themselves and the role of government (Smith, 2011). Additionally, since my participants were unfamiliar with government disaster assistance, I used vignettes to help them consider what they would expect. In result, the data was a rich collection of thoughts, ideas, opinions, beliefs, and experiences. These were analyzed using Interpretive Phenomenological Analysis (IPA) which revealed several underlying dimensions of expectations like perceived responsibility, fairness, and trust in government. Because I used a phenomenological approach combined with vignettes, I was able to gain insight into both what individuals expect of government disaster assistance, as well as why.

The significance of this study is rooted in its deeper level of analysis, which provides context and depth to our overall understanding of household-level behavior before, during, and after disasters. Understanding why individuals hold certain beliefs is key to unraveling how they behave in risk-based environments and can better inform policy decisions to meet safety and social needs. Additionally, understanding individuals' expectations can help

policy makers and practitioners address issues in delivering disaster assistance. Previous research suggests individuals' make preparedness, response, recovery and mitigation decisions based on the expected actions of government (Chamlee-Wright & Storr, 2010; Wachinger *et al.*, 2013; Terpstra, 2011; Cameron & Shah, 2015; Eisenman *et al.*, 2012; Lindell & Hwang, 2008), so it is essential survivors these expectations are aligned to actuality. This study improves our understanding of what those expectations are and why individuals hold them. In turn, the results are a contribution to the overarching scholarly and practitioner conversation about the interplay of individual and government responsibilities in reducing disaster losses and suffering.

Summary of Remaining Chapters

In the next chapter, I review the literature to situate my topic within the context of previous research. This is especially important as expectations of government disaster assistance are complex and multi-dimensional, drawing on a variety of fields and areas of study. In the following chapter (chapter three), I provide an overview of the current policies governing the delivery of U.S. disaster assistance. Since part of this dissertation is meant to identify whether individuals' expectations are out of sync with actuality, it is essential to know how the system was devised and is currently administered. In chapter four, I introduce my methodological approach and rationale for exploring the research questions using phenomenology. I explain in detail my data collection and analysis procedures in order to increase confidence in the findings I produce in chapter five. The findings are categorized around themes and, in chapter six, I discuss those key themes in relation to the research questions. I also give suggestions for both the practitioner and academic communities for further exploration into the expectations individuals hold of government disaster assistance.

CHAPTER II

THE LITERATURE REVIEW

The word "expectations" is sprinkled throughout the disaster literature, from the earliest days of research. Barton (1969) said collective stress can be defined "in terms of expected conditions of life...it can arise not only from a worsening of conditions but from a sudden rise of expectations that the system fails to meet" [emphasis added] (p. 38).

Quarantelli (1984, 1986) likewise referenced expectations in his work on organizations and communities, but only to say the common expectations of disaster survivor behavior are different from reality. Expectations are casually mentioned in discussions about collective behavior (Quarantelli, 1982), sensemaking (Boin & 't Hart, 2007), planning (Norris et al., 2008), the definition of disasters (Perry, 2007), bureaucratic problems (Prince, 1920), and political considerations (Prater & Lindell, 2000); however, few researchers have delved into the what and why of individuals' expectations of government disaster assistance.

The purpose of this literature review is to provide context to the concept of expectations and lay the groundwork for the exploration of government disaster assistance. The first section is an overview of expectancy and offers relevant models

found in the research. The second and third sections explore beliefs and experiences, respectively, due to their prominence in expectation development. The fourth and final section reviews the disaster recovery literature, as this project is oriented toward future thinking about post-disaster activities. The literature review concludes with a description of what is missing from our body of knowledge and how this project will contribute to the research community's understanding of expectations of government disaster assistance.

What is Expectancy?

In considering the definition of expectations, the social psychology field differentiates between expectancy and expectation. Expectancy is used to "identify the general concept" (Janzen et al., 2006, p.40) and can be defined broadly as, "beliefs about a future state of affairs" (Olson, Roese & Zanna, 1996, p. 211). Expectations are the specific beliefs we hold about the future (Janzen et al., 2006). Expectancy is an essential part of cognitive health and plays a role in psychological and physical well-being (Janzen et al., 2006). Individuals use expectations to guide behaviors as they move through time, constantly predicting the future and choosing actions based on what they believe will occur. Expectations are a part of learning; individuals use previous experiences as a cognitive link to what could occur if a particular action is taken (Olson, Roese, and Zanna, 1996, p. 212; Roese and Sherman, 2007). Expectancy is a constant and often unnoticed part of the human experience (Janzen et al., 2006), since human intelligence has evolved to unconsciously motivate behavior toward good things and avoid bad things (Olson, Roese, and Zanna, 1996, p. 212; Roese and Sherman, 2007). Expectations help individuals recognize and categorize the world around them, which in turn produces

understanding and shapes their worldview (Janzen *et al.*, 2006). Dennett (1991) says, "all brains are, in essence, *anticipation* machines" (p. 177), and through the process of anticipating the future, individuals craft expectations to guide behavior (Janzen *et al.*, 2006).

There are two types of expectancies: probabilistic and normative (Olson, Roese, and Zanna, 1996, p. 212). Probabilistic expectancies refer to the process of making judgements about the probability something will occur in the future. Normative expectancies are what individuals believe should occur in the future, which can be – and often is – different than what they believe will probably occur. Both types of expectations can be "experienced consciously or unconsciously and can be highly specific or extremely broad" (Janzen *et al.*, 2006, p. 39).

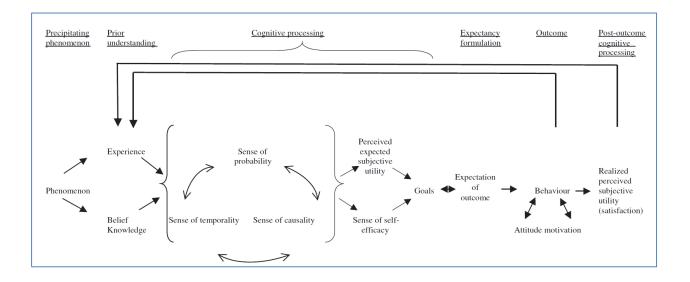
Models of Expectancy

The social psychology literature divides expectancy into two cognitive processes (Janzen *et al.*, 2006). The first process is expectancy development, or how an individual forms an expectation. The second and subsequent process describes what an individual does when their expectation is confirmed or disconfirmed.

Janzen *et al.* (2006) created a model for the expectancy formulation process, which consists of several stages of cognitive processing to generate an expectation (p. 40). As seen in Figure 1, once a precipitating phenomenon occurs, individuals use their prior understanding to begin forming expectations, pulling from their experiences, beliefs, and knowledge. These elements are then fed into an iterative cycle of the individuals' sense of "...probability, temporality, and causality" of the phenomenon (p.

40). This includes contemplating how likely it is a phenomenon will occur, when it will occur, and who or what is responsible for its occurrence. From there, individuals consider their self-efficacy by conducting a "subjective assessment of [their] ability to perform necessary behaviors in order to achieve future states" (Janzen *et al.*, 2006, p. 42). This is combined with judgements about perceived expected subjective utility, or the value of the anticipated outcome. Individuals weigh the pros and cons of different expectations based on their perceived ability to accomplish certain outcomes. This is then considered against the individuals' goals to ultimately form an expectation. Janzen *et al.*'s (2006) process is iterative and begins again based on outcomes of behavior and attitude motivation (p. 40).

Figure 1: Janzen et al.'s (2006) conceptual model for the process of expectation development

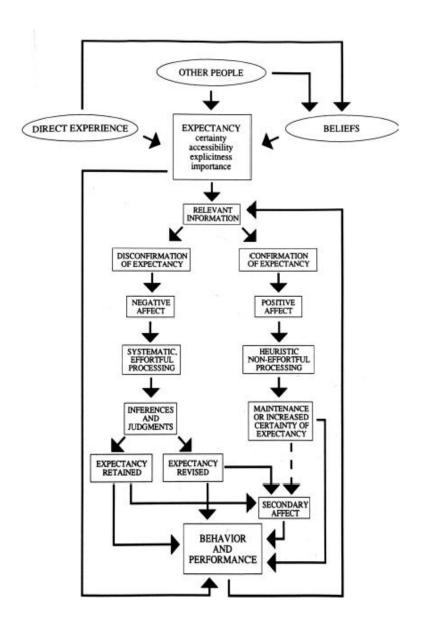


Janzen *et al.*'s (2006) conceptual model was designed based on their work with Alzheimer's patients. It has been used by other health care researchers to explore individuals' expectations of recovering from surgery (Park *et al.*, 2014), pain relief after giving birth (Lally *et al.*, 2014), and chronic pain (Hamnes *et al.*, 2011). Janzen *et al.*'s (2006) model (Figure 1) is useful as it provides discrete categories to breakdown a complex and iterative cognitive process.

While Janzen *et al.* (2006) explained how expectations are formed, Olson, Roese and Zanna (1996) provided a cognitive model once an expectation is confirmed or disconfirmed (Figure 2). Olson, Roese and Zanna (1996) begin their process model with individuals' experience and beliefs to create "confident, accessible, explicit and salient expectations" (p. 231). Importantly, they also include "other people" as a dimension of expectation formation (an element inferred by Janzen *et al.* (2006) but not explicitly stated). Once an expectation is met with relevant information, an individual decides if their expectation is either confirmed or disconfirmed. From there, an individual goes

through a series of stages to either revise their beliefs and attitudes, or to keep them the same based on their level of satisfaction (Olson, Roese, & Zanna, 1996).

Figure 2: Olson, Roese and Zanna's (1996) model of expectancy processes



Starting in the 1960s, the marketing and psychology literature began to explore how individuals decide if they are satisfied with a service or product (Cardozo, 1965;

Anderson, 1973; Yi, 1990). Oliver (1980) developed the Expectancy-Disconfirmation Theory to suggest customers weigh the service they expected and the service they experienced to arrive at a certain level of satisfaction. The Expectancy-Disconfirmation Theory was eventually expanded and applied to the public sector to explain citizens' satisfaction with government services. Most of the studies explored expectations of local government services (Van Ryzin, 2004, Van Ryzin, 2005; Roch & Poister, 2016; Nigro & Cisaro, 2014; James, 2009), with a few studies about expectations of the federal government (Morgeson, 2012; Filtenborg *et al.*, 2017). These studies examined public services, like trash collection and public schools, to gauge residents' expectations and subsequent satisfaction.

Although this research project is focused on expectation formation rather than its subsequent confirmation or disconfirmation, the studies that link expectations to satisfaction are important in two ways. First, expectancy is an ongoing, complex, and iterative cognitive process that uses satisfaction as a part of its knowledge bank. When individuals are presented with a new or unfamiliar phenomenon (like a hazard or disaster), they retrieve their level of satisfaction from previous experiences and knowledge to create new expectations (Olson, Roese & Zanna, 1996). Second, much of the disaster literature about expectations of government services uses satisfaction as a variable or dimension (Schneider, 1997; Jong & Dückers, 2018; Horsley, Liu & Levenshus, 2010; Howard *et al.*, 2017; Chamlee-Wright & Storr, 2010), which adds to our knowledge of what expectations individuals hold and provide clues about why they hold them.

Beliefs

Beliefs and Expectations

Janzen *et al.* (2006), Olson, Roese and Zanna (1996), and Roese and Sherman (2007) agree expectations are formed through a combination of beliefs and personal experiences, as well as other people's beliefs and experiences. This section will first generally discuss expectancy beliefs and then more specifically how beliefs about government relate to individuals' expectations during a disaster.

Beliefs and knowledge are often paired together in the expectancy literature (Olson, Roese and Zanna, 1996; Roese and Sherman, 2014). Knowledge shapes our beliefs about past experiences and predictions for the future. Olson, Roese and Zanna (1996) categorize expectancy knowledge in three ways. Episodic knowledge is event-specific and usually relates to the individual's anticipation of a particular setting. Semantic knowledge is abstract and relates to "what may typically happen to particular objects or persons" (Olson, Roese & Zanna, 1996, p. 213). Procedural knowledge is awareness of rules and regulations in either a specific or general context. These three types of knowledge interact with each other to create and/or affirm a person's beliefs about the past and the future. Together, they drive the formation of an expectation and motivate behavior once the expectation is confirmed or disconfirmed (Olson, Roese and Zanna, 1996; Roese and Sherman, 2014).

A good example of this process is Charney *et al.*'s (2016) study of hospital operations during a disaster. They found individuals from the surrounding community expected hospitals to provide certain services to disaster survivors. Participants conveyed

specific beliefs about non-medical hospital services (like providing water, food and clothing) based on abstract beliefs about the hospital's mission (providing assistance to those in need) (p. 392, 394). The participants in Charney *et al.*'s (2016) study used semantic knowledge to make judgements about the probability that a hospital would provide non-medical assistance during a disaster. Since – abstractly – hospitals help people and during disasters people need help, the probability that a hospital would provide help is deemed high, which is an example of a probabilistic expectancy.

Charney *et al.*'s (2016) participants then go a step further and state that a hospital not only *will* but *should* provide non-medical assistance during disasters because a hospital's mission is to help people. This is an example of a normative expectancy, where the belief of what should be is derived from one's interpretation of the institution itself. Charney *et al.*'s (2016) participants believed that a hospital is defined by its commitment to helping people and harbor expectations that this commitment translates into providing all kinds of assistance, even beyond what it will actually provide. Likewise, individuals craft probabilistic and normative expectations about government assistance during disasters based on their beliefs of what the government will do and should do (Chamlee-Wright & Storr, 2010; Murphy, Greer & Wu, 2018).

Beliefs about the Future

Beliefs about the future are prevalent in disaster scholarship, especially in the risk and preparedness literature. Historically, the preparedness research has been oriented toward the temporal aspect of risk perception, specifically how risk beliefs translate into intentions, which translate into decision-making and behavior (McNeill *et al.*, 2013;

Lindell & Whitney, 2000; Mulilis & Duval, 1997). Expectations are a component of a number of decision-making theories and models (McNeill *et al.*, 2013, p. 1830). The Protective Motivation Theory (Floyd, Prentice-Dunn & Rogers, 2000; Mulilis & Duval, 1997), the Expectancy-Valance Model (Busemeyer & Stout, 2002), the Person Relative to Event Model (Lindell & Whitney, 2000), the Theory of Decision-Making (Edwards, 1954), the Theory of Planned Behavior (Ajzen, 1991), and the Transtheoretical Model (Martin, Bender & Raish, 2007) all include expectancy as a dimension of decision-making and are used by disaster scholars. These theories have been especially useful for hazard adjustment, evacuation, response, and preparedness research, exploring how individuals' expectations of government action during a crisis influences personal choices made beforehand (Paton, 2019; Thomas *et al.*, 2018; McNeill *et al.*, 2013; Kang, Lindell & Prater, 2007; Lindell & Whitney, 2000; Mulilis & Duval, 1997).

Borrowing from behavioral psychology and risk fields (Norris, Smith & Kaniasty, 1999; Mulilis & Lippa, 1990; Paek *et al.*, 2010), individual preparedness is now thought of as a complex decision-making process influenced by risk perception, disaster experience, self-efficacy and social/community networks (DeYoung & Peters, 2016; Kusenbach, 2017; Donahue *et al.*, 2014; Kirschenbaum, 2002). The risk research has provided a wealth of literature about individual decision-making, using expectations as an indicator of adjustment behavior. For example, a recent study found individuals who believe they would receive government disaster assistance decreases the probability the household will buy flood insurance by 25% to 42% (Landry *et al.*, 2020). Other risk researchers have used expectations as either a causal variable (Blanchard-Boehm, Berry & Showalter, 2001; Lam *et al.*, 2007; McNeill *et al.*, 2013; Lindell & Whitney, 2000;

Mulilis & Duval, 1997) or a possible explanation for their results (Darr, Cate & Moak, 2018; Bradley & Forgue, 2008; Charney *et al.*, 2017).

Beliefs about the Government

Beliefs about the government are influenced by many factors, including one's personal experiences, culture and worldview, demographics and socio-economic status (Miller, 2016; Lewis & Weigert, 1985; Chanley, Rudolph, & Rahn, 2000). Americans generally take a dim view of governmental institutions (Marvel, 2105; Thomas, 1998; Brown, 1977), but express a wide variety of levels and dimensions of trust in their government, which can change throughout their lifetime (Miller, 2016). Marvel (2015) argues that our attitudes about government are linked to our expectations about government services, which stem from a belief that the government will assist when needed (Miller, 2016). This belief is rooted in trust that governmental institutions will act in the citizen's best interest (Miller, 2016) and is a foundation of democratic societies (Freudenburg, 1993; Brown, 1977). Horsley, Liu and Levenshus (2010) found expectations of government services are higher than the private sector because individuals believe the government is bound to "serving the public good" instead of pursuing profits (Veil & Anthony, 2017, p. 142). The implicit nature of these attitudes makes them more "durable" in contrast to malleable market-based attitudes (Marvel, 2015, p. 145). In a focus group study with vulnerable populations, Howard et al. (2017) found certain government safety services are viewed as a unique government responsibility, as no one else would and/or could offer the expertise and authority. Since the government provides services not found in the private sector, poor performance can

heighten feelings of frustration and lower trust (Avery & Lariscy, 2010; Veil & Anthony, 2017). When interviewing grieving disaster survivors, Dutch researchers Jong and Dückers (2018) found "assisting citizens in times of crisis is regarded as government's first obligation" (p. 8).

In their work on climate change adaptation planning, Kettle and Dow (2014) suggest trust in government has two components, "confidence in [the government's] abilities and trust in [its] intentions" (p. 6). This distinction between capacity and intention is found in the disaster research and bolstered by the psychological research on normative and probabilistic expectations (Van Ryzin, 2013; Chamlee-Wright & Storr, 2010; Schneider, 1992). In Van Ryzin's (2013) work on expectations of the public sector, he argues each individual harbors certain expectations of what the government will do (what it is capable of) and what it should do (what it intends to do). Hardin's (2006) rational theory of trust also brackets trust in government into similar categories of competence and confidence (Murphy, Greer & Wu, 2018). Likewise, the government has its own expectations of what it will do and what it should do. For governmental entities, what should be done (as described as Van Ryzin's (2013) normative expectations and Schneider's (1992) bureaucratic norms) is often found in statute, regulations, doctrine, and policy documents (Schneider, 1992; Schneider, 2014). During a disaster, the government may not be able to perform these normal, bureaucratic functions and what should be done differs from what occurs (Schneider, 2008).

Schneider (2018) believes the size of the expectation gap is dependent on the individual's perception of the intent and capacity of the governmental response. If an

individual believes the government has the capacity to respond effectively to a disaster but chooses not to, then the expectation gap is larger. If, on the other hand, the governmental capacity is overwhelmed but a person believes the government is trying with good intentions, the gap is smaller. Chamlee-Wright & Storr (2010) argue that expectations of government disaster assistance are also nuanced with optimism and pessimism, which are co-mingled with beliefs about intent and capacity. The size of the expectation gap depends not only on overall expectations of government actions, but also on personal judgements about the intention of the government as it responds (Chamlee-Wright & Storr, 2010).

Beliefs about the Government and Fairness

Trust in the government is rooted in the belief that the government has both the intention and capacity to do what it says it will do (Miller, 2016; Marvel, 2015; Roch & Poister, 2006). Several scholars found the concepts of trust and government credibility are tied to fairness (Peters, Covello & McMallum, 1997; Cook & Gronke, 2005; Christensen & Lægreid, 2005). For many Americans, assistance provided by the government during disasters should be delivered fairly, although what is considered "fair" can vary widely (Chamlee-Wright & Storr, 2010; Barnett, 1999). Bureaucratic organizations in the U.S. use fairness as a driving force in decision-making, even at the expense of speed and efficiency (Wilson, 1989). For decades, the recovery literature has used distributive justice models when considering both household and community recovery programs (Tafti & Tomlinson, 2018). Fairness is separate from equality and equity, although all three concepts are interwoven in disaster policy and regulations (Moss, 1999; Sylves, 2008). Citizens not only expect the government to perform certain

functions after a disaster, they also expect the government complete them "in an equal, reliable, and fair manner" (Jong & Dückers, 2018, p. 8).

Fairness appears in the scholarly research about disasters, often with references to the social contract (Siddiqi & Canuday, 2018; Stubblefield, 2009; Chamlee-Wright & Storr, 2010, Dynes, 1999). Social contract theory posits that citizens will consent to certain mandated actions (like paying taxes or obeying laws) in exchange for other things they value (like Social Security benefits or a living in a safe environment) (Zack, 2006). In the disaster context, individuals may believe because they have taken certain actions, they are due certain services (Adger *et al.*, 2013). For example, an individual may say that since they paid taxes, they are now due government disaster assistance (Furlong & Scheberle, 1998; Charney *et al.*, 2017). When individuals voice their displeasure with the government after a disaster, they may use words and phrases that evoke a betrayal of this contract. Disaster survivors say they "played by the rules" and "jumped through bureaucratic hoops," and yet were still not given what was due to them (Furlong & Scheberle, 1998; Chamlee-Wright & Storr, 2010).

Beliefs about the Government's Role and Responsibility

In the risk and preparedness literature, expectations are often measured as a component of perceived personal and government responsibility (Blanchard-Boehm, Berry & Showalter, 2001; Lam *et al.*, 2007; McNeill *et al.*, 2013; Lindell & Whitney, 2000; Mulilis & Duval, 1997). An individuals' perception of what the government can and will do during a disaster is based on beliefs about the government's role (McNeill *et al.*, 2013). This perception is rooted in the idea that the government is generally

responsible for public safety and more specifically, for certain hazard-related and disaster functions (Schneider, 2011; McNeill *et al.*, 2013). For example, in their 1977 study, McPherson and Saarinen found that individuals did not believe it was their personal responsibility to mitigate future flood damage, but was instead the government's responsibility to do so. Additional studies support this finding, including Grothmann and Reusswig (2006) and Box *et al.* (2013), suggesting that perceptions of hazard responsibility directly affect preparedness and hazard adjustment behavior.

McNeill et al. (2013) tie the relationship between expectations and perceptions of responsibility to a value/cost benefit theory of decision-making, which suggests an individuals' choice to expend their own resources is "strongly driven by expectations" (p. 1831). If the individual perceives the government as responsible for certain disaster activities, they will not expend the time or money toward that area of responsibility (McNeill et al., 2013, p. 1832). This phenomenon is evident in the preparedness and mitigation literature, where individuals are less likely to take protective actions if they believe the government is responsible for those functions (Lindell & Whitney, 2000; Mulilis & Duval, 1997; McPherson & Saarinen, 1977; Martin, Martin & Kent, 2009; McCaffrey et al., 2011). Other studies show individuals are willing to prepare for natural hazards but believe technological hazards fall under the government's purview (Becker et al., 2014; Dooley, 1992; Tierney, 2000). Hans, Nigg and D'Souza (1994) found, "the perception of governmental responsibility after technological disasters is even higher [than natural hazards]. Government is seen to be liable for monitoring the health consequences of the disaster, assessing soil and water contamination, cleaning up the contamination, assisting business and agriculture, and restoring public and private

property" (p. 12-13).

The government has unique perceived responsibilities during a disaster. As mentioned previously, the government is expected to protect residents, provide expertise and authority, and offer assistance to those in need (Schneider, 2011; Miller, 2016; Howard et al., 2017). Schneider (2011) argues since certain relief functions are outside the scope of personal ability or private sector resources, individuals strongly believe the government is a primary actor during disasters. Disaster events are especially salient for individuals, both for those who directly and vicariously experience damages, because of its high visibility and its symbolic dimensions within the community (Schneider, 2011). Individuals affected by disasters are considered "innocent" and collectively, the community recognizes the need to quickly reduce suffering (unlike other types of suffering, like substance abuse) (Schneider, 2011, p. 17). This collective understanding of government responsibility is amplified by political dynamics and the "absence of private sector solutions" to disaster response and recovery (p. 17). The government is perceived to have a unique responsibility during disasters, since it alone "has the technical capability, the appropriate resources, and the authority to coordinate a range of disaster-related responses" (Schneider, 2011, p. 17).

Expectations of government responsibilities are complicated by the intergovernmental nature of disaster response and recovery (Schneider, 2018). In the U.S., each level of government has distinct, codified disaster responsibilities, which can alter the perception of what the overall government effort will be (Schneider, 2018; Schneider, 2011). Although it is tempting to fault outsized expectations on low-levels of

understanding of federalism, Chamlee-Wright & Storr (2010) found that Hurricane Katrina evacuees were able to provide sophisticated answers to questions about different levels of government. Charney *et al.* (2017) also found individuals were able to differentiate their expectations of local, state and federal roles of government involvement after a disaster, which indicates a certain level of understanding of federalism. Additionally, a Gallup poll after Hurricane Katrina found individuals were able to pin point which level of government they blame for which actions (or non-actions) (Darr, Kate & Moak, 2018; Schneider, 2018).

Parsing out what activities are perceived as the responsibility of government is a focus of disaster-related political science research. Individuals hold government actors and organizations responsible for certain disaster activities and make judgements about government performance (Schneider, 2011; Darr, Kate & Moak, 2018). Numerous studies review polling and voter turnout data to gauge perceived responsibility during a disaster (Arceneaux & Stein, 2006, Achen & Bartels, 2016; Gasper & Reeves, 2011; Healy & Malhotra, 2009, Schneider, 2008). Some researchers believe political ideology plays a role in attribution of government responsibility during disasters (Malhotra and Kuo, 2008; Maestas *et al.*, 2008). Satisfaction and, more often, dissatisfaction with the government's activities are reflected at the voting booth and in opinion polls (Arcaneaux & Stein, 2006). Schneider (2018, 2011) traces these judgements directly to fulfilled or unfulfilled expectations, based on perceived responsibility of governmental actions.

Experiences

Direct Hazard Experiences

Personal experience is a primary component of expectancy development (Janzen et al., 2006, Olson, Roese & Zanna, 1996; Roese & Sherman, 2007). Any interaction with an object or situation adds to an individual's bank of knowledge and influences their beliefs and attitudes (Roese and Sherman, 2007). Haith (1997) said, "experience and memory play a central role in future thinking, whether it is the experience of the individual..., extrapolation from past experiences, or induction based on the experience of others" (p. 34). The social psychology research has shown "that the attitudes of someone who has had actual behavioral experience with an object will be more clear, more confidently held, more accessible, and more predictive of future behavior" (Olson, Roese and Zanna, 1996, p. 214). Alternatively, individuals who do not have direct experience with a phenomenon take longer to develop expectations, rely on beliefs about similar experiences and use inductive reasoning based on others' experiences (Haith, 1997, p. 35-36).

Individuals constantly revise their beliefs based on their experiences, incorporating each new interaction into their belief system (Janzen *et al.*, 2006). Furlong and Scheberle's (1998) study on small business owners after the Northridge earthquake in 1994 found small business owners' multiple experiences with the Federal Emergency Management Agency (FEMA) and the Small Business Association (SBA) led to an emergence of new expectations which evolved over time (Furlong and Scheberle, 1998). Individuals revise their expectations about disaster assistance programs based on their ongoing experiences (Bradley *et al.*, 2008; Chamlee-Wright & Storr, 2010). This is especially important for those individuals who have not experienced a disaster before.

Rivera (2019) emphasizes those survivors without previous disaster experience must create "conceptual frames" for recovery as they encounter each new decision. He said,

Although the decision to apply for disaster assistance is extremely important in the aftermath of any event, it is even more important in places with low frequencies of disaster. In places that experience disasters on a regular basis, individuals develop conceptual frames that elicit various decisions in reference to how to respond to and recover from an event (p. 27).

Personal experience has also been used as a variable in numerous studies exploring perceptions of the public sector. Marvel (2015) argued personal experience with a government service, like the U.S. Post Office, directly affected the way individuals perceived the government as a whole. Darr, Kate and Moak (2018) found "prior experience with government agencies [during disasters] establishes expectations of responsibility that endure years later" (p. 4). Charney *et al.* (2017) said personal experiences were a primary factor in individuals' trust in institutions and influenced the expectations held by the participants (p. 2).

Several disaster studies also use personal experience as an indicator of high/low risk perception (Wachinger *et al.*, 2013; Donahue, Eckel and Wilson, 2014; Fothergill *et al.*, 1999), the likelihood of household adjustment and protective actions (Grothman and Reusswig, 2006; Lindell, 2013), and the likelihood of evacuation (Dash and Gladwin, 2007; Perry, 1979). Risk perception is influenced by a combination of disaster experience, one's level of trust in the government, and an individual's level of self-efficacy (Wachinger *et al.*, 2013). Risk perception can be impacted by an individuals' personal experience with disasters and their familiarity with hazards; if a person

experienced a disaster in the past, they may perceive the risk to be low or high, depending on their losses (Kusenbach, 2017; Norris, Smith & Kaniasty, 1999; DeYoung & Peters, 2016; Palm, 1998). In their work on earthquake preparedness, Becker *et al.* (2017) delineates between hazard experiences (direct disaster experience and indirect hazard experience) and vicarious hazard experiences ("i.e. the disaster experience of others, information in the media"), noting both influence household level decision-making (p. 181).

Vicarious Experiences: Other People's Experiences

Konrad (2006) suggests all expectations held by individuals are influenced by social dynamics. Olson, Roese and Zanna (1996) support this, saying that expectations are swayed by "communication from other people (indirect experience)," including our families, social institutions, and the media (p. 214). Individuals rely on others for cues about the future and integrate external ideas into their own internal cognitive processes (Olson, Roese and Zanna, 1996; Roese and Sherman, 2007). There exists a feedback loop of expectations between the individual and society; individual expectations influence other people's expectations to create collective expectations, which in turn influences individual expectations. Konrad (2006) argues that a continual "expectation exchange" between the individual and the group is "mediated through societal discourse" (p. 431). For Konrad (2006), collective expectations "are part of a generalized and takenfor-granted social repertoire" (p. 431) and significantly impact individual expectations. Through communication behaviors, individuals identify other people's expectations and

adapt their own to align with the collective interpretation of a particular situation (Oh, Eom, & Rao, 2015).

Olson, Roese and Zanna (1996) suggest that a person will incorporate what they hear and see of others' experiences into their own set of expectations. Receiving and processing information about the experiences of others – both friends and strangers – can impact a person's perception of social institutions, like government or the economy (Charney et al., 2016; Boomgaarden et al., 2011). Quarantelli (1991) suggests "disaster victims tend to judge not only their losses but also what they obtain in recovery in relativistic rather than absolute terms" (p. 6). Survivors consider their own losses and assistance they receive based on others' experiences to form (and revise) their expectations (Quarantelli, 1991). This is an important point, due to disaster survivors' expectation for fairness in the government's delivery of disaster assistance. In Rivera's (2016) study of Hurricane Sandy survivors, African American applicants to FEMA's assistance program expected they would not be treated fairly because of what they remembered from media coverage of Hurricane Katrina. Additionally, Rivera's (2016) participants made comparisons of what they received from FEMA to what their neighbors' received in order to make judgements about institutional fairness. Other people's experiences play a role in expectation formation and can affect the individuals' perception of government (Charney et al., 2016; Boomgaarden et al., 2011; Rivera, 2016).

Vicarious Experiences: The Media's Influence

The media influences an individuals' expectations two ways. First, through sharing the experiences of others and second, through framing a situation by coverage and commentary. As mentioned above, individuals use the experiences of others to construct their own expectations (Olson, Roese & Zanna, 1996; Roese & Sherman, 2007). The media is a powerful medium to describe and visually communicate the experiences of other people (Miller, Roberts & LaPoe, 2014). As a part of collective information seeking and sensemaking, individuals interact with the media to gather, interpret, and disseminate the experiences of others (Oh, Eom & Rao, 2015). Traditional media often shares the experiences of other people to their viewers through articles or videos about events and activities (Miller, Roberts & LaPoe, 2014). Social media platforms² are used to interactively share information of other's experiences (Oh, Eom & Rao, 2015).

News reporting by the media is often divided into episodic and thematic stories (Miller, Roberts & LaPoe, 2014, p. 69). Episodic stories are often short pieces that focus on an event or experience. During a disaster, "an episodic news story could focus on a family that did not evacuate and was trapped in their home by the rising waters" (Miller, Roberts & LaPoe, 2014, p. 69). Thematic stories, in contrast, place the event or experience within a larger context of an overarching theme (Miller, Roberts & LaPoe, 2014, p. 70). Episodic stories make up the majority of news reporting during disasters,

-

² Social media is recognized as substantially different from traditional media, with the ability to deliver messages and provide information beyond the boundaries of a news organization (Sutton *et al.*, 2008; Vos *et al.*, 2018; Liu *et al.*, 2016). The majority of my participants referenced traditional media in their interview answers, so I focused this section on traditional news framing and reporting.

especially in local news, and often emphasize a particular experience of an individual or group (Miller, Roberts & LaPoe, 2014, p. 70). Individuals glean information about other people's experiences from these episodic news stories and incorporate them into their own perceptions of the disaster event. Both episodic and thematic stories are framed by reporters through "...organizing ideas [which] allows the media to shape the way it tells the story [and] the way a story is perceived and interpreted" (Miller, Roberts & LaPoe, 2014, p. 68, 70).

The literature on media framing is vast and a full examination is beyond the scope of this literature review. However, several articles mention the effect of media framing on expectations, either in general or during a disaster event. Olson, Roese and Zanna (1996) refer to mass media as a direct influence on individuals' expectation development (p. 214). Schneider (2014) argues that the media plays a critical role in sensemaking and affects emergent expectations of disaster survivors (p. 78). She further states that expectations are impacted by the media's negative framing of government response activities, which often focuses on "striking images" and "vivid reports" of government failures (p. 78-79). In their study on perceptions about the Avian Flu, Nerlich and Halliday (2007) argued the media holds the power to communicate intense images about an ambiguous future (p. 48). Additionally, Kousky and Sabman (2012) argued the media's reporting of large amounts of disaster assistance provided to communities increases individual expectations of what they will personally receive from the government.

The media often uses an "attribution of responsibility" frame in disaster reporting, which can negatively shape individual's perception of government actors through implicit and explicit commentary (Miller, Roberts & LaPoe, 2014). The media's role in blame and outrage after a disaster has been the subject of numerous studies (Malhotra & Kuo, 2008; Schneider & Jacoby, 2003; Arceneaux & Stein, 2006; Fischer & Harr, 1994; Maestas et al., 2008). When the media reports government actions not aligned with the expectations of what the government will do and should do during a disaster, individuals feel betrayed and look to assign blame (Schneider, 2011). Researchers found outrage can erupt from this process, when individuals and government officials point to one another as the reason why the expectations are not met (Schneider, 2008; Schneider, 1992). Blame is usually a manifestation of a lack of – perceived or real – trust, credibility and fairness (Malhotra & Kuo, 2008; Gephart, 1993; Ewart & McLean, 2015; Anagondahalli & Turner, 2012). The media is not solely responsible for this phenomenon, but it certainly plays a role in expectation development and revision (Nerlich & Halliday, 2007).

Recovery and the Disaster Assistance Experience

Although much of the future-oriented disaster research is found within the risk and preparedness literature, this project asked participants what they expect to occur after a disaster, which situates the project within the recovery literature. This section gives a broad overview of the elements of recovery, the various types of disaster assistance, and survivors' experiences of applying for government aid. The next chapter provides an overview of U.S. government disaster assistance programs from a policy perspective.

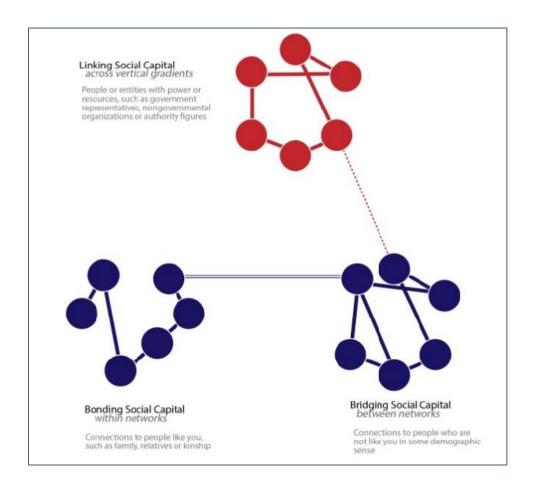
Recovery

Mileti (1999) describes recovery as "putting a disaster-stricken community back together" with recognition of complex, dynamic, and non-linear dimensions (p. 229). Recovery is generally conceptualized as a series of stages households and communities experience after a disaster occurs (Phillips, 2009). Much of the recovery literature is focused at the community level, with emphasis on the interaction of political, economic, and social characteristics (Berke, Kartez & Wenger, 1993; Bolin, 1986; Oliver-Smith, 1991; Smith & Wenger, 2007). At the household level, the recovery literature often centers around the social elements of support networks, bondedness and transitioning through stages of change (Grube et al., 2018; Nigg, 1995; Phillips, 2009). Bolin (1985) found families go through stages of recovery, punctuated by various changes in housing, financial stability, and household routines (Phillips, 2009, p. 23). Central to much of the household recovery research is that of housing; Quarantelli (1982) provided a typology of post-disaster shelter and housing as emergency sheltering, temporary sheltering, temporary housing, and permanent housing. These types of post-disaster housing are helpful in conceptualizing the phases a household may traverse through recovery, although not in a linear fashion. A household may experience one or many of these types of housing multiple times before finding a stable, permanent home (Sutley & Hamideh, 2020; Phillips, 2009). Nigg (1995) argues household recovery is a social process and is much more complex than simply finding a new place to live or repairing a damaged home. Both household and community recovery has been studied from a variety of viewpoints, including a sociopolitical-ecology perspective, a vulnerability perspective, and an emergent norm perspective (Peacock & Ragsdale, 1997; Wisner, 2001; Bolin &

Stanford, 1999; Enarson & Marrow, 1998; Dynes & Quarantelli, 1968; Neal & Phillips, 1995; Phillips, 2009).

The social bonds that impact disaster recovery have been studied extensively using a social capital framework (Aldrich & Meyer, 2014; Elliott, Haney & Sams-Abiodun, 2010; Ritchie & Gill, 2007; Hurlbert, Haines & Beggs, 2000; Kaniasty & Norris, 1995). Social capital is conceptualized as "features of social organizations, such as networks, norms and trust that facilitate action and cooperation for mutual benefit (Aldrich & Meyer, 2014, p. 4; Putnam, 2000). Disaster survivors leverage social capital to identify and access resources "including information, aid, financial resources, childcare, and emotional and psychological support" (Aldrich & Meyer, 2014, p. 3; Aldrich, 2012). Generally, scholars use three categories of social capital to differentiate processes and outcomes (Aldrich & Meyer, 2014; Aldrich, 2012; Szreter & Woolcock, 2004). Bonding social capital is the tight-knit bonds of close family and friends. Bridging social capital describes bonds based on looser connections across social groups, like church membership or special interest clubs. Linking social capital "connects regular citizens with those in power" through access to formal processes and organizations (Aldrich & Meyer, 2014, p. 6).

Figure 3: Types of Social Capital by Aldrich (2012)



Researchers found that socio-economic factors may play a role in the types of social capital disaster survivors use to get resources; individuals on the lower rungs of the socio-economic ladder use bridging social capital more, whereas individuals on the higher rungs rely more on linking social capital (Smiley, Howell & Elliott, 2018; Aldrich, 2012; Elliott, Haney & Sams-Abiodun, 2010; Hawkins & Maurer, 2010). Across all group demographics, bonding social capital is an important element of psychological, physical, and economic recovery (Aldrich, 2012; Hawkins & Maurer, 2010; Adler & Kwon, 2002; McPherson, Smith-Lovin, & Cook, 2001; Chamlee-Wright & Storr, 2011).

Disaster Assistance

During recovery, individuals and households may request various types of disaster assistance to help with financial or physical needs. Assistance programs may require a formal application process requiring a demonstration of need, or may be informal and distributed to anyone who asks (Grube et al., 2018). Most government disaster assistance falls in the former category, although the government may fund the informal assistance provided in the latter category (Grube et al., 2018, Phillips, 2009). Any level of government or government organization may offer some type disaster assistance, depending on funding and the organizational structures to distribute the aid (Smith & Wenger, 2007; Phillips, 2009). Nigg (1995) argued that government assistance can help household recovery, but often strong social bonds, a recovering local economy, and relief from non-profit organizations are key elements to successful recovery. Quarantelli (1999) found although government assistance is helpful, it is often dwarfed by the amount of assistance a person receives from friends and family. Disaster assistance provided the government is just one part of household-level recovery (Nigg, 1995; Quarantelli, 1999; Phillips, 2009).

Government disaster assistance in the U.S. is based on a limited-intervention model of recovery (Phillips, 2009; Comerio, 1998) to augment the individuals' recovery, but not fund it entirely (Phillips, 2009, p. 197). This approach mirrors the model of U.S. disaster management, with each level of government responsible for its own emergencies and only requesting assistance once its resources are exhausted (Sylves, 2008). The assistance provided (from a state to a municipality or from the federal government to a state) is meant to supplement the ongoing relief work, but not to cover all expenses (Sylves, 2008). Many government disaster assistance programs assume households will

receive insurance pay-outs and non-profit relief, as well as draw on the resources of preimpact social networks and financial assets (Phillips, 2009; Grube *et al.*, 2018). The limited intervention model is reflected in statutes, regulations, and policies that govern the U.S. disaster management system (Phillips, 2009, p. 207; Sylves, 2008).

The Disaster Assistance Experience

The experience of applying for government disaster assistance is less studied than the informal assistance households receive during recovery (Grube et al., 2017; Rivera, 2016; Beggs et al., 1996; Hooks and Miller, 2006). However, research about assistance – both formal and informal – show disparities in access and distribution. Dynes and Quarantelli (1989) argue a primary characteristic of disaster recovery is the "issue of equity and inattention" (p. 3). Individuals and households proceed through recovery at different speeds, depending on their socioeconomic status, access to power, and the availability of resources (Grube et al., 2017; Nigg, 1995; Phillips, 2009). The distribution of disaster assistance is influenced by these factors as well; research shows households who fall on the lower rungs of the socioeconomic ladder "find it difficult to get assistance after disasters" (Grube et al., 2017, p. 44). Individuals who struggle with poverty in particular encounter situational barriers that prevent access to information about assistance programs, difficulties in applying, and challenges in completing the application process (Fong, Wright & Wimer, 2016; Kousky, 2013; Fothergill, 2003; Fothergill and Peek, 2004). Language barriers are also a challenge and can be a complicating factor for receiving disaster assistance. Phillips (1998) found Latino residents were less likely to receive government aid after the Loma Prieta earthquake and

Fothergill *et al.* (1999) suggests the difficulty of receiving government assistance is compounded when the applicant does not speak English as a first language. Even "middle-class" disaster survivors face difficulties with access to government disaster assistance; Fothergill (2002) reported middle-income women found the government assistance programs confusing and byzantine, often accompanied by stigma and shame.

Frustrations with the process applying for and receiving government disaster assistance permeate the recovery literature. Even Prince (1920) mentioned governmentorganized relief programs after the Halifax explosion were mired in "red tape" and bureaucratic hurdles, which frustrated survivors and officials alike. Disaster assistance programs studied during Hurricane Katrina showed individuals were unsatisfied by the application process, the various qualification requirements, and the lack of transparency (Bier, 2006; Kamal, 2012; Finch, Emrich & Cutter, (2010); Levine, Esnard & Sapat, 2007). Reid's (2013) study on disaster rental assistance after Katrina called out FEMA's bureaucracy as classist, focused on weeding out "cheats" and forcing survivors prove they deserved the aid. Reinke and Eldridge (2020) characterized FEMA's assistance during Hurricane Florence in South Carolina as "bureaucratic violence" (p. 107). Rivera (2016) investigated the role of FEMA's home inspectors as "street level bureaucrats" who held substantial power in verifying losses which, in many cases, left the survivors confused and angry. A study of case-workers assigned to help Hurricane Katrina survivors evacuated to Denver found overwhelming paperwork and bureaucratic "hoops" were a significant factor in survivors' ability to recover (Sterett, 2015). After Hurricane Sandy, researchers found individuals were continually frustrated with the Build it Back program and the FEMA application process (Petkova et al., 2018; Rivera, 2016).

Schneider (2011, 2018) notes that these frustrations with government programs are a manifestation of the gap between what individuals expected the government to do and what actually occurred during the recovery process.

What's Missing?

Expectations are a complex cognitive process individuals use to anticipate the future and make decisions. Future-thinking is a part of the risk, mitigation, and preparedness literature as researchers explore how intentions translate into behavior.

Expectations are influenced by both beliefs and experiences. Beliefs about government, especially about the government's intent and capacity to assist disaster survivors, play a role in what a person expects the government to do during a disaster. Individuals generally believe the government has a pivotal role in disaster response and recovery, and their perceptions of responsibility influences personal behavior. While direct hazard experience is important for expectation formation, an individuals' expectations are also influenced by media coverage of disasters and the experiences of others. Individuals who experience a disaster may be surprised by the process and distribution of government disaster assistance. Researchers have found government disaster assistance to be bureaucratic and frustrating for survivors, which may be incongruent with pre-disaster beliefs of government and disaster relief.

Although previous studies show expectations play a role in the individuals' perception of government disaster assistance, most of the research only tangentially explores it. A handful of studies directly investigate individuals' expectations of government during disasters, albeit from different viewpoints. Chamlee-Wright and Storr

(2010) and Furlong and Scheberle (1998) come the closest to this research project, as they both used qualitative interviews to ask survivors about their expectations of government disaster assistance programs (relocation services and FEMA/SBA assistance, respectively). However, both studies were conducted after the disaster event. Likewise, Jong and Dückers (2018) asked bereaved individuals what kind of psychosocial support they expected of government actors after a disaster. Schneider (1998, 2011, 2018) has spent the most time studying expectations of government during disasters, but her orientation is public policy from a government-centric viewpoint. Additionally, Schneider's (2011, 1998) work is focused on emergent expectations after a disaster occurred. These post-disaster studies use retrospective expectations as their starting point, wherein the participants are asked to recall from memory what they expected before the disaster. These retrospective expectations are invariably influenced by the events after the disaster and often reflect the individual's level of satisfaction with disaster assistance, rather than whether the expectation was met or unmet.

Certain studies ask residents about their expectations before a disaster, but focus on hospital preparedness (Charney *et al.*, 2001) or critical infrastructure (Peterson *et al.*, 2020). Howard *et al.* (2017) used focus groups to ask vulnerable populations about their expectations of public safety information from the government during impending bush fires. Other studies use expectations as either a causal variable (Blanchard-Boehm, Berry & Showalter, 2001; Lam *et al.*, 2007; McNeill *et al.*, 2013; Lindell & Whitney, 2000; Mulilis & Duval, 1997) or a possible explanation for the study's results (Darr, Cate & Moak, 2018; Bradley & Forgue, 2008).

However, the body of knowledge is missing a deeper, more nuanced exploration of what expectations individuals hold of government disaster assistance before a disaster occurs. Since expectations are a complex bundle of beliefs, perceptions, and experiences, it is also imperative we explore how these expectations are formed. If Schneider (1992, 2011) is correct about the existence of an "expectation gap" between what individuals expect and what actually occurs, it is essential we —both the academic and practitioner communities — understand those differences.

CHAPTER III

U.S. DISASTER ASSISTANCE POLICY

In order to explore how expectations of government disaster assistance compare with what the government actually provides to disaster survivors, it is necessary to review current U.S. policy. This chapter will first provide an overview of the U.S. disaster response and recovery system, and then an overview of federal and state government assistance programs. While a number of government disaster assistance programs exist for businesses, non-profit organizations, and state, local, tribal and territorial governments, this chapter will focus on those programs that provide assistance directly to individuals or households.

U.S. Disaster Response & Recovery

Prior to the mid-20th century, disaster assistance for individuals was primarily provided by non-profit organizations, organized through local government-sanctioned boards or committees (Rubin, 2012; Dauber, 2005). The Disaster Relief Act of 1950 authorized federal funding to states and communities for infrastructure programs but was not structured to help the individual (Rubin, 2012; Sylves, 2008).

Other federal government programs, like the Small Business Association (SBA) and the U.S. Department of Agriculture (USDA), provided loans or grants to certain individuals, but broader relief from the federal government for disaster survivors was not codified until the Robert T. Stafford Act of 1988 (Rubin, 2012; Roberts, 2013). The Stafford Act authorized the Federal Emergency Management Agency's (FEMA) Individual Assistance (IA) program, which is now a primary vehicle of federal government relief for disaster-affected households (Phillips, 2009).

While FEMA is authorized to deliver the IA program, the availability of assistance is dependent on the federal disaster declaration process (McCarthy, 2014). After a disaster³, a governor may request assistance from the federal government for a variety of needs under three distinct programs: Individual Assistance (financial assistance for household-level losses), Public Assistance (for debris removal, emergency protective measures, and infrastructure repair), and the Hazard Mitigation Grant Program (for mitigation projects to reduce future damages) (McCarthy, 2014). Individual Assistance (IA) is primarily provided directly to households; Public Assistance (PA) and Hazard Mitigation (HMGP) are provided to the state, tribe, or territory to disperse to their jurisdictions. When requesting a disaster declaration, a governor must describe in detail how the disaster has exceeded the state government's capacity and justify the need for federal assistance (McCarthy, 2014). Additionally, a governor must request (and justify) each program for each affected county (or equivalent local jurisdiction). This request is

-

³ Before a disaster, a governor can request an emergency declaration to offset the cost of emergency protective measures to prepare for an impending hazard. A governor can also request a fire management declaration if appropriate. Direct government assistance to individuals is not included in emergency or firemanagement declarations (McCarthy, 2014).

verified through a preliminary damage assessment conducted by federal, state, and local officials (McCarthy, 2014). The governor's request is routed through FEMA offices and the White House and, if a declaration is granted, FEMA begins its work with the state to deliver the authorized programs. The approved disaster declaration designates which program (IA, PA, and/or HMGP) is authorized for which county and, for those disaster survivors who reside in an IA-approved county, they can begin the process of applying for FEMA assistance (McCarthy, 2014).

It is important to note that not all disaster survivors in the U.S. are eligible to receive IA through the disaster declaration process. In some cases, individuals live just outside the declared counties and, while they suffered losses, their county was not included in the disaster declaration (McCarthy, 2014). In other cases, a governor may request IA for a certain county, but the request is denied. Disaster declarations for PA are far more numerous than declarations for IA. Vroman (2019) points out "in 2016, only 18 of the 46 major disaster declarations authorized IA payments...In contrast, PA was available following all 46 major disasters" (p. 3). The number of declarations for both IA and PA, as well as the amount of assistance provided through each program, varies from year to year depending on hazard activity. In 2017, a very active disaster year, more than 4.7 million individuals applied for IA (Reese, 2018) and more than \$2.5B was provided by FEMA to help survivors of Hurricanes Harvey, Irma, and Maria (Walls & Cortez, 2018).

FEMA's Individual Assistance Program

Once a disaster declaration for IA is granted for a state and its designated counties, FEMA can activate any of the six sub-programs under the IA program, depending on the state's request (Kreiser, Mullins & Nagel, 2018). FEMA can distribute funds for mass care and sheltering, crisis counseling, disaster unemployment assistance, disaster legal services, and disaster case management (Webster, 2019). These funds are provided to the state, which in turn funds organizations and/or programs to benefit individuals and households (Kreiser, Mullins & Nagel, 2018). The primary and by far the largest IA program is the Individuals and Households Program (IHP), which provides financial assistance via grants to disaster-affected individuals and households ⁴(Kreiser, Mullins & Nagel, 2018).

The IHP funding is dispersed under two categories: Housing Assistance and Other Needs Assistance. Housing Assistance provides money for home repair and replacement, temporary lodging, or rental assistance (Kreiser, Mullins & Nagel, 2018). Other Needs Assistance (ONA) can offer financial assistance for a variety of needs like funeral, medical, dental, childcare and other miscellaneous expenses (Kreiser, Mullins & Nagel, 2018). FEMA pays 100% of the costs of Housing Assistance, but usually requires a cost-share agreement with the state to fund ONA (Webster, 2019). The maximum

-

⁴ FEMA PA dollars are also used to help individuals directly, even though the program is functionally different. For example, PA is used to secure temporary housing, either through temporary housing units (similar to mobile homes) or through a direct leasing program with a hotel or apartment building. In these cases, FEMA pays for the housing directly and the survivor does not participate in the financial transaction. This assistance does not count against the maximum amount of IHP dollars an eligible applicant could receive (McCarthy, 2010).

amount of IHP assistance to a household is \$35,500⁵ although the average amount disaster survivor receives is usually much lower. FEMA states in its IHP publications that Housing Assistance is meant to make the disaster-damaged dwelling habitable, not to "return the dwelling to its pre-disaster condition" (FEMA, 2020; FEMA, 2005, p.5). This is evident by the average amounts of assistance provided; for Hurricane Harvey, the average amount of IHP assistance was \$4,300 (Vinik, 2018); for Hurricane Sandy, it was \$8,000 and for Hurricane Katrina, the average was \$7,100 (Calder, 2016). Homeowners receive the bulk of the IHP dollars since the assistance for repairs is paid to the person who owns the dwelling (Walls & Cortez, 2018).

In order to qualify for IHP assistance, disaster survivors must first apply by phone or via the internet typically within 60 days of the date of the disaster declaration (FEMA, 2019). Survivors are asked questions about their losses, their current living situation, their income and insurance coverage. Once an application is received, an inspector visits the property to verify losses (if the home is inaccessible, other means of verification are used) (FEMA, 2019). Applicants must show proof of ownership or a rental agreement, as well as government-issued identification at the time of the inspection. The inspector then submits a damage report and, along with information about the applicants' insurance coverage, FEMA makes a determination of eligibility and award amount (FEMA, 2019). Housing repair or replacement assistance and/or ONA funds are directly deposited into the survivor's bank account via a one-time payment. For rental assistance, a certain amount is provided initially to the disaster survivor but they are required to re-certify

⁻

⁵ The maximum amount of IHP "is adjusted annually to reflect changes in the Consumer Price Index for All Urban Consumers published by the Department of Labor" (Webster, 2019, p. 5).

their rental needs every 60 days (FEMA, 2019). Individuals have the right to appeal a decision made by FEMA within 60 days (FEMA, 2019).

The Small Business Administration Disaster Loans

FEMA and the SBA work closely during disasters and share information, resources, and database systems (Lindsay & Webster, 2019). The SBA automatically sends a disaster loan⁶ application to FEMA applicants who report their income as above the poverty line. SBA's long-term, low-interest disaster loans are available to homeowners, renters, and businesses of all sizes (Lindsay & Webster, 2019). SBA disaster loans for a household are usually used to finance home repair and replacement costs, as well as personal property losses. Disaster loans for businesses are used to finance repairs to physical assets, replace inventory, and offset the economic injury caused by the disaster. SBA disaster loans for homeowners to repair or replace their home can be as much as \$200,000; loans for personal property loss are provided up to \$40,000 (Reigal, 2020; Lindsay & Webster, 2019). SBA applicants usually have six months to apply (Lindsay & Webster, 2019). Disaster survivors are often confused when they receive an SBA loan application or uneasy taking on debt, so SBA loan totals are relatively low compared to the amount of IHP distributed each year (GAO, 2020; Chamlee-Wright & Storr, 2010). For the Hurricanes Harvey, Irma and Maria, the SBA distributed more than \$6.8B through more than 110,000 loans to homeowners, renters, and businesses (Goldstein, 2019).

-

⁶ The SBA disaster loan program is automatically activated once IA is authorized within a disaster declaration. The SBA can also make disaster loans available through its own declaration process (Lindsay & Webster, 2019).

The SBA approves roughly 42% of disaster loan applications (Goldstein, 2019). If a disaster survivor is turned down for an SBA loan, the applicant is referred back to FEMA IHP (Lindsay & Webster, 2019). FEMA reviews the application again and may offer supplemental ONA in addition to the ONA previously mentioned. This SBA-dependent ONA assistance can assist with replacing personal property, moving and transportation expenses, and a group flood insurance policy for three years (Lindsay & Webster, 2019).

The Department of Housing & Urban Development CDBG-DR

After certain disasters, the Department of Housing and Urban Development (HUD) provides disaster funding to states and local jurisdictions through Community Development Block Grant – Disaster Recovery (CDBG-DR) (Boyd, 2011). These funds are made available only through special congressional appropriation and are usually reserved for larger, catastrophic events with a special emphasis on the repair and rebuilding of low income housing (Boyd, 2011). CDBG-DRs are meant to supplement (not duplicate) other federal assistance and can be used to repair homes, rebuild infrastructure, and revitalize the local economy (Boyd, 2011). The CDBG-DR funds are allocated to a state, which either distributes the funds directly or provides the funds to sub-grantees for distribution. In certain cases, states will use CDBG-DR funds to build and implement an assistance program for disaster-affected individuals and households (Boyd, 2011). For example, the State of Texas used CDBG-DR funds to create a Homeowner Assistance Program after Hurricane Harvey (GLO, 2020). After Hurricane Sandy, New York City implemented its Build it Back program, and New Jersey created

homeowner and renter assistance programs using CDBG-DR monies (Petkova *et al.*, 2018; Kousky & Shabman, 2013).

Because of the way CDBG-DR funds are allocated (through the appropriation process) and dispersed (through newly created programs), the assistance may take months to years before it reaches the hands of disaster survivors (Boyd, 2011). Additionally, in many cases, the disaster survivors' eligibility for state or local assistance programs is tied to their FEMA application number and/or documentation of FEMA's determination of eligibility (Martin, 2018). Usually this is done to ensure no duplication of benefits (which is expressly forbidden in statute) but may require the survivor to apply to several programs and retain numerous records (Martin & Teles, 2018).

The National Flood Insurance Program

Although the National Flood Insurance Program (NFIP) differs from the previously mentioned programs, flood insurance can be a significant part of household recovery (Horn & Webel, 2019). The NFIP, administered by FEMA, subsidizes flood insurance policies so homeowners living in participating communities can buy affordable coverage (Horn & Webel, 2019). Only 30% of all homes in the U.S. in high-risk flood area have flood insurance and roughly 4% of all homes in the U.S. are covered (Fields, 2020). Flood insurance is available to both homeowners and renters, and usually must be purchased at least 30 days before a flood event occurs (Horn & Webel, 2019). Almost all homeowner's insurance policies exclude flooding from their coverage and flood insurance must be purchased separately. For those individuals purchasing a home within a high-risk flood area, a federally backed mortgage requires the purchase and

maintenance of a flood insurance policy (Horn & Webel, 2019). For disaster survivors who have received FEMA or SBA assistance in the past and who live in a high-risk flood area, they must buy and maintain flood insurance to be eligible for future federal disaster assistance (Vinik, 2018; FEMA, 2017).

As with any type of insurance, flood insurance policyholders who experience losses must file a claim with the insurance company, meet with an adjuster, and provide various verification and documentation (Horn & Webel, 2019). For many disaster survivors, the flood insurance claims process is done at the same time as filing other insurance claims (i.e. for roof damage or car repair) and applying for government disaster assistance (Floodsmart.gov, 2020). FEMA and SBA both require insurance information (either homeowners or flood insurance, or both) from applicants before awarding assistance (Lindsay & Webster, 2019). If a survivor has inadequate insurance, FEMA and SBA can assist; however, the assistance process will stop if the applicant does not provide the requested insurance information (FEMA, 2019; Vinik, 2018). FEMA strongly encourages all residents, even those living outside a high-risk flood area, to buy flood insurance. In 2017, the average amount of FEMA assistance to a household was \$5,000 whereas the average paid flood insurance claim was more than \$91,000 (Floodsmart.gov, 2020; Insurance Information Institute, 2019).

Other Government Disaster Assistance Programs

In some cases, individuals may receive disaster assistance from their local government, although this is relatively rare as local governments often rely on state or federal dollars for disaster recovery (Phillips, 2009). Larger municipalities, like New

York City or Chicago, may distribute funds through their non-disaster social service programs. Often, local jurisdictions work closely with non-profit organizations through already-established processes to provide assistance to residents in need (Phillips, 2009). In some cases, local governments facilitate and manage donations from non-profit and philanthropic organizations (Phillips, 2009).

The U.S. system of disaster assistance to individuals and households is situated within the limited intervention model described in chapter one (Comerio, 1998; Phillips, 2009). The current system assumes the majority of survivors will have adequate insurance coverage and any assistance from the government will be supplementary, not primary (Comerio, 1998; Phillips, 2009). Most federal funds for households are provided through FEMA, SBA, and HUD (Lindsay & Webster, 2019). All programs require an application and verification process and are delivered within a set of rules and regulations under proscribed deadlines. Each of these programs have timelines; generally, FEMA is offered first (although FEMA emphasizes the survivor should file an insurance claim as a first step), SBA is often offered concurrently with FEMA, and then HUD funding through CDBG-DR is offered later depending on the time of congressional appropriation. The timelines for these programs – with the attendant requirements and deadlines – overlap with each other, which also overlap with the survivors' insurance claims process, the community's permitting process, and a host of other processes a household must navigate during the recovery phase (Phillips, 2009).

CHAPTER IV

METHODOLOGY

In designing this research project, I employed a qualitative research design using a phenomenological approach in order to explore my research questions:

Central Question: What expectations do individuals *who have never received* government disaster assistance hold of government disaster assistance?

Sub-Research Question 1: How do individuals form these expectations? Or, on what basis do they derive their expectations?

Sub-Research Question 2: How do individuals' expectations compare to what government actually provides disaster survivors?

This chapter provides the philosophical reasoning for my research methods, ethical considerations, procedures for data collection and analysis, and steps I took to ensure quality and trustworthiness of my findings.

Research Design

Rationale for a Qualitative Approach

Qualitative methods were a natural choice to explore the research questions, since I wanted to dig deeper into individuals' expectations of government disaster assistance. I was especially interested in exploring expectations within the context of the individuals' personal beliefs, experiences, and social life (Creswell, 2003; Punch, 2005).

Expectations are deeply embedded within the human experience of cognition; individuals use a vast collection of personal and social tools to create meaning out of the world around them (Olson, Roese, and Zanna, 1996; Roese and Sherman, 2007; Janzen *et al.*, 2006; Schneider, 2011). A participant-centered, qualitative approach was necessary to find rich, contextual clues about how and why individuals hold certain expectations of government disaster assistance (Creswell, 2003; Denzin & Lincoln, 2000, Howard *et al.*, 2017).

Madill *et al.* (2000) said it is essential for the researcher to explain their epistemological posture when describing their research design (p.2). The epistemological foundations of any research project can be found on a continuum, with radical constructivism on one end and a realist perspective on the other (Madill *et al.*, 2000). As a middle ground, the contextual constructivist position recognizes that individuals construct their own meanings of reality but allows the researcher to interpret those meanings to gain insight (Madill *et al.*, 2000). How individuals interpret the world is unique to each person and is relative to time and context (Larkin *et al.*, 2006). For the contextualist, "the relationship between accounts and the situations in which they were produced" is an essential clue to the unique, inner world of the individual (Madill *et al.*, 2000, p. 10). The researcher integrates this uniqueness and relativity into their interpretations to extract meaning (Larkin *et al.*, 2006). In designing this project, I

assumed a contextual constructivist posture to uphold the centrality of the individuals' personal meaning-making while using a flexible, yet structured approach to interpret the findings. I recognize phenomenology has a colorful ontological and epistemological history, having been considered both (or either) within the positivism/post-positivism and constructivism paradigms (Racher & Robinson, 2003). Since Interpretive Phenomenological Analysis (IPA) draws more from Heidegger (and his constructivism/relativism) than Husserl (and his positivism) (Racher & Robinson, 2003), I feel comfortable situating myself within the contextual constructivist position under the large umbrella of phenomenological paradigms.

Due to my contextual constructivist posture, I wanted to hear directly from individuals about their lived experiences (Creswell, 2003; Punch, 2005). Thus far, the majority of studies about public sector expectations have used quantitative methods, such as Likert-scale surveys (Peterson *et al.*, 2018; Lam *et al.*, 2007; Charney *et al.*, 2016; Darr, Kate & Moak, 2018; McNeill *et al.* 2013) and experiments (Van Ryzin, 2013; Filtenborg, Gaardboe, & Sigsgaard-Rasmussen, 2017). While these studies are valuable, they are rooted in preconceived ideas of individuals' expectations and gloss over the unique perspectives of the individual. Interviewing participants, especially using semi-structured interviews, offers flexibility to incorporate new perceptions and previously unexamined ideas (Gorden, 1998; Punch, 2005; Phillips, 1997; Weiss, 1994). Because expectations are rooted in experiences, beliefs and feelings, it was important to hear from individuals in their own words (Gorden, 1998, p. 15). Van Manen (1990) said our "experiences are soaked through with language" (p. 38) and the power of the participant's words were central to this study.

In qualitative work, the researcher is the primary instrument (Guba and Lincoln, 1981; Merriam, 2002). The researcher's epistemological posture contributes both to the design of the study and data collection, as well as how the data is interpreted and the findings are presented (Mantzoukas, 2004). Recognizing my own role in this process was a key component of this study and throughout this chapter, I include reflexive thoughts and a positionality statement (see Appendix A) that influenced my decisions throughout the research process. Overall, I recognized reality for both the participants and myself is largely socially constructed, and I can gain understanding through careful, considered interpretation. These interpretations will be subjective but provide insight into the complexities of disaster expectations.

Interpretive Phenomenological Analysis

This study used Interpretive Phenomenological Analysis (IPA) to collect and analyze the data through vignette-based, semi-structured interviews. IPA is an outgrowth of the philosophy of phenomenology that provides a flexible structure to interpret data, centered on how individuals make sense of their experiences (Smith, 2011). The aim of IPA is to "explore in detail the participant's view...and get close to the participant's world" (Smith, Jarman & Osborn, 1987, p. 218-219). IPA researchers want to get an "insider's perspective" (Conrad, 1987; Smith, Jarman & Osborn, 1987, p. 218) of how participants experience a phenomenon and then interpret the meanings participants ascribed to the experience in a particular context (Larkin *et al.*, 2006). This section will use Smith's (2011) three foundational elements of IPA (phenomenology, hermeneutics and ideography) to explain why IPA was appropriate for this study and provide a rationale for the methodological procedures.

Phenomenology

Phenomenological research is rooted in the existentialist philosophies of Husserl, Heidegger, Sartre, and Merleau-Ponty, and focuses on the "lived experiences of the individual" (Groenwald, 2004, p. 44; Vagle, 2014). Phenomenology allows the researcher to delve into the experiences of participants to understand their feelings and beliefs, "emphasizing the importance of personal perspective and interpretation" (Lester, 1999, p. 1). A guiding principle of phenomenological research is individuals' experiences must be described by the researcher as authentically as possible, with a concerted effort to disregard norms and assumptions (Lester, 1999; Groenwald, 2004; Moustakas, 1994). In disaster studies, phenomenology has been used to explore experiences of firefighters and emergency medical personnel (De Soir *et al.*, 2012; Hearns & Deeny, 2007), as well as the experiences of volunteers (Clukey, 2010; Brooks *et al.*, 2015) and disaster survivors (Hrostowski, & Rehner, 2012; Keene, 1998; Raholm *et al.*, 2008).

Phenomenological research design is especially suited for work on expectations, since expectancy is a complex part of human consciousness. Consciousness for the phenomenologist is the core of the experience instead of the "reality" of the external world (Moustakas, 1994; Lester, 1999). Our understanding of the world and our place in it is rooted in experiences as we continuously, unconsciously interpret the world around us (Smith, 2011). Ricoeur (1992) said our lives are filled with the stories we tell ourselves to make sense of and reconcile our past, present and future selves. In this way, consciousness plays a central role in future thinking and expectancy. Heideggar's concept of *dasein* is a "co-realization" of the past, present and future, as "the future is not

later than having been, and having-been is not earlier than the present" (Heideggar, 1968, p. 401; Wheeler, 2011; Finlay 2011). Phenomenological researchers recognize the temporal element of our experiences, which are inherently tangled up in perceptions of the past, present and future (De Boer, van der Hulst & Slatman, 2015, p. 412).

While many phenomenological studies explore individuals' past experiences, this study explored participant's past experiences in relation to their anticipation of future events. Participants were asked questions based on fictional vignettes to facilitate future thinking; when answering these questions, participants reached back to their experiences to explain their beliefs about the future. Other researchers have similarly used phenomenology to explore expectations; Davis (2005) and Vickers and Parris (2007) used phenomenology to examine patient and nurses' expectations of certain medical procedures, and a number of other studies explore various experiences within the medical community (examples: Zadvinskis *et al.*, 2014, Gibbins & Thomson, 2001; Moyle, 2003; Snelgrove, 2014). The fields of education (Siler & Kleiner, 2001), psychology and social work (Hutt, Scott & King, 1983; Humbert *et al.*, 2014), and business and marketing (Thomas & Menon, 2007; Cope, 2005) all claim studies about individual expectations using a phenomenological approach.

The other element of this study that made phenomenology uniquely suited was the unfamiliarity of a future disaster event. I wanted to hear from individuals who had not been personally and significantly affected by a disaster in order to gain their "predisaster" perspectives of government and disaster assistance. For most of the participants, experiencing a disaster was viewed as an improbable event. This meant I had to ask the participants to *imagine* themselves in a fictional scenario and provide

answers based on what they believed they would do, feel, and believe. This imagining aligns with the concept of phenomenology's "intentionality" and Husserl's ideas of intentional content (Spear, 2011). Here, intentionality does not mean to describe the participants' intentions toward future action. Instead, "the intentional act...is the particular kind of mental event that it is, whether this be perceiving, believing, evaluating, remembering, or something else" (Spear, 2011, n.p.). Husserl had three types of intentionality, intentional act (above), intentional object, and intentional content, to describe various mental processes. While intentional objects are more tangible and concrete for the individual, intentional content can be imagined, theoretical, or about "non-existent objects" (Spear, 2011, n.p.). In Spear's (2011) work on Husserl's intentional content, he says it is "possible to have meaningful experiences, thoughts, and beliefs about these things even though the corresponding objects do not exist, at least not in any ordinary sense of 'exist'" (n.p.). In this way, phenomenology provides a philosophical foundation to examine the thoughts and beliefs participants have of an "imagined" event like a disaster, in order to find valuable meaning and insight.

Hermeneutics

IPA acknowledges "the central role of interpretation in negotiating meaning" of the participants' lived experiences (Snelgrove, 2014, p. 2). As a tool for research, phenomenology generally falls in two categories; descriptive and hermeneutical.

Descriptive phenomenology was favored by Husserl and focuses on the authentic description of participants' experience with little interpretation. Alternatively, interpretive phenomenology is rooted in Heidegger's (1962) concept of *dasein* where "the things themselves" are always based on our interpretation. All of our interactions

with the world undergo internal interpretation and are never "presupposition-less" (Heidegger, 1962, p. 191-192); we use experiences and beliefs to find meaning through an on-going basis as we live our lives. Since "experience cannot be plucked straightforwardly from the heads of participants," IPA researchers interpret other's experiences through in-depth, semi-structured interviews and careful analysis of written transcripts (Smith, 2011, p. 3).

IPA uses a double-hermeneutic process, "whereby the researcher is trying to make sense of the participant trying to make sense of what is happening to them" (Smith, 2011, p. 10). This is especially true for this study, as participants considered the unfamiliar and largely notional experience of a disaster event. Several said they were "just thinking out loud" as they spoke; they vocalized their interpretation process by saying things like, "based on my experience, I believe..." and "After going through [Hurricane] Isabel, I think..." My role was to facilitate the double-hermeneutic process by interpreting the participant's interpretations using their words and contextual clues.

Related to the double-hermeneutic process is the "hermeneutic circle" of IPA, where the researcher continually compares the parts and the whole to make sense of the data (Smith & Osborn, 2003). IPA researchers shift back and forth through the data in a non-linear manner, "examining the whole in light of its parts, the parts in light of the whole, and the contexts in which the whole and parts are embedded" (Eatough & Smith, 2017, p. 198). This requires a multi-layered analysis where multiple parts (such as a sentence or an interview transcript) are continually compared to the whole (such as a paragraph of text or the entirety of the research project) (Eatough & Smith, 2017, p.198). This circular process allows the participants' meaning to "shine forth" for the researcher

(Eatough & Smith, p. 198).

Bracketing and bridling are important concepts within phenomenological research design (Vagle, 2014; Groenewald, 2004; Smith 2011). The purpose of bracketing for the researcher to "bracket out" or "step away" from their own experiences to "see through" the experiences described by the participant (Vagle, 2014; Groenewald, 2004). Although the researcher can never entirely disentangle themselves from their pre-suppositions, phenomenology requires a concerted effort to set aside these perceived notions and approach the topic and participants with openness and empathy (Finlay, 2008). Vagle (2014) prefers to use the term bridling instead of bracketing for this personal activity, since the point is to "bridle one's understanding of the phenomenon" (p. 67). Dahlberg (2006) approaches bridling as taking "a reflective stance that helps us 'slacken' the firm intentional threads that tie us to the world" (p. 16).

Central to any phenomenological study is the recognition that the researcher's beliefs, experiences and biases influence their decisions throughout the project (Vagle, 2014; Finlay, 2008; Dalberg, 2006). As an academic and a practitioner, the process of "setting aside" my assumptions was especially important (Finlay, 2008). Since I have been a FEMA employee for more than 15 years, it was incumbent upon me to thoroughly consider my own biases and taken-for-granted assumptions. While I am not able to fully remove my personal knowledge or experiences about the phenomenon, I was committed to approaching the topic with an authentic, genuine openness to the participant's perspective. Throughout this project, I maintained a journal and kept careful notes about my thoughts during the data collection and analysis procedures. Before I began this project, I drafted a positionality statement to reflect my beliefs about expectations of

government disaster assistance (see Appendix A). Finlay (2008) says the researcher's prior knowledge of the subject should be bracketed but can also be used to gain further insights. For the phenomenologist, "past knowledge is both restricted and used to interrogate the meanings that come to be, in order for the researcher to be more fully open to the research encounter" (Finlay, 2008, p. 29). Bridling in this study was a continual process and evident in my positionality statement, the reflexive notes in my journal, and the case notes written after each interview.

Ideography

IPA is idiographic in nature, "examining the detailed experience of each case in turn, prior to the move to more general claims" (Smith & Osborn, 2015, p. 41-42). IPA intentionally reverts back to the specifics of the participant's experience and their unique contribution to understanding the phenomenon through a "detailed and nuanced analysis" (Tuffour, 2017, p. 4). For IPA researchers, "there is more of a focus on the possible transferability of findings from group to group rather than generalization" (Hefferon & Gil-Rodriguez, 2011, p. 758). Transferability is a recognized aspect of qualitative research, achieved through thick description with contextual details of both the participants and the methodology (Lincoln & Guba, 1985). In practice, this means a smaller, homogenous sample and an emphasis on each participant's perspective. For many IPA projects, a small number of participant interviews are treated as individual case studies; however, for this study, I used Smith, Jarman and Osborn's (1999) approach to explore shared experiences across a larger number of participants. This meant identifying "mutually relevant themes across all participants" to enable "subsequent, more detailed analysis where personally distinct experiences could then be considered"

(Smith, Jarman & Osborn, 1999, p. 229). While my interpretations using IPA are not generalizable beyond the participants in this study, they contribute to an overall understanding of the phenomenon of having expectations of government disaster assistance.

Limitations of IPA

It is important to recognize IPA has certain limitations (Tuffour, 2017). The majority of criticism centers around phenomenology's unstructured approach and its subjectivity (Smith, 2011; Finlay, 2009). Smith, Flower and Larkin (2009) address these criticisms in a number of ways. Phenomenology is intentionally unstructured to allow for an authentic exploration of the complex and often messy "lived experiences" of the individual (Smith, Flower & Larkin, 2009). IPA provides a framework to phenomenology philosophy that allows for this exploration within parameters of rigorous scholarship (Smith, Flower & Larkin, 2009). Since I have not used IPA before, I used an example IPA method like Smith, Jarman & Osborn's (1999) work on exploring shared experiences across a larger number of participants. This provided a structured approach to organize my data collection and analysis. IPA's subjectivity is an inherent part of the research, dependent on both the participant's and researcher's positionality (Tuffour, 2017, p. 5). The IPA researcher engages in "extra attentiveness" of obtaining a detailed account of the participant's experiences to produce "rich and exhaustive data" (Tuffour, 2017, p. 3). Bracketing and bridling are used to mitigate preconceived ideas and bias. For this project, the data collection and analysis procedures were followed to ensure exhaustive details and authenticity were captured in every step of the research process.

Throughout this project, I was committed to engaging in reflexive and reflective thinking (Langdridge, 2007; Rettke, 2018; Finlay, 2008). I kept a journal to capture my thoughts and ideas about the topic and my data, but also about my feelings and emotions. In order to authentically convey the participants' experiences, it was important for me to consistently examine my own beliefs throughout the data collection and analysis processes. In addition to journaling and exhaustive note-taking, I spoke with my advisors and peers about this research process to ensure I maintained a posture of self-reflection throughout the project.

Data Collection

Between October 2019 and February 2020, I collected data through 24 semi-structured interviews. This section first provides an overview of the steps I took to ensure ethical principles were observed before, during and after my interviews. I then summarize my recruitment strategies, the population sample, the interview protocol, and the use of vignettes in this project. I conclude this section with a description of my pilot and the interview process.

Ethics

This study was approved by the Oklahoma State University – Stillwater

Institutional Review Board (IRB) on October 22, 2019 (see Appendix B). This study
adhered to the Code of Human Research Ethics and the principles of "respect of persons,
beneficence and justice" (IRB, 2019, n.p.). I submitted the project application to the IRB
before I began recruiting participants for my pilot. Although this study did not pose a
high risk to participants, I took care to ensure consent, confidentiality, and transparency

were maintained in every participant interaction (Shaw, 2003; Creswell, 2007; Ausbrooks *et al.*, 2009).

Consent. All participants volunteered to participate in this study and responded to my solicitation verbally or in writing. Most of the participants contacted me after seeing a solicitation in a newsletter or they provided their names on a contact sheet (full description provided below). At the beginning of each interview, I verbally reviewed the consent form (see Appendix C), emphasizing they could withdraw their consent at any time during or after the interview. Each participant signed a consent form and received a copy for their records. As I explained the purpose of the study and the risks, I made sure to pause to give the participant time to read the document and ask questions. I was also aware of any non-verbal indicators of unease; two participants (who were also lawyers) asked follow-up questions about confidentiality and after I answered, had no more concerns.

Confidentiality. All participants' names and identifying information were kept confidential throughout this project. I collected the participant's names, email address and, sometimes, phone numbers via the email exchanges to set up the interviews. During the interview, I did not write the participants name on the hardcopy interview guide I used to keep notes. Instead, I assigned them a number and used this number for all subsequent documents on my computer and other electronic files. I was careful not to say their name during the audio recording. After the audio recordings were reviewed and transcribed, they were destroyed. No one had access to the names or contact information for the participants during this process besides myself. There are no documents that link the participant's name with the number assigned to them.

Transparency. Throughout the interview process, I was committed to putting the participants' preferences first. I interviewed them at whatever location they preferred and did my best to make them feel comfortable during the interview. Part of this was being transparent about who I am, my academic background, my employment with FEMA, and how I plan to use their data. Several participants asked me questions about my profession and the study, and I was open and honest in my replies. Participants often asked why I was asking certain questions or "what I was getting at?" I was always truthful and used the opportunity to solicit feedback and deepen the conversation. In this vein, each participant was treated as a "co-researcher," as we jointly sorted through the complexities of disaster assistance (Finlay, 2009). I believe my transparency increased their comfort level (as well as their interest) and produced deeper, richer data.

Population Sample

I interviewed a total of 24 participants for this study, five of which were a part of my pilot. A small sample is appropriate for a phenomenological design, since the intention is to generate longer, in-depth interviews (Groenewald, 2004; Vagle, 2014, p. 75). Some phenomenologists prefer small sample sizes of six to eight participants while others choose anywhere between two and 25 (Alase, 2017). In Smith, Jarman and Osborn's (1999) guidance on IPA procedures, they use an example of a study with 14 participants, which is in-line with my sample size.

A homogenous sample is preferred in phenomenology, in order to gain a deeper rather than broader understanding of the participants' experiences. Creswell (2013) said "it is essential that all participants have [similar lived] experience of the phenomenon

being studied" (p. 155). In this study, the participants represented a homogenous group of individuals who, while all unique, shared certain characteristics. Across the sample, they all were adults above age 18, either owned or rented their home, and had never applied for government disaster assistance. They were all Caucasian and, while I did not ask for income, indicated they fell toward the middle or high end of the socio-economic spectrum. The sample skewed older, single, and female as 10 participants were above the age of 60, 12 lived alone, and 17 identified as female (see Table 1). Seven participants rent their home from a landlord or property management company; the remaining 17 own their homes. Fifteen participants live in a community governed by a Homeowners Association (HOA) or some kind of governing board. All participants live in the Washington, DC metro area except three; one lives in Connecticut and two reside in rural Wisconsin.

Table 1: Participant Characteristics and Length of Interview

Participant Number	Gender	Age	Household Number	Profession	Length of Interview
	Г	21		CELIDENE	
P1	F	31	2	STUDENT	27 min
P2	F	24	1	STUDENT	29 min
P3	M	~55	2	ENTREPRENEUR	57 min
P4	F	52	1	UX DESIGNER	48 min
P5	F	26	1	DIGITAL	24 min
				MARKETING	
				MANAGER	
P6	M	35	6	ARMY OFFICER	53 min
P7a	M	79	2	RETIRED	1 hr 31
					min
P7b	F	77	2	RETIRED	1 hr 31
					min
P7c	F	45	2	DATA ANALYST	1 hr 31
					min
P8	F	68	1	RETIRED	44 min
P9	F	65	1	RETIRED	36 min

P10	F	69	1	RETIRED	43 min
P11	F	73	1	RETIRED	48 min
P12	M	73	2	MINISTER	28 min
P13	F	73	2	RETIRED	45 min
P14a	F	~50	3	TV PRODUCER	58 min
P14b	M	~70	3	RETIRED	58 min
P15	M	63	1	MUSEUM	57 min
				CURATOR	
P16	M	38	1	LAWYER	46 min
P17	F	41	2	EVENT PLANNER	1 hr 26
					min
P18	F	39	2	HR MANAGER	55 min
P19	F	66	1	LAWYER	47 min
P20	F	60	1	LAWYER	39 min
P21	F	46	1	PUBLIC HEALTH	57 min

Participants were selected using a convenience sampling technique (Creswell, 2007, p. 128), with the somewhat purposeful criteria of limited experience with government disaster assistance. Simply speaking, I wanted to interview individuals who had never applied for or received FEMA Individual Assistance or a state household-level disaster assistance program. One woman received government disaster assistance via a special needs shelter in the state of Florida during Hurricane Irma; however, she did not go through a process of applying for or receiving any other types of government assistance.

Recruitment and Location

Recruiting participants who do *not* have a certain experience, like applying for government disaster assistance, was surprisingly challenging. Whereas other researchers could say, "if you've experienced X, I want to hear your story!", I was placed in the odd position of asking people to speak about unfamiliar topics. For those who declined to be interviewed, they made comments like "I don't really have much to say about that." In

order to recruit participants, I used four different methods: face-to-face recruitment, announcements made in select Georgetown University student newsletters, an ad placed in a community newsletter, and soliciting volunteers through a local craft group. I also offered \$10 gift cards to compensate participants for their time (approved by the IRB).

Face to face recruitment was conducted by asking individuals I personally knew if they would participate in the study, using the protocol approved through the IRB at Oklahoma State University-Stillwater (see Appendix D). This process yielded my first three interviews (P1, P2 & P3) as well as the two interviews conducted in Wisconsin.

The first two interviews, which I consider a part of my pilot interviews, were with students I had taught at Georgetown University's School of Continuing Studies

Emergency and Disaster Management (EDM) program. These participants live in Washington, DC and the interviews took place on campus in study rooms. One interview (P3), also part of my pilot, was recruited after striking up a conversation on an airplane; the participant resides in Connecticut and the interview was conducted at 30,000 feet.

The other two participants I recruited face-to-face (P12 & P13) are married, live in Wisconsin, and I interviewed them each separately in their home.

Early in my recruitment phase, I considered interviewing students within the Georgetown EDM program, since several had indicated an interest in my dissertation and I knew the program director would be supportive. I chose not to recruit from the student pool because I wanted participants who were less familiar with disaster management and I was concerned with the power dynamic of interviewing my own students. However, I reached out to the directors of the adjacent Integrated Marketing Communications program and the Real Estate programs. Both programs send out monthly emails to their

students and they agreed to include my recruitment information for the month of November, 2019. I received six emails from interested individuals and I responded with a detailed explanation of my project and the interview process (this was done for all participants who emailed with interest; an example can be found in Appendix E). Of the six, I interviewed two participants (P5 & P6) who live in Washington, DC and Northern Virginia, and conducted the interviews on-campus in study rooms.

I also placed an ad in my local community newsletter, sent out each month by the Parkfairfax Homeowners Association. These ads ran from October 2019 through February 2020 (see Appendix F) and yielded six interviews. The participants all lived in the Parkfairfax community, which is a historic neighborhood of 1,600 units (townhomes and apartments) covering 130 acres in Alexandria, VA. These interviews were conducted in the participants' home (P17) or at a coffee shop or a nearby restaurant (P4, P15, P16, P18, & P21).

The remaining eleven participants were recruited by leveraging my membership in a local craft group, the Colonial Rug Hookers. This group is a part of the National Association of Traditional Hooking Artists and provides a monthly meet-up for individuals who make wool rugs using traditional hooked methods. After gaining permission from the chapter president, I made an announcement and sent around a volunteer sign-up sheet at the November 2019 meeting. I followed up with the volunteers via email with more information to schedule interviews (see Appendix E). For two of these interviews, when I arrived at their home, the participant wanted family members interviewed at the same time. For one participant this meant interviewing her, her husband, and her daughter (P7a, P7b & P7c); for another, this meant interviewing her

and her husband (P14a & P14b). Although I was initially uneasy, I conducted the interviews using the same protocol, took copious notes, and tried to ensure all participants felt welcome and valued. In these group interviews, all individuals actively participated (none were silent or spoke less than the others), so I included them as full participants of this study. Of all of the interviews recruited from the Colonial Rug Hookers, six were conducted in their homes (P7a, P7b, P7c, P14a, P14b & P19) and five were conducted in a coffee shop or restaurant (P8, P9, P10, P11, P20). These participants live in cities in Northern Virginia, including Arlington, Front Royal, Reston, Fairfax, and Chantilly.

The Interview Process

Each interview started with pleasantries, where I gave a short overview of my research project and a little of my educational and professional background. I then transitioned to the consent process. I explained the consent form verbally and then gave the participant time to read the form while I remained quiet. After each of them signed, I also signed it and gave them a copy. I then asked if it okay to start recording (all agreed) and I proceeded to ask questions using the interview protocol. During the interview itself, I took copious notes which included personal thoughts, feelings, and impressions (Groenewald, 2004). My intention was to approach each interview with openness, active listening, and empathy. After the interview was done, I thanked the participants and reiterated their identity and answers would remain confidential. Once home, I sent each participant an email with appreciation for their time and my contact information if they had follow-up questions or concerns.

Pilot

Piloting the interview protocol is an accepted and encouraged practice in qualitative work, since it can clarify the study's purpose and help novice interviewers gain skills and confidence (Van Teijlingen et al., 2001, p. 3). The first five interviews served as my pilot; after each interview, I listened to the audio recordings and reflected on what went well and what went poorly, taking note of my own responses and posture. I tweaked the vignettes for clarity and improved my probing questions. In the pilot, I asked the demographic questions at the end of the interview but it did not feel quite right; one participant suggested I ask them first "to get them out of the way," which was a vast improvement to smoothly wrapping up each interview. My first five interviews were shorter in length (see Table 1) but my skills improved and the interviews grew longer with experience. Additionally, after I listened to the recordings from the pilot interviews, I noticed I chimed in with too many affirmative comments; I made a concerted effort in the remaining interviews to be quieter and less vocal. The pilot interviews provided the opportunity to make changes to my process which significantly improved the quality of the rest of the interviews.

Since I received IRB approval before I began the pilot, I used data from the pilot interviews in this study. Additionally, I checked with my advisor and the OSU-Stillwater IRB office to verify the small changes to the interview protocol were not sufficient to resubmit the IRB application.

Vignettes

Semi-structured interviews are used extensively in IPA research (Smith et al.,

2011) and provide a flexible yet structured approach to collect data (Creswell, 2009). However, since I wanted to ask participants questions about an unfamiliar experience, my interview protocol needed to go beyond the traditional semi-structured approach. Vignettes offered a mechanism to explore individuals' beliefs about both an unfamiliar and unpredictable future event. Finch (1987) describes vignettes as "short stories about hypothetical characters in specified circumstances, to whose situation the interviewee is invited to respond" (p. 105). Vignettes in sociological research usually falls in two groups, either "snapshot" vignettes with independent scenarios and "developmental" vignettes with connected stories that build on each other (Jenkins et al., 2010). This study used the snapshot approach, with each of the five vignettes independent of the others. Additionally, the vignettes in this study used the participant as the central actor (the we-orientation), instead of fictional characters (the thou-orientation) (Jenkins et al., 2010). Both orientations are valid and useful, but I chose to keep the participants as primary actors since I wanted the individual to be central to this project. The full interview guide and vignettes can be found in Appendix G.

Jenkins *et al.* (2010) draw on Schutz's (1970) work to emphasize that, while vignettes provide insight, the researcher should be clear about what kind of insight they are seeking. Individuals employ different cognitive processes when faced with a vignette, as their motivations for answering the questions are undeniably different than when faced with actual scenario (this is especially true for disaster scenarios). Finch (1987) warned against the "misuse" of vignettes through blurring the lines between beliefs about actions and actions themselves" (p. 113). The purpose of this project and the use of vignettes is not to predict behavior or gauge what participants would "actually" do in a

disaster scenario. Instead, vignettes were used "to achieve insight into the social components of the participant's interpretative framework and perceptual processes" (Jenkins *et al.*, 2010, p.178). The vignettes provoked thought about unfamiliar circumstances that are driven by taken-for-granted assumptions (Jenkins *et al.*, 2010), like the role of government and their community during a disaster.

Using vignettes within a phenomenological approach has been done by several researchers (examples: Pitard, 2015; Allen-Collinson *et al.*, 2016; Denovan & Macaskill; 2013), as a mechanism to "explore the unquestioned beliefs about which interviewees hold regarding their life-worlds" (Jenkins *et al.*, 2010, p. 192). Several researchers have also used a combination of vignettes with IPA, (Mole *et al.*, 2019; Denovan & Macaskill, 2013; Yungblut *et al.*, 2012) with the recognition that "creating vignettes not only centralizes participants lived experiences and voices, but makes them more accessible to those outside of the experience" (Yungblut *et al.*, 2012, p. 43). Since IPA is a flexible, moderately structured approach (Smith, Jansen & Osborn, 1999), the use of vignettes within IPA is appropriate and particularly useful for the study about future-thinking. In addition to asking standard questions related to each vignette, I also asked "unscripted questions and probed further [based on] participants' responses" (Jenkins *et al.*, 2010, p.177).

The Interview Guide

The interview guide (see Appendix G) was created based on the disaster and psychology literature (Jenkins *et al.*, 2010; Weiss, 1995; Neal, 1997; Stallings, 2003), with help from my advisors. I started each interview by asking basic demographic

questions about age, gender, household composition, profession, and political affiliation. I then moved on to the first question, where I asked the participant to tell me about their community. This question was meant as an icebreaker and I asked a variety of follow-up questions specific to their answers (Barter & Renold, 1999). I then asked if the participants had any close friends in their neighborhood and, if so, to tell me about them. The intention of these questions was to increase the comfort level of the participant and establish a rapport (Weiss, 1995). To follow, I asked if their community and if they, personally, had ever experienced a disaster. I intentionally left the word disaster vague; I allowed the participants to interpret "disaster" however they chose and only offered a definition if asked to do so. I then moved onto the vignette portion of the interview.

The vignettes (see Appendix G) were based on the traditional disaster cycle (Neal, 1997) as they asked participants about preparedness, response and recovery scenarios. The majority of the interviews were spent exploring the recovery phase. The first vignette described a storm predicted to impact the participants' neighborhood in the next 24 hours. The second vignette described a storm producing minor damage to the participants' home and neighborhood. The third vignette was of a significant storm creating major damage, leaving the participants' home uninhabitable. The fourth vignette was of a storm that did not impact the participants' home, but destroyed their neighbors' home. The fifth vignette was of a major storm that significantly impacted either the home of either the participant or their neighbor and FEMA Individual Assistance was available.

Jenkins *et al.* (2010) emphasizes the importance of vignettes having the right balance of believability and specificity. For almost all of the participants, I used a

hurricane as the hazard; for the two Wisconsin residents, I used a tornado. I verified with each participant the hazard as plausible (believable) for their location (Barter & Renold, 1999). Each vignette was intentionally succinct and brief, with "sufficient context for respondents to have an understanding about the situation being depicted, but vague enough to 'force' participants to provide additional factors which influence their decisions" (Barter & Renold, 1999, p. 5). During some interviews, I slightly modified the subsequent vignette based on their answers to the previous ones. After each vignette was presented, I asked the participants what they would do, think, and feel. I then asked questions about what they expected their community and government would do in each scenario.

The final question of the interview asked, "Do you trust the government to help you during a future disaster if you needed it?" Afterward, I closed the interview by asking if the participants had any questions for me or if there were any topics they wanted to revisit. Several participants took this opportunity to clarify their earlier comments or to say, in thinking about it, they wanted to add certain points. Other participants were curious about me, the research project, or what I had learned from other participants.

Data Analysis

Interpretative Phenomenological Analysis (IPA) does not have a rigid, standard set of steps for data analysis; instead, it is a flexible process that focuses on the phenomenon being studied and the participants' who are trying to make sense of it.

While the opportunity for creativity within IPA is exciting, as a novice researcher, it felt daunting. I used Smith, Jarman and Osborn's (1999) model of exploring shared

experiences to guide the analysis process, as described below. The section concludes with a description of the steps I took to ensure quality and trustworthiness in both my data collection and my analysis.

Data Analysis

IPA researchers use the hermeneutic circle to work through their data, in a process of going back and forth through the parts and the whole (Smith, 2011). In this way, IPA researchers listen to the audio recordings multiple times, read and re-read each transcript, take notes and capture details to find meaning units and overarching themes (Smith, 2011). The process is repeated for each transcript and as the parts begin to make up the whole, themes emerge that reflect the similar experiences across all participants (Smith, Jarman & Osborn, 1999). These themes are used to find and explore the meanings ascribed to the topic by the interviewees and allow for deeper analysis by the researcher. The themes are then worked through to find similarities and dissimilarities and crafted into a narrative that shows contextual relationships throughout the findings (Smith, Jarman & Osborn, 1999).

Transcribing

The recordings of each interview were uploaded to an electronic transcription service, temi.com. This service was used because it was quick and inexpensive, but the transcriptions were often incomplete or inaccurate. For each interview, I listened to the audio file and combed the transcript line-by-line to ensure it captured the participant's words. I did not remove "filler" words like "uh" or "ah" in order to capture the participant's words as closely as possible. I added notations for significant or longer

pauses, as well as laughter or other verbal sounds. After completing each transcript, I read the transcript again and wrote an interview summary. These summaries integrated my hand-written notes from each interview and captured background information on the participant, the setting, the participants' mannerisms and non-verbal communication, words and phrases that jumped out at me, key themes, and my own feelings as I conducted the interview. This process was essential for me "to become familiar with the words of the interviewee/informant in order to develop a holistic sense, the 'gestalt'" (Groenewald, 2004, p. 50). By repeatedly listening and considering the words of the participant, I received a fuller understanding of the uniqueness of the individual and their lived experience (Vagle, 2014). While this process was labor-intensive, it gave me the opportunity to fully immerse myself in the interview (both audio and written) several times, with a strong attention to detail.

Developing Codes and Emergent Themes

Each transcript and the interview summaries were uploaded to Atlas.ti. Atlas.ti is a well-known software program used by qualitative researchers to develop codes, visually show relationships, and retain records (Friese, 2019). My coding process was done in three stages resulting in descriptive codes, thematic codes, and relationship codes.

My first phase of coding was descriptive coding, creating simple codes that reflected the answers to the interview questions (Friese, 2019; Saldana, 2015; Miles & Huberman, 1994). These were grouped according to the interview questions and vignettes. For example, I grouped all codes related to the first vignette about pre-storm activities under a PRE-DISASTER code. These included codes like "pre-disaster: gov't

info sharing" and "pre-disaster: concern for neighbors." I also coded demographic information, feelings and emotions, interesting phrases with invivo codes, and other big chunks of text with basic descriptor codes (like community attributes). The purpose of this phase was to get a feel for coding and "notice things" that were not apparent in my summaries (Friese, 2019). At the end of this phase, I had about 100 codes (see Appendix H).

The second phase of coding was to group the codes across major themes. For example, "helping neighbors" was found under "pre-disaster activity" as well as under "minor damage" and "major damage." I looked through each code individually and read the excerpts several times to find the best grouping for each. At the end of this process, I found eight theme groups: personal attributes, community attributes, experiences, trust in government, role of government, expectations of government, expectations of oneself, and expectations of an HOA, insurance, community and/or NGO. These themes were broad, but I felt confident all of the data could be grouped into one of these categories. I moved codes (as well as lumped and split them) into these theme groups within the software to get a sense of the whole (Sandana, 2015). Each group now had between four and 26 codes associated with it. I also created new codes during this phase as needed. For example, I originally just coded all experiences generically; I now split the code into "direct hazard experience," "vicarious hazard experience," and "experience with other government programs" (see Appendix I).

The third phase of coding was focused on finding relationships across the theme groups. In Atlas.ti, I ran an analysis report of all coded text for each of my eight groups. These reports provided the excerpts of the coded transcripts and I read through each to

get a sense of the overall theme. In certain cases, I had to go back and move codes to other groups. For example, I had grouped all references to fraud together and placed them in the group of expectations of government. However, when re-reading these codes, I found that those comments needed to be split into two; individuals expressed their determination to avoid being victims of scams after a disaster and they also expressed concern that other people may receive government disaster assistance fraudulently (two different concepts). After I re-read the coded text for each grouping, I wrote a lengthy narrative report for each. These reports grouped similar experiences and themes together, with multiple quotes for examples.

As I wrote these reports, I began to see relationships emerge across the themes. For example, individuals conveyed different types of experiences when answering questions. Participants talked more about direct experiences with hazards when describing personal action. But, when they talked about government responsibility, they described vicarious experiences of seeing disasters on TV or applying for other government programs. As the narrative reports came together, a larger picture of how the various themes interacted became apparent that revealed the reasons for particular beliefs and influencing factors. For example, participants described their beliefs about perceived responsibilities as influenced by the size and predictability of the disaster. The final five themes that emerged from these narrative reports were experiences, perceived responsibilities, trust in government, attributes of government disaster assistance, and beliefs about the role of government.

As I wrote my narrative reports for each theme, I was concerned I would lose the participants' unique "inner world of the experience" (Hycner, 1999, pp. 153-154) by

looking at the parts, instead of the whole. To ensure that I had not, I went back to the original transcripts and re-read them during this phase. I also read and re-read the hazard experiences the participants conveyed, since they were poignant and meaningful; I wanted their mannerisms and the words they chose, the little asides and offshoot stories, and all the meanings behind them to be constantly on my mind as I conducted the analysis. I also wrote brief summaries of each participants' interviews again, this time using the five themes as a validation exercise to ensure I was finding and reflecting their unique meanings. In addition, throughout this process I kept a journal of thoughts about my findings and continually worked with my advisors as I "tried out" different ideas.

Quality, Trustworthiness and Limitations

Ensuring quality in any qualitative research project is essential to increasing confidence in the analysis and results. While quantitative methods strive for generalizability, validity and replicability, qualitative work focuses on quality, trustworthiness and transparency, and rigor (Yardley, 2008; Rolfe, 2006). For the IPA researcher, these dimensions are even more important as IPA is a "creative process" and "there is no clear right or wrong way of conducting this sort of analysis" (Smith *et al.*, 2009, p.80, p. 184).

Several researchers have addressed quality of phenomenological research (Smith, 2011; Tuffour, 2017; Larkin, Watts & Clifton, 2007; Hycner, 1985; Vagle, 2014). The challenges of phenomenology are similar to those of any type of qualitative work, with limitations related to generalizability, subjectivity, validity, and replicability (Smith, 2011). These issues are especially noticeable in phenomenology due to its ideography

and the centrality of individuals' lived experience. The philosophical orientation of phenomenological research precludes many of these challenges by embracing them as central to its approach (Vagle, 2014, Hycner, 1985). Phenomenological researchers recognize their studies will not be generalizable due to the focus on the particular instead of the universal (Snelgrove, 2014), but this concern is outweighed by the deeper, richer knowledge attained in longer, in-depth interviews (Hycner, 1985). A careful attention to my own biases and the focus on the individuals' experience allowed the "the meaningfulness of the findings" (Hycner, 1985, p. 299) to naturally emerge.

Subjectivity and limits to "accuracy" are a part of every kind of research, regardless of the chosen approach (Creswell, 2009). Phenomenology addresses this through bracketing or bridling one's own experience throughout the research process (Vagle, 2014; Groenewald, 2004; Smith 2011) as well as extensive personal reflexivity and reflection (Finlay, 2011). Additionally, the "authenticity of the final account" in phenomenological research is paramount and can be reached through internal validation processes and "leaving an audit trail to illustrate the degree of transparency surrounding the role of researcher and the research" (Snelgrove, 2014, p. 6). In stage three of my analysis section, I conducted an internal validation process to ensure my themes authentically reflected the data. Additionally, my detailed notes and explanation of the data collection and analysis processes are meant to address these challenges and increase confidence in my findings.

CHAPTER V

FINDINGS

The purpose of this chapter is to present the findings from the data analysis in order to explore my research questions about individuals' expectations of government disaster assistance. During the interviews, the 24 participants provided a variety of expectations of government activities during disasters, such as providing hazard information and rapidly restoring damaged infrastructure. However, this chapter's narrower focus is government disaster assistance (commodities, sheltering or financial assistance) provided directly to individuals. Fundamentally, all participants agreed they expect the government to help those in need during a disaster, with variations of how and why this should occur. While each participant offered a unique perspective, five overarching themes emerged of what participants expect and why. These themes were experiences, perceived responsibilities, trust in government, attributes of government disaster assistance, and beliefs about the role of government. Each theme had subordinate themes, reflected in Table 2 below. This chapter will explore each theme in turn, using direct quotes to show how interpretations were made.

All themes are interrelated and overlap, which points to the complexity of the topic and the need for an in-depth, holistic exploration. The findings are presented through a phenomenological, interpretative narrative to convey both the breadth and depth of the participants' ideas.

Table 2: Emergent themes from the data analysis

Themes	Subordinate Themes		
Experiences	Direct Hazard Experience		
	Vicarious Hazard Experience		
	Experience with Other Government Services		
Perceived Responsibilities	Self		
T erectived reesponsionnees	Government		
	Influenced by: Size of the Disaster		
	Influenced by: Predictability of the Disaster		
Trust in Government	Influenced by: Beliefs about Government Intent		
	Influenced by: Beliefs about Government Capacity		
Attributes of Government	Fair		
Disaster Assistance	Bureaucratic		
Role of Government	The Common Good		
	Transactional		

Experiences

In the course of the interviews, participants shared lively anecdotes of their personal experiences to explain and contextualize their thoughts about government disaster assistance. These stories were especially important since the topic of government disaster assistance was unfamiliar; the participants had little-to-no experience with applying or receiving disaster assistance. Instead, participants retrieved

memories of similar or related experiences to explore unfamiliar ideas and find answers to the interview questions. In this way, the participants' experiences served as a starting point for beliefs about perceived responsibility, trust in government, fairness and bureaucracy, and the role of government. Three types of experiences emerged during the interviews: 1.) direct personal experiences of hazards and disaster events, 2.) vicarious experiences of watching or hearing of others' disaster or hazard experiences, either first-hand or through media sources, and 3.) direct and non-direct experiences with other government services. Participants used these three types of experiences in different ways to articulate what they expect of government disaster assistance.

Direct Hazard Experience

All participants were able to relay personal experiences with hazards or disasters. Several participants provided examples of disruptive events in their homes, like burst pipes or power outages but did not count them as a disaster (or only as a "tiny disaster"). These disruptions were still shared when asked about their disaster experience since to the participant, these smaller events were in some way similar to what they imagine a disaster would be. Other participants told stories of sheltering in place during a hurricane, helping a loved one into a boat when their home flooded, preparing to evacuate themselves and their families, waiting in the dark during power outages, driving home in a snowstorm, picking up storm debris on their property, and locating and communicating with loved ones after an earthquake. One man told a story of hunkering down in his home in St. Croix during Hurricane Dorian, alone with his flashlight, watching the water seep through windows. He said he could feel "the wind and the rain coming from the East, then all of a sudden it's from the North and it's coming through the sliding glass

door." Another woman told of waking up during the Northridge Earthquake in 1994, frightened and worried she would be fired if she did not show up for work since she was "freelancing. I was really young. I needed income." One woman told a harrowing story of taking her elderly mother to a special needs shelter in Florida before Hurricane Irma made landfall. She described her experience in detail, lingering on the most poignant and memorable episodes.

...but we got there around noon. There were people coming in eight, nine, the whole, the halls were full... We were in a room with very severely, most of the people were on oxygen. Um, they, you know, and at one point we did lose power and those people could have died, you know, but people went out and got a generator from some kind of sports shed or something at the school and hooked that up in the middle of the storm...

These participants relayed their hazard experiences with vivid details and emotional language to convey powerful, long-lasting memories.

The memories conjured by the participants provided a baseline and context for how they believed a disaster scenario would play out. The stories of hazard experiences were interwoven throughout the answers to the vignette-based questions. The participants used previous experiences to make predictions about the future and to justify their beliefs. For example, when I asked what she would do to prepare for a hurricane, one woman told a story about a previous, distressing hurricane event in Northern Virginia and said,

So that struck me as, like, wow, we're really on our own here...I just remember thinking, okay, we're on own here because I don't remember any place that was set up where they were going to distribute food or water. And, uh, especially if you are elderly and if you did not have neighbors to help, you'd be in trouble.

For this woman, the memory of being "on her own" informed her beliefs about how the government would handle a future disaster and what she would need to do to prepare. Likewise, another woman who works in downtown Washington, DC but lives in the suburbs said, based on her memories of 9/11, "my biggest fear is getting stuck at work, sheltering in place. And [them] never letting us out of the building. I don't want to stay there." For her, the experience of 9/11 solidified her beliefs about what would occur (she would be stuck) and what she would do (get out of DC) during a future hazard event.

Likewise, memories of positive emotions during a hazard event were also prevalent in the data. One woman shared an experience of staying with a cousin during a multiple-day power outage; she said,

So I remember...going over to her house. And she had power. She had food. Um, she had television, you know, I remember I never watched the Miss America pageant, but it was on. And I just, and she had chocolate truffles. It was just like, this is heaven. Sitting on the couch watching, you know, the Miss America pageant and having food and lights and, you know, so, um, that was wonderful.

These memories evoked positive emotions in the participants, who then used them to describe their anticipation of helping others and being an active part of their community during a disaster. Several participants mentioned during past storms and disruptions, community members assisted one another and they felt confident they could get help if they needed it. One participant said during the power outages after Hurricane Sandy, neighbors helped each other. She said, "We had Super Storm Sandy when we were out [of power] for a while. The different neighbors would check in with each other or people would say, 'I'm running my car around, do you want me to power up your phone?'"

Another participant was confident she could rely on her neighbors to help in the aftermath of a storm since, "I know George who is next door to me, he's got a chainsaw, so I feel I can call on him." Participants used positive experiences and optimistic beliefs as a reference point for anticipating how they and their community would handle a disaster.

Throughout the data, participants relied on personal, direct hazard experiences to anticipate what would occur during a future disaster event. They used memories of the past, often laden with positive and negative emotions, to form beliefs about what they would do if confronted with a disaster. These experiences were often used by the participants to conjure concrete, tangible actions they believed they would take before a disaster event. Several participants said they would take certain preparedness actions explicitly because of the "lessons" they learned in previous experiences. For example, one woman said that she would have her cell phone charged because she remembered having to stop at a gas station to charge her phone during a hurricane. Another participant said she would have a lot of water on hand, boiled and stored, because of her experiences with local power outages. Participants used their previous experiences and translated them into tangible preparedness actions, like getting gas for the car, taking a shower right away, and "as soon as you hear about that hurricane, you better get over to the store because it's going to be picked clean."

Vicarious Hazard Experience

Notably, participants used the experiences of others in much the same way as their own experiences when answering questions about an anticipated future. When presented with a question about an unfamiliar experience, participants referenced other people's experience to form and justify their answers. These vicarious experiences were prevalent throughout the data, as participants shared stories they had heard from friends and loved ones, or of other people's experiences via media. While participants used direct, personal experiences to describe tangible actions they would take before or during a disaster, participants used vicarious experiences more to describe reasons for their beliefs.

Some participants shared stories of their family and friends' experiences in lieu of personal disaster experiences. For example, one woman told a story of her daughter's home destroyed by a falling tree during a tornado. She used this vicarious experience to emphasize her beliefs about adaptability and personal responsibility, which was a theme throughout her interview.

The Lord preserved us through it. Um, you know, earthly things can pass away. Our lives are more important. And I guess how you're, you know, depends how, how extensive the damage was. I know that [daughter] Carrie, we went and picked up Carrie's kids last summer. They had, they lost all their power and tree went down on their house. And I mean it was extensive, tornado, they called it in their town straight line winds, but in the neighboring town it was called a tornado. But you know, they were without electricity and they couldn't use anything. I know they, they took the grates off the stove and made a fire so they could make coffee on site.

This participant, like many others, used stories of other people's experiences as a reference point when thinking through what they expect during a disaster scenario, and why. The woman used the example of her daughter's experience to support her overall narrative that people need to be adaptive and self-reliant during a disaster. She later

emphasized that, "you're going to have to adjust and you're probably gonna have to adjust to the fact that somebody's not coming in the next half hour to do what you want." This example demonstrates the way participants used indirect experiences, not just personal experiences, to formulate their expectations. Repeatedly, the participants wove narratives that included experiences of other people to describe beliefs about themselves, other people and organizations, and the government.

Participants also drew on the disaster experiences of other people they saw or read about via media. All participants told stories of people they had seen on television who experienced large-scale disasters; a few participants mentioned smaller events, but the majority of the examples centered on well-known disasters like Hurricanes Katrina, Sandy, and Maria. Participants used these vicarious experiences to make judgements about prior government disaster activities and to explain their beliefs. These examples were most frequently referenced when asked how they expect the government to handle a disaster response operation and provide assistance. For example, one participant said he was not confident of government assistance because of what he had seen on television. He said, "it's all the other past disasters and things. So expectations are real low, expectations are that we won't getting anything for a long time." It is important to note that none of the participants experienced these major events directly, nor had friends or family who were impacted; however, the participants still used vicarious, media-based experiences as a basis for their beliefs and to express their expectations.

Experience with Other Government Services

Similarly, several participants used their experience with familiar government programs to describe what they expect of (unfamiliar) government disaster assistance. Participants used inductive reasoning to make inferences about how the government would operate in a disaster. When participants spoke of non-disaster government services they had leveraged, they emphasized customer service, transparency, and ease of use. One woman said she was confident Fairfax County government would provide assistance during a disaster based on what she already knew about the services provided by the county. She said, "Fairfax County's a pretty good county to live in. They are on the ball...I have not been involved in a disaster with them... but I am confident that they would, they have a good emergency [management]." When asked why she had such high confidence in the county, she said,

A friend of mine, her son has...drug problems and mental and so we went. I looked it up and Fairfax County has a wonderful program. Really wonderful. And I was like, wow, I never knew about it...But once I looked into it and that, they have taken him by the hand and [are] really, really helping him. I'm just shocked. And you know, they're nice and I thought, Oh, now we're going to go to this place and...it's going to be horrible. It wasn't, it was like a, I don't know, it was like a nice doctor's office, nice soft music, people [were] very pleasant...nice places to sit, soft couches. I was like, woah, that's great. And they're still helping him.

While this participant's experience was positive, other participants provided negative examples of government programs. For them, government services were tainted by poor customer service, bureaucratic and confusing processes, and difficult-to-understand instructions. For example, two participants mentioned they would be wary of applying for and receiving government disaster assistance based on their poor experiences with the Department of Education and student loans (one participant said, "I

guess I base that [opinion] on years ago our daughter took out a student loan and it was a disaster"). Another participant said, due to his experiences with the Department of Transportation, he anticipates applying for government disaster assistance to be frustrating. He said,

I just bought one of those EZ Passes today. To register that thing, it took me over 15 minutes for a stupid transponder that goes in my car. I can only imagine what it would take [for] somebody who's applying for disaster assistance, whose home...has been just been wrecked to be sitting with a pile of paperwork that they have to fill out in terms that they don't understand.

Later, this participant said, "I think that there's that mindset from people [in] government, you stand on the line at the DMV...it's like, I don't care who you are... I think that mindset has kind of played into how FEMA [operates]." Participants drew conclusions based on one set of government service experiences to infer what government disaster assistance would be like. These experiences were prevalent throughout the data and provided participants' a point of reference to think through their expectations.

Perceived Responsibility

As participants shared their direct and vicarious experiences, they began to describe perceptions of who is responsible for what during a disaster. Almost all participants first spoke about their own responsibilities of taking care of themselves, their property and their loved ones, seeking information and resources, and helping their neighbors. They then talked about the disaster responsibilities of the government, their community, their insurance company, their homeowner's association (HOA) or landlord, and non-profit organizations. For the participants, numerous entities and actors had

certain responsibilities during a disaster event. The distinction between these perceived responsibilities were most frequently based on property ownership. For example, one participant said,

So yes, if the highway was tore up with a tornado or flood, I would expect them [the government] to fix it and not charge me for it. But if I had a tree go down on my house, I would expect that I have the coverage for that and take care of it.

For most of the participants, the delineation of ownership responsibilities served as the basis for their expectations of who will handle what during a disaster. Since the government "owns" infrastructure, it is responsible for its repair and restoration. An HOA or landlord will take action based on what they own versus what the individual owns. In a similar vein, the insurance company's expected actions are based on the terms of the owner's or renter's policy. Although participants believed these lines of responsibility could be muddied with litigation or bureaucracy, they expressed confidence of clear dividing lines between their own responsibilities and those of other actors.

For the participants, beliefs about personal responsibility were based on their capacity to handle the situation. Participants spoke confidently about their own anticipated disaster-related actions; what they would do, how they would do it, the challenges they would face, and how they would overcome barriers. They expressed characteristics of self-reliance, resourcefulness, and adaptability. For example, some participants said they would not "wait around" for information; instead they would actively seek it. Many participants said they would not rely on government in order to make it through a disaster. In some cases, participants explicitly said they had financial

and social resources ("We would personally go get...a hotel. We have the financial means to do that"); in other cases, it was inferred ("I don't know how that all works, but you know, I have options"). These comments were often bundled with actions the participant would take, which to me demonstrated a proactive posture to adapt to the circumstances. Overwhelmingly, participants expressed a belief that they not only had a responsibility to take care of themselves during a disaster, but also had the means to do so.

Because of this belief in their own capacity, all participants conveyed a responsibility to help their disaster-affected neighbors. Every participant said they would help (or try to help) their neighbor in some way. One participant described this responsibility as part of how she views herself as a resourceful person who could help to her neighbor, Mike, if he suffered disaster losses. When asked for specifics, she said,

I would be in here on this computer. I'm looking either looking for resources, um, to assist or writing down, typing or emailing some kind of resources to them of what I thought that they could use so that they didn't have to search for that themselves. I feel like I've always kind of been that person.... What can I do to help? And everyone's gonna be able to help in a different way. And maybe mine's not monetarily as a single mom, but I 100% would be on the computer either trying to pull together stuff or literally being like, hey Mike, this program can get you this. Are you interested? Good. Cause I'm going to go sign you up and I'm going to call such and such and see if I can get it in action. Don't worry about it. I'm going to take care of this part and all. I'll come by at six o'clock or whatever. And we'd give them hard facts. And I think that's where I fit in the best.

Similar sentiments about perceptions of self as "helpers" were conveyed by almost all of the participants. They viewed themselves as not only possessing the knowledge and resources to handle a disaster, but having a sense of responsibility to use these resources to help other people. A few participants spoke of volunteering with their church or other organizations, or simply helping other people in need. One woman said, "We've actually done similar stuff with neighbors, not in a disaster area, but some people were having a hard time and I went off to social services and got pamphlets and had a social worker sit down with them and explain what their options are." Several participants said they would help their disaster-affected neighbor in any way they could (other variations of this were "anything I could do" and "whatever it takes"), including help with administrative or household tasks. One participant said,

So I'd really, I mean I would just be looking for...anything that's missing or just...help them clean up, you know, that...'Hey, [we're] in this together' type feeling. Always make people feel better. If you can laugh about it, it's good, and I can bring over food.

Along the same vein, participants recognized other people do not possess the same resources as their own and may need additional assistance during a disaster. This led many of them to describe their beliefs about the government's responsibility to help people in need. One participant said,

One problem that I noticed in Katrina was getting poor people to a safe place. And I do expect the government...to try to carry that out. You know, if you don't have a car or you are crippled or whatever, somebody else has to take *responsibility* for getting you to a safe place where you can remain until you have other things organized... I really expect them to take care of those less fortunate that don't have any resources of some sort.

For these participants, the government's area of responsibility was to help those in need during dire situations. This translated into expectations of the government to provide

certain commodities, services, and resources for disaster survivors. When asked for specificity, most participants gravitated toward tangible needs after a disaster like food, water, and temporary housing. Other participants said they would expect the government to provide social services to individuals with disaster needs. One woman said she would expect "a case manager if they were really elderly…because their families are far away." Another participant said she would expect the government to go door to door because, "some people don't have access to all of those means of communication. So in that case, I…hope that there'll be more people, like people on the ground actually going out around, sort of checking in on people." Across all participants, the overarching belief was the government has a responsibility to help those in need during a disaster and there exists an expectation that the government will fulfill this responsibility.

Influencing Factors

While the participants agreed the government should help disaster survivors, their perception of the extent of responsibility was influenced by the characteristics of the event itself. All participants said they expected the government to provide disaster assistance for catastrophic or "large" disasters. Several participants referred to Hurricane Katrina or other notable disasters as an example of this belief. One man said the government should help people during large-scale disasters, "like I saw in New Orleans...people were destitute, those people didn't do anything wrong, that was a major disaster." He said, "those people didn't do anything wrong" to suggest their suffering was due to the size and scale of the event, so government help was reasonable and expected. Other participants voiced similar sentiments, saying the nature of the event –

its size and scale – meant the government had an increased level of responsibility to assist survivors.

Likewise, several participants said the government's responsibility to help people is dependent on whether the disaster event was anticipated. For these participants, an anticipated event (like a hurricane) meant individuals could take preparedness actions and the government's responsibility would be reduced. For unanticipated events (an "out of the blue kind of thing"), individuals are unable to prepare so the government's level of responsibility would be higher. One woman said her expectations are based on her experiences with Hurricane Irma and the 2012 Derecho. During Hurricane Irma, she knew it was coming and could stock up on supplies and fill her gas tank; however, she was unable to prepare for the Derecho. The unanticipated nature of the event meant the government had a greater responsibility to help those in need. She said,

They probably should make food available if it's not, you know, if you can't go to a grocery store or any place like that, especially with the Derecho. You know, you couldn't plan for that... You had no time at all. I mean it was like *boom*, you know?

Along the same lines, a few participants referenced the causation of the disaster as an influencing factor of expected government action. For example, one participant said she expects government relief after a disaster because it "is so not in my hands...something like a hurricane is not something I can control." For her, the element of personal control was a dividing line between who is responsible for what during a disaster. Since she did not cause the disaster to occur and she could not control it, her level of responsibility was minimized. This dovetailed with other participants' beliefs about fault and blame. These

participants expressed a distinction between events that are the result of wrongdoing and those beyond anyone's control. One participant said,

And especially if it was an instance of like the government did something wrong or the city did wrong, I would definitely be like, okay, they made this error. Why am I suffering? Versus if it was just like a natural disaster that no one predicted, a tornado or something that no one had control over, that'd be a little bit different I'd say.

Notably, for several participants, even if the government did not cause or anticipate the disaster, its response and recovery still fell within the government's area of responsibility. One woman said, "I think that's something that they [the government] would be responsible for because...I just don't think the city can predict like a flooding or something like that." For certain participants, unanticipated events outside of their control, especially large, catastrophic incidents, increased their perception of the government's level of responsibility.

Trust in Government

When discussing personal and governmental responsibility, participants differentiated what they believed the government *should* do versus what they believe the government *would* do. Both of these types of expectations were expressed, which were often influenced by the participant's level of trust in government. These expectations reflected participants' beliefs about government's intention to help disaster survivors and its capacity to do so.

Trust in Government's Intentions

Several participants made distinctions between local, state, and federal governments when expressing levels of trust. Generally speaking, participants said they had a high level of trust in their local government, but held lower levels of trust in the federal government. State government was only minimally mentioned by participants and, if noted, only in passing (one woman said she felt that state government was "far away"). When speaking about local government, participants often expressed positive feelings of connectivity and access to power. Several said they knew their local leaders or participated in city council meetings. One woman said she trusts local government more than state or federal government during disasters because it feels more accessible. She said,

I feel like I would trust local [government] more...I've been in the local community for 11 years... I've gone to city hall and sat in meetings. I'm, I'm connected to the community in a variety of ways. It feels more accessible to me so that I feel like I have something to build on. It's not like I'm just going to call a one 800 number and hope that I'm not on hold for an hour and then tell my sob story like hundreds of thousands of other people.

Alternatively, some participants expressed more distrust in the federal government's intentions in providing government disaster assistance, citing the negative influence of politics. The word "politics" popped up in participants' comments about communication, delivery of services, and how disaster assistance would be funded. One woman said she is distrustful of information from the federal government because, "just the way the politics of it is going and, and even simple things, it seems like nobody can wrap their arms around doing the best thing." This type of comment reflected low confidence in the federal government's intention to help people during a disaster.

Interestingly, other participants expressed high confidence in the federal government's intentions during disasters. They said the federal government "will do its best" since "there are individuals in government who are ready, able, and willing to help." However, these participants said response efforts would be mishandled by poor leadership or be overwhelmed by the situation. Several participants made the distinction between government disaster workers and the overarching institution of government. For them, the institution is inept or nefarious, while the "on the ground" employees will try to help people. For certain participants, this delineation was made to distinguish the current political administration and "regular" government disaster workers. For example, one woman said, "I trust individual people who work for the government to their best. I do not trust the current administration to give people what they are entitled to by law." For other participants, the current political administration is not the concern; instead the problem is incompetent bureaucrats undermining the good intentions of disaster workers. One participant said,

The people who are on the ground are going to do a good job. It's just getting them there and getting the, you know, getting people in the cushy offices with the gold curtains and the nice carpets to do something.

Several participants said while they trusted the federal government's intentions, there were caveats or qualifiers. For example, one person said she believed the government would help her during a disaster but, "they're not going to be quick though. And so, you know, in the long term, I'm sure they will come through. In the short term, we have to be dependent on ourselves." Other participants said they believed the government would try

to assist survivors, but because of disaster damage, geographic access, or power disruptions, it may be difficult for the government to provide services.

Trust in Government's Capacity

Several participants indicated their trust in government was dependent on their perception of the government's capacity to handle a disaster. Most held a general belief their local government had the capacity to marshal necessary resources and confident there are "internal preparations" or "some kind of plan in place" for a disaster. One woman said she believes her local government is well organized and knowledgeable. She said, "Despite all the flaws, I still feel government's going to do what it's supposed to do. Public officials that I've interacted with [at] the local level are very conscientious."

Conversely, a woman who lives in a more rural area expressed low confidence in her local government's capacity, since it is a "poor county" with little money for disaster preparedness or response. Similarly, one woman said since Virginia does not experience a lot of hurricanes, she is doubtful about its capacity. She said the state of Florida was able to offer her mother a special-needs shelter during Hurricane Irma because the county staff had both disaster knowledge and experience. She said,

The experience in Florida was very good because I think they're used to having hurricanes and, and I don't know why it was, but I was, I was very impressed with what, what they did. Here [in Virginia], whenever there's been anything, I've seen no signs of anybody helping anybody at all.

For these participants, capacity was related to resources (especially money), experience, and disaster knowledge, which was lacking in their local government.

Overall, participants were pessimistic about the federal government's capacity to provide assistance during a disaster. Several participants mentioned Hurricanes Katrina, Harvey, and Maria as examples of ineptitude. One woman said,

Katrina, yeah. Sometimes the government makes too quick decisions like those trailers...with the formaldehyde and you know, instead of just destroying them, I think they were still allowing people to buy them and live in them. Um, but you know, sometimes there's not enough common sense that goes into these things.

Other participants relayed stories they heard about poor disaster response decisions and mismanagement of disaster resources. Several participants used examples of overcrowded shelters, poor evacuation planning, costly cruise ships, "shady" contractors, mistreatment and abandonment of pets, and assistance to prisoners as evidence of ineptitude. One participant said when the government comes in, it actually makes things worse. She said,

And the, and the government, it doesn't seem to be stepping in and, this is would probably be at all levels of government, to deal with the infrastructure problems. And in fact things are being done that could make things worse. It seems like I've just watched something on the Mississippi River and how they have changed it so that it actually increases the chance of flooding, so I would say, no, no, they're not going to help.

This participant, as with others, linked their beliefs about the government's capacity to their expectations of government assistance during a disaster. Participants expressed expectations of what the government *should* do (help people), but recognized those are not necessarily what the government *will* do or *could* do. This distinction was evident

throughout the data as participants described their level of trust in government's intent and capacity.

Attributes of Expected Government Assistance

While all the participants agreed the government should provide disaster assistance to those in need, there was variation in who would qualify as "needy" and how the assistance would be delivered. In exploring these dimensions, the attributes of fairness and bureaucracy emerged. These two dimensions were intertwined; participants believed government assistance should be fairly distributed and recognized the necessity of having bureaucratic processes to do so. Many participants used vicarious hazard experiences, experiences with other government services, and their level of trust in government as the basis for their beliefs about the attributes of government disaster assistance.

Fairness

As participants considered the government's responsibilities during a disaster, the topic of *who* deserves assistance emerged. This was especially important as participants thought about longer-term, financial assistance for disaster survivors, beyond commodities or sheltering. The concept of fairness frequently arose during the interviews and, when asked for specifics, most participants said they expect the government to help individuals with low incomes after a disaster. These comments were often made with the recognition that a disaster would be devastating for those with limited means. One participant said,

There, there seems to be, there's an assumption that...everybody has resources... Uh, what do we do with people who are not technologically cutting edge? Who don't have ready transportation, who don't have 500 bucks in the drawer upstairs, uh, or even a credit card and may not have a phone? They're, they're human beings too.

Similarly, when asked who should receive financial assistance from the government, one woman said, "lower income households, they might need that financial assistance. For example, their whole house was torn down and they have nowhere to go. What are they, what are they going to do?" The majority of participants assumed financial disaster assistance was distributed based on income-level, which aligned with their expectation that those with the greatest need should receive help from the government.

Participant's beliefs about income-level criteria and fairness was evidenced by the distinction participants made between themselves and disaster survivors. Comments about others' income level were often bundled with participants' assurances they would not need or qualify for disaster assistance because of their own socio-economic standing. One woman said, "I figure that, you know, there are people that would really need that. And I'm fortunate enough that I don't have to have that." Another woman was more direct, saying, "I think they [individuals with low-income] should get more help than us rich people, I'm not rich but I'm fine." One participant said they would may apply for financial assistance from FEMA, "but like in the back of my head, I would feel guilty for taking it because I know there's so many other people that deserve it so much more." These comments show a distinction in who deserves disaster assistance; for them, fairness dictates that lower income individuals should receive assistance and the participant will not.

Alternatively, one participant said she expected to received disaster assistance *because* of her higher income level. She said,

I think in general I would be helped because I am better off than a lot of other people...people that are better off seem to get the help quicker, faster, more robust [than] people that are on the lower rung, that are struggling to survive.

This type of comment was made by several participants, which signaled low confidence the process of government assistance would be delivered fairly. Another participant said the "powers that be" are so concerned some individuals may get more than they deserve, they overcompensate by placing barriers within the assistance process. This gives an unfair advantage to individuals with more resources to navigate the system. For these participants, fairness was an aspiration but not realistically expected.

Participants also expressed an expectation the government would have criteria for the amount of disaster assistance and the timeframe for its delivery. Several participants voiced concern that individuals might "get rich" from disaster assistance or receive more money than their losses. Other participants raised concerns about the time-frame, reflecting a belief that disaster assistance should be in some way temporary. One woman said.

You know, it's a touchy thing, because honestly you don't want, uh, what's the word? Um, help being given indefinitely long into the future...and sometimes I get the impression that FEMA and other government organizations give too much help or, you know, they allow you to stay in your home and it's been destroyed, you know, every five years for the last 25 years. That's got to stop.

These types of comments demonstrate an expectation that the government will prevent "too much" assistance going out the door. Often, these opinions were combined with stories the participants heard about individuals fraudulently receiving disaster assistance. One woman said, "the people I knew that got help from FEMA really were cheating... I mean they went outside and broke their own window and squirted their belongings with a hose. You know, cheating, truly cheating, stealing. We'll call it stealing." All of these comments are tied to a fundamental belief that fairness is a central component of government disaster assistance and the expectation the government should take steps to ensure only deserving people receive it.

Bureaucracy

Although the participants expect the government to have some kind of fairness criteria for delivering disaster assistance, they expressed low confidence that bureaucratic processes would allow people in need to receive the assistance they deserve. Participants said they expected the assistance process to be overly bureaucratic and laden with paperwork, endless wait-times, confusion, and frustration. One woman said she expects government disaster assistance to be full of red tape, saying,

All those, jumped hurdles and jumps you have to go through when you're filling out anything for the government or anything. Um, I just, I get frustrated with that kind of stuff, excuse the expression, but the bullshit that they put you through.

Participants talked about the "hassle" of paperwork and the "hoops" they would need to navigate; others spoke of anticipated long lines, busy signals, or wait times to speak with someone who could help. Participants also voiced doubts that assistance would be

provided in a timely way. For example, one man said he expects applying for assistance to be, "slow and very bureaucratic." In response to a question about how quickly he would expect FEMA assistance, one participate said, "To arrive? Not quickly at all." Another said the process would take "months and months" and another said, "months to years, if at all." Participants overwhelmingly expected government disaster assistance process to be bureaucratic and cumbersome.

In many cases, the comments about bureaucracy were followed by comments about the need for balance. Participants recognized some rules are needed but, due to the devastation of a disaster, the rules should be flexible. One woman said,

You don't want them just to be passing out vouchers willy-nilly. But also, you know, [on] the other hand...you don't want anybody in there questioning, do you really need this water? Do you need this hot dog?

Similarly, another woman said, "You can't be totally, you know, hide-bound to the rules. It has to [have] a little leeway there." This need for flexibility showed a tension between the expectation that disaster survivors verify their needs, but should not be overburdened with a bureaucratic process. Participants knew survivors would need to provide documentation, but did not want the government to be "totally bureaucratic and stupid about it." The participants expressed an expectation that the government would have rules and processes for delivering disaster assistance to ensure fairness, but they should be flexible due to the inherent hardship of the disaster.

Role of Government

All participants said they believe the government has a responsibility to help those in need during a disaster, influenced by the size and the predictability of the event as well as their level of trust in the government's intent and capacity. The participants also said they expect the government to have criteria to ensure fairness when delivering disaster assistance, although they believed the assistance process would be mired in bureaucracy. All of these expectations are influenced by underlying and fundamental beliefs the participants hold about the role of government.

Role of Government: The Common Good

All participants said while they feel confident they could take care of themselves during a disaster, they recognize that others may not be able to do the same. When asked why they believe the government should provide disaster assistance, several participants said the role of government is to provide a safety net for those in need. Interestingly, comments about a "safety net" were often coupled with an emphasis on personal responsibility. It was important to these participants that I understand they believe in personal responsibility, but they also recognize that there are circumstances when people (other people) should receive assistance. For example, one woman said,

It kind of comes down to some personal responsibility for, for where you've decided to make your home and manage yourself. Some people have no choice. That's where, because that's where they have to live and just don't have the wherewithal to get up and go someplace.

Likewise, another participant spoke extensively about her beliefs about the role of government as a safety net for those in need. She first emphasized the unpredictability of

the disaster, then talked about personal responsibility, and then explained her beliefs about the role of government.

Um, so this is really hard because it's a natural disaster and in some ways I think that crap happens. I mean...crap happens and we all also have to be responsible for ourselves as far as making sure that we, um, have set ourselves up for success and preparedness. But I look at people like my mom who does not have her own home, makes \$200 a month literally and does not plan ahead like this. [She] would fill up gallons of water, and run around buying toilet paper and you know, doing what she could. Um, and I know that's the best she can do and I know it's not enough...I feel like there should be safety nets. And this safety net should have some sort of either restriction or regulation because not everyone is born into the same circumstances... Someone that was born with a physical limitation, disability, emotional disability, insert whatever, isn't given as much of a fair fighting chance...Um, so I'm kind of that two pronged. Like you gotta do crap for yourself if you're able to do crap for yourself...[but] I want them [the government] to help...I believe that government is our, you know, our safety net, that it's something that we should all feel invested in.

Beliefs about the government's role as a safety net emerged as participants spoke about responsibility, fairness, and bureaucracy, often mixed with direct and vicarious experiences.

In a similar vein, several participants said that the role of government is to provide for the common good. For these participants, helping those in need after a disaster helps the community as a whole recover. For example, one participant said,

When you think about, uh, government, I think about providing sort of for the common good. Um, I think that there are certain like infrastructure needs that benefit our community and if one part of the community is affected by damage to that infrastructure, that other parts of the community will be affected as well...So having some like some level of assistance, but mainly from the purpose of like if this person doesn't have a place to live then that hurts the community rather than like we owe them for what they lost. That make sense? Um, so making sure that

the schools get reopened, that roads are rebuilt, that water, you know, is at the store, that people have their basic needs met so that they can continue to do the things that they do in the community, whether that's get to work or take care of your kids or run their business.

This rationale appeared in the data several times as participants mulled over their thoughts about the role of government. Most participants believed the government's role is to provide a safety net, but a few others further contextualized this belief by saying helping those in need not only benefits survivors, but also the entire community.

The Role of Government: Transactional

Other participants expressed their beliefs about the role of government as more transactional in nature. Participants pointed to paying their taxes, electing officials, and keeping politicians accountable as reasons for holding certain expectations. Numerous participants mentioned paying taxes as a primary reason for expecting government disaster assistance. One woman said, "But you know, excuse me, but god damn it, I paid for this and I rely on my government for that." Another participant said he expects disaster assistance, "because that's kind of what you're paying into as like a society. Like you're paying into those kinds of services that should be available." Likewise, one participant said,

The bottom line is, I guess if, if government is there to help, it's kind of foolish to turn them away if the need, the need is legitimate. Like the old adage says, we're paying them, so we might as well get something from them.

These comments dovetailed with beliefs about electing officials and holding them accountable. When asked about her beliefs, one woman said she expects government

disaster assistance because, "basically, it's a government responsibility. That's why we pay taxes. Why we have elected officials to execute our will [and be] voted out of office if they don't do that."

Similarly, a few participants mentioned they believed the government would provide assistance out of a need for political preservation. In some cases, this was said with jadedness, but others saw it as a positive aspect of constituents' power to drive political decision-making. For example, one participant said,

Well, I think that that the government has our best interest at heart. They're looking for, to protect residents, um, and American citizens. Um, there's a lot at stake. If you don't respond well to a disaster, it could be everything from a loss of trust and confidence in that organization to not reelecting officials. If the governor does a terrible job in his or her response, then that's probably not going to bode well for his election, reelection campaign. So, um, I think that...it's mutually beneficial.

Along the same lines, one woman said she believes the government will provide disaster assistance because in her city, "the community holds them responsible enough to keep them active." The role of government here is responsiveness to its citizens, which in turn means assistance to individuals during a disaster.

Ideological preferences emerged in a limited way when participants discussed their views on the role of government. Principally, ideological preference was not a straightforward indicator of the participants' expectations of government assistance. Regardless of political party, all participants believed the government should help those in need and all participants emphasized the need for personal responsibility. However, those who identified themselves as Republicans gravitated towards more transactional

beliefs about the role of government, like paying taxes and political accountability; whereas the Democrats spoke slightly more about the need for a safety net and the common good.

CHAPTER VI

DISCUSSION & CONCLUSION

The purpose of this research was to explore participants' expectations of government disaster assistance, how they form those expectations, and how those expectations compare to actuality. Other disaster researchers have studied the topic of expectations using surveys or public policy-oriented cased studies (Petersen *et al.*, 2020; Schneider, 1999; Michel-Kerjan & Volkman-Wise, 2011), but only a few used qualitative approaches to investigate expectations and underlying beliefs (Chamlee-Wright & Storr, 2010; Scheberle, 1988). Additionally, most disaster studies of expectations are focused on individuals' perceptions after the event occurred, rather than beforehand (Schneider, 1999; Jong & Dückers, 2018). This study offered a unique perspective of asking participants who have never applied for or received government disaster assistance about their expectations.

Phenomenology was best suited for this deeper, more intense exploration of the participant's "lifeworld" and their own interpretations of having expectations of a future disaster event (Moustakas, 1994).

Interpretative Phenomenological Analysis (IPA) provided a structure to understand of the participants' responses through a double-hermeneutical process (Smith, 2011); I was able to watch participants form their expectations as they put their thoughts into words, and in turn, I interpreted their answers from a strong, ideographic position. Despite the purposeful sample, each participant provided a rich and unique perspective with a variety of experiences and opinions. The participants shared stories about their past to anticipate what will occur during a disaster event. Participants used these stories to give context to their beliefs, both as a rationale and as a benchmark for inductive reasoning. The stories were shared with evocative, detailed, and emotive language, signaling the deeply personal nature of these beliefs and the meanings participants ascribed to them. When viewed holistically, the participants' answers provide a basic structure of understanding of why individuals hold certain expectations of an unfamiliar concept like government disaster assistance. The findings suggest disaster assistance expectations are formed using direct and non-direct experience combined with beliefs about roles and responsibility, influenced by the individuals' level of trust in the government's intent and capacity.

The purpose of this chapter is to consider the research findings within the context of the current disaster literature. Many of the findings support previous studies, although the data from this project provides more contextual evidence about what expectations individuals hold and why. The findings were grouped into five themes of experiences: perceived responsibilities, attributes of assistance, trust in government, and the role of government. Due to the complexity of the topic and the interrelated nature of the themes, this chapter is divided into three key discussion areas to synthesize the five themes. This

study's limitations are then provided, followed by suggestions for future research and implications for the practitioner community.

Discussion

Discussion Point 1: Expectations of government disaster assistance are a reflection of beliefs about roles and responsibilities.

In this study, participants expressed their expectations of government through a delineation of perceived responsibilities. For example, several participants said they expect the government to handle disaster-related infrastructure activities, while the individual is responsible for damage to private property. This demarcation worked for tangible, familiar concepts like fixing roads and removing debris; however, participants' expectations became murkier when an unfamiliar concept, like government disaster assistance, was introduced. This unfamiliarity is essential to understanding expectations of disasters generally and for government disaster assistance in particular.

Much of the relevant literature uses unfulfilled expectations to explain dissatisfaction with government activities after the disaster occurred (Schneider, 1992; Chamlee-Wright & Storr, 2010; Furlong and Scheberle, 1998; Bradley *et al.*, 2008). The expectations individuals express after a disaster are retrospective and a part of an iterative, collective sense-making process (Schneider, 1992, 2011). When an individual who has direct disaster experience says their expectations were not met, they are using new-found knowledge of the event and assistance rendered to themselves and others to form judgements of the current situation. They use tangible and immediate examples to

compare their beliefs about what should have occurred and what actually occurred (Schneider, 1992).

Expectations of unfamiliar events are different; they are amorphous and vague, with contradictions and half-formed ideas (Haith, 1997). This study found participants do not have fully formed expectations due to the unfamiliarity of both disasters and the government's role. For unfamiliar events like disasters, participants often said they were unsure or uncertain, and several said they were "thinking out loud" as they considered disaster assistance. This provided an opportunity to get a glimpse of how expectations were "put together" by the participants as we spoke. More often than not, expectations were formed by reaching back to familiar experiences and knowledge to make predictions about what a disaster would be like. For expectations of a non-familiar event, direct and vicarious experiences are central and relied upon more heavily. These experiences were used to form, verify, and justify beliefs about roles and responsibilities. Notably, participants used vicarious experiences of disasters – disasters they had seen on television – as a basis for their expectations. They used examples of other people's experiences during major events to articulate their beliefs and explain their reasoning. In this way, pre-disaster expectations are more a reflection of participants' beliefs about roles and responsibilities, influenced by their level of trust in government, than they are an expectation of what will actually occur.

Discussion Point 2: Expectations of government disaster assistance are modest.

The current literature indicates the existence of a gap between what individuals expect the government to provide during a disaster and what will realistically happen

(Kunreuther & White, 1994; Schneider, 2011; Kousky & Shabman, 2012; Michel-Kerjan & Volkman-Wise, 2011). This gap has raised alarm bells as a significant consideration from a budgetary, policy, and political standpoint (Moss, 1999; Platt, 1999; Sylves, 2008). However, this study revealed only modest expectations of government disaster assistance not significantly misaligned with current statutory or regulatory processes. Participants said they primarily expect the government at all levels to provide information to disaster survivors. They expect the government to repair infrastructure, clear debris, and provide emergency food and water. They also expect the government to help the needy, either financially or with goods, based on some kind of criteria to ensure fairness. For many participants, this fairness criteria should be income-based, with the majority of the assistance distributed to those most in need. They also expect government disaster assistance for individuals to be bureaucratic and cumbersome. When asked how much money they thought individuals receive from the government after a disaster, most participants gave amounts lower than the national average⁷. Almost all the activities the participants said they expect of the government are performed under the current structure of disaster management in the U.S. Overall, the participants in this study conveyed modest and low expectations of government disaster assistance, which are not out of sync with what the government offers. These low expectations seem to contradict the current literature and run contrary to Schneider's (2011) "expectation gap." How then, do we account for these findings?

 $^{^{7}}$ When asked, participants said they would guess FEMA offers between \$900 - \$25,000 to survivors who suffer damages from a major disaster.

It is possible the lower, more realistic expectations found in this study are different than the "outsized" expectations raised in other studies (Schneider, 1998; Michel-Kerjan & Volkman-Wise, 2011; Kousky & Shabman, 2012; Blanchard-Boehm, Berry & Showalter, 2000) due to the difference between pre-event and retrospective expectations, raised in discussion point one (above). Individuals are unfamiliar with both disasters and government disaster assistance, so their expectations are vague and not overly ambitious. Participants also expressed a great deal of realism about both the difficulties of providing disaster relief and the complexities of delivering financial assistance. This realism was evidenced by the distinction participants made between what *should* happen and what they believe *will* happen, rooted in their level of trust in government. Participants recognized the challenges of reaching inaccessible areas and delivering assistance fairly during a disaster, despite the efforts of disaster workers. Almost all of the participants spoke at length about the anticipated burdens of bureaucracy and the attendant frustration of working through the government assistance process. All of these concerns are realistic and bolstered by the recovery literature (Sterett, 2015; Rivera, 2016; Reinke and Eldridge, 2020; Reid, 2013; Bier, 2006; Emrich et al., 2020; Levine, Esnard & Sapat, 2007)

Another explanation for modest and low expectations expressed by the participants is the influence of media coverage of previous U.S. disasters. Almost all of the participants referenced Hurricane Katrina and, to a lesser degree Hurricanes Sandy and Maria, as reasons for their low expectations of government disaster assistance. The memories of watching these disasters unfold on television were tangible, evocative, and accessible for the participants. They were able to retrieve details of what they had

witnessed on television with alacrity; images of abandoned pets, deaths at the superdome, and "toxic trailers" were relayed by the majority of the participants. Although these were not direct, personal experiences, participants used the memories of watching these images on television as if they were. Miller, Roberts and LaPoe (2014) and Schneider (2014) suggest the importance of the media's imagery on the public in swaying public opinion. Schneider (2014) in particular references the vividness of disaster images and how they affect the population's collective sense making. My findings bolster these conclusions; the participants drew on these images – almost 15 years later – to express the reasons why they hold low expectations of the government during disasters.

The low expectations of disaster assistance could also be influenced by how the participants viewed themselves. This study's participants believed that they will not need or receive government disaster assistance and could handle a disaster through their own resources. For them, disaster assistance applies to other people and thinking about it was more a theoretical exercise rather than a realistic consideration. This kind of thinking is bolstered by Spittal *et al.* (2005) and Milch *et al.* (2018) who found individuals believe disasters happen to others, but not them (Meyer & Kunreuther, 2017; Trumbo, *et al.*, 2014; Weinstein *et al.*, 2000). Additionally, Kusenbach (2017) argues the way individuals perceive themselves – as resourceful and capable – affects their conceptualization of a hazard threat. Kaniasty and Norris (1999) found disaster survivors downplay their own experience in comparison to other, disaster-affected individuals. It is possible the participants expressed modest expectations due to their own optimistic beliefs about themselves (that they would be better off than others). This perception of self is combined with the participants' unfamiliarity with government disaster assistance

and their memories of disaster images on television, and the result is modest to low expectations.

Discussion Point 3: Perceived responsibilities of disaster functions are shared and interdependent.

A central theme of each participant interview was 'areas of responsibility.' While the focus of this study was on the government's responsibilities during disasters, participants also referred to other entities in their answers, like their homeowner's association (HOA) or landlord, their insurance carrier, the community, and non-profit organizations. These were often bundled together and conveyed as pieces of a jigsaw puzzle that would need to fit together to help them through a disaster experience. Nigg (1995) and others have studied this multi-pronged dimension of recovery extensively, showing government disaster assistance is often a small component of a diverse set of entities disaster survivors rely on to recover (Quarantelli, 1999; Tierney & Oliver-Smith, 2012; Phillips, 2009).

Additionally, several researchers have approached the concept of shared responsibility across multiple actors before, during, and after disasters (Box *et al.*, 2013; McLennan & Handmer, 2012; Eburn & Dovers, 2012). The participants of this study said the government, their HOA or landlord, their insurance carrier, the community, and non-profits would fulfill certain responsibilities during a disaster event. Importantly, several participants recognized these responsibilities as interdependent and reliant on each other. For example, participants knew they would rely on their insurance claim to financially recover from a disaster. Some participants would depend on their HOA or

landlord to rebuild their unit, which would also be dependent on insurance claims. Other participants recognized their community may rely on state or federal assistance in order to repair critical infrastructure or receive emergency supplies.

For these dependencies, several participants mentioned a temporal element.

Participants knew they would need to contact their insurance company *first* before they made other decisions. Participants expected government information would be available at the *same time* the participants sought it. The necessity of communicating with their HOA or landlord was often said as a top *priority* or a "first thing." This temporal dimension between the responsibilities is notable in that the dependent actions are decision-making actions. A person needs information before they can act; they need money before they decide what to buy. This makes these perceived responsibilities of other entities immediate and personal to the disaster survivor, even though they are largely outside the survivors' control.

Feeling dependent on other entities is frustrating for disaster survivors, especially for those – like the participants of this study – who believe themselves to be independent and resourceful (Kusenbach, 2017; Sterett, 2015; Rivera, 2016). It is possible this dependency could partially explain Schneider's (2011) expectation gap; survivors expect other actors to fulfill their responsibilities in order for the survivor to fulfill their own. If other entities do not fulfill their responsibilities in a timely way (or at all), the disaster survivor's recovery process is disrupted and prolonged resulting in dissatisfaction.

Insurance companies were heavily criticized after Hurricanes Katrina and Rita for slowing household recovery because of adjuster wait times (Eaton & Treaster, 2007; Davis & Land, 2007). Likewise, infrastructure repairs were necessary for household

recovery in Puerto Rico after Hurricane Maria and the anger toward the power companies erupted as the timeframe grew (DiJulio, Muñana, & Brodie, 2018). Media coverage abounds of community leaders saying they cannot complete certain disaster repairs because they are dependent on federal funding (examples: Moline, 2019; Gowen & Sellers, 2020).

For the disaster survivor who is dependent on the private sector, like insurance or power companies, or on the government take certain actions before they can make recovery decisions, this is especially frustrating (Rajua, Beckerb & Tehlerb, 2017; Sterett, 2015; Rivera, 2016). This dependency is in direct conflict with beliefs about oneself (as independent and resourceful), and could explain why individuals after a disaster say their expectations were unmet. The participants in this study expressed the importance of a strong, internal locus of control. If, for example, they had time to prepare for a disaster, then they could take care of themselves. If the disaster was unanticipated and/or catastrophic, then the responsibility for response and recovery lies with the government (or whomever was liable) and the participant would be – to some degree – dependent on others. Principally, participants expressed the underlying expectation that they will have to rely on other entities so they, as one participant said, "can make the decisions or do what I need to do on my end." This places expectations of government disaster assistance within the broader context of expectations across a number of entities, many of which have interdependences and shared responsibilities. This also illustrates the importance of the continued research about the multitude of organizations, companies, government offices, and social networks disaster survivors' must navigate throughout their recovery experience (Schneider, 2011; Edgeley &

Paveglio, 2017; Bolin, 1976; Comerio, 1998; Tierney, 2006; Tierney & Oliver-Smith, 2012; Arlikatti *et al.* 2010)

Limitations

The limitations of this study stem from the inherent limitations of both IPA and small sample sizes, as well as the design itself. IPA offers the opportunity to explore the participants' beliefs and experiences through a double hermeneutical approach; however, the researcher's interpretation is vulnerable to personal bias (Smith, 2011). I worked to overcome this through an ongoing process of bracketing my personal thoughts, ideas, and opinions throughout the data analysis procedures. I also strove for transparency through my positionality statement and a clear articulation of my processes, both in the methods section and in the appendices. I also included direct quotes from participants throughout my findings section to show how I arrived at certain conclusions. My findings are transferable since they provide insight into the overarching concept of expectations of government disaster assistance.

IPA requires small, homogenous sample sizes in order to conduct a deeper, rather than broader analysis. For this study, the sample size was appropriate for a phenomenological study (Creswell, 2007) and was sufficiently homogenous to provide shared experiences across the group. The sample was predominately Caucasian, middle-to-upper class, and geographically situated in relatively low-hazard states. The study's findings would no doubt be different had the sample composition been of different socio-economic level, ethnicity, and/or geographic location. This is especially important as a main finding of this study was the participants' belief in their own resourcefulness and

ability to handle a disaster. This was due to – in many of the participants' own words – their ability to draw on financial resources and their personal networks for support.

Additionally, had the participants lived in areas with frequent hazard threats or disasters, the responses and resulting findings would have been different.

Another limitation of this study was built into its design by asking participants to imagine an experience and giving their opinions about an anticipated future. As noted in the methods section, this design was not meant to predict behavior; instead, vignettes were used to tease out beliefs and experiences. Because disasters are so momentous to the individual, straightforward comparisons between what the participants believe would occur to what would actually happen are fraught with both operational and philosophical concerns. While I did not compare pre-versus-post disaster beliefs, I heavily draw on Schneider's (2008; 2011) work for context, which is situated in the post-disaster recovery space. I recognize the challenges of this conundrum, but they are not unique to this study. All research about pre-disaster behavior, including risk perception, preparedness, mitigation, and hazard adjustments, is future oriented. Additionally, numerous researchers have conducted future-thinking studies, explicitly asking participants what they expect or plan to do in the future (examples: Howard et al., 2017; Kang, Lindell & Prater, 2007; Blanchard-Boehm, Berry & Showalter, 2001; Lam et al., 2007; McNeill et al., 2013; Lindell & Whitney, 2000; Mulilis & Duval, 1997). Disaster researchers understand future thinking may not be "accurate" but are beneficial to understanding personal beliefs and decision-making. This study builds on previous future-oriented research by asking participants to anticipate their recovery actions in a fictional disaster

scenario, and in doing so, contributed to the ongoing academic discourse about recovery behavior.

Future Research

While this study discovered insights about the way participants conceptualize government disaster assistance, additional research is needed. Since this study unexpectedly found participants' had modest expectations of government disaster assistance, it is important to continue to explore Schneider's (2011) "expectation gap." The unexpected findings are an indicator of the complexity of the topic which would benefit from further investigation. Participants framed their expectations using perceived responsibilities across several interdependent entities, with government assistance as only one element of a larger whole. Future studies to explore the relationships across shared responsibilities in the pre- and post-disaster timeframes would be especially useful in understanding expectations of government. For example, individuals' may believe government and private sector disaster activities are closely aligned and coordinated, which skews their perception of how response and recovery operations unfold.

Since this study approached the topic using a phenomenological posture, the interview questions were broad to facilitate a holistic account of the participants' lived experiences. The study used the most general concepts of government disaster assistance to ensure nothing was unwittingly left out; however, additional research is needed with more specificity. Other researchers have explored perceived responsibility for particular hazards, like floods (Box *et al.*, 2013; Terpstra & Gutteling, 2008; Blanchard-Boehm, Berry & Showalter, 2001) and wildfire (McNeill *et al.*, 2013; Howard *et al.*, 2017). This

line of research would be valuable applied to other natural and human-induced hazards as well. The exploration of perceived responsibility is especially interesting when considering technological disasters (Miller, 2016; Hans, Nigg & D'Souza, 1994; Wachinger *et al.*, 2010; Slovic, 2013; Covello, 1989), since my participants indicated fault and blame were closely tied to perceived responsibility. Furthermore, investigation into the relationship between perceived responsibilities and expectations, both natural and human-induced hazards, and pre-and post-disaster behavior would be ideal. Evacuation, preparedness, and hazard adjustment behavior are all seemingly influenced by perceived roles and responsibilities (Paton, 2019; Lechowska, 2018; Lindell & Whitney, 2000; McNeill *et al.*, 2013), but more research is needed.

The element of unfamiliarity was central to this study; none of the participants had experience with applying or receiving government disaster assistance. Additional research exploring this element of unfamiliarity versus familiarity would be helpful, particularly in identifying how participants use their new-found knowledge to form and modify their expectations. A follow up study with participants who became familiar with government disaster assistance (similar to Rivera's (2016) study on Hurricane Sandy survivors) to gauge changes in their beliefs would be illuminating. Additionally, since this study's sample was primarily from one geographic region without a historically high number of disasters, it would be valuable to speak with participants in different geographic locations. Proximity and familiarity with both hazards and government activities have already been explored in other studies (Wachinger *et al.*, 2013; Paek *et al.*, 2010), but adding the additional dimensions of expectations and perceived responsibilities would further our overall understanding of this topic. For example, this

study could be augmented with disaster assistance employees, both public and non-profit, to explore and compare their perceptions of government disaster assistance.

One of the most intriguing elements of this study was the way participants retrieved and used memories of disaster images from media when answering questions. Additional research about media coverage during disasters and the effect of disaster images is always needed, but the influence of disaster images on perceptions of government is understudied. Researchers (Houston *et al.*, 2018; Parks & Walker, 2020; Jones *et al.*, 2016) have studied this topic to varying degrees, but it is worth more investigation especially as Schneider (2011) emphasizes the role disaster media images play in expectation development. The participants in this study used disaster images from media to formulate their opinions and bolster their beliefs, even when they had not experienced the disaster first-hand or had a personal connection to the incident.

Finally, it is worth exploring the concept of "experience" in our research designs. Many preparedness and mitigation studies appropriately use experience as a variable (Dillon, Tinsley & Burs, 2014; Wachinger *et al.*, 2013; DeYoung & Peters, 2016; Shaw *et al.*, 2004) and the link between experience and preparedness, mitigation, and risk perception is well-researched. However, this study showed individuals use vicarious experiences to anticipate the future; perhaps not in the same way as direct experiences, but enough for there to be a connection. It would be worthwhile to build on the work of Becker *et al.* (2017) to explore the way vicarious experiences – via friends, family, or the media – affect an individuals' pre-disaster decision-making.

Practical Implications

In the days leading up to Hurricane Dorian's landfall, former FEMA

Administrator Brock Long told a CBS reporter, "FEMA faces unrealistic expectations by

Congress and the American public" (Montoya-Galvez, 2019) which perfectly reflects the
practitioner's perspective of Schneider's (2011) "expectation gap." For many

practitioners, stakeholders do not understand the role of U.S. emergency management, its

processes and its legal authorities, and their expectations must be proactively managed.

A quick Google search of the phrase "manage expectations" provides dozens of disaster

planning documents from all levels of government (examples: National Governor's

Association, 2007; Snohomish County, 2016; FEMA, 2019; FEMA 2016;) encouraging

practitioners to educate the public about what the government will and will not do during
a disaster.

The intention of "managing expectations" is to bring outsized, unrealistic expectations into alignment with reality. Practitioners attempt to manage expectations through information campaigns and education about roles and responsibilities (Trainor & Stubbio, 2014). This practice is worthwhile and should be a part of any preparedness effort. Individuals, households, and communities must have a clear understanding of what government will do during a disaster, so they can prepare accordingly. Practitioners are right to believe the vast majority of the U.S. population (and perhaps Congress, too) misunderstands emergency management and every effort should be made to clarify roles, responsibilities, and processes (Trainor & Stubbio, 2014). If expectations are too high and, if those high expectations influence disaster decision-making, it is particularly important to lower them.

In this study, however, the participants expressed low expectations of government disaster assistance. They were pessimistic about its delivery and the amount of assistance available. In a few instances, participants said they expected activities beyond standard practice (like FEMA officials conducting wellness checks after a disaster), but overwhelmingly, the expectations were modest. It is possible my population sample deviates from the norm; however, it is more likely the participants are expressing opinions many others share. So, if expectations of government disaster assistance are already low, why do practitioners say we need to "manage" them?

I believe when disaster survivors say their expectations are not met, they are expressing dissatisfaction with the system in general and the assistance in particular. The problem facing practitioners is not that individuals have unrealistic expectations of government disaster assistance; the problem is with the delivery of government disaster assistance itself. The "expectation gap" is not a gap in expectations; it is simply a different name for disappointment with the disaster assistance experience. Federal government disaster assistance can be complicated to navigate in and of itself; when it is combined with state disaster assistance programs, the layers of bureaucracy, the required paperwork, the numerous deadlines, and the uncertainty of outcomes becomes overwhelmingly burdensome.

Fundamentally, the phrase "manage expectations" puts the onus on the disaster survivor to understand the U.S. emergency management system and the intricacies of government assistance programs. I would caution the phrase allows practitioners to abdicate their responsibility to provide meaningful, effective disaster assistance by shifting the responsibility to the survivor for fully understanding bureaucratic processes.

In its darkest interpretation, "managing expectations" is code for suggesting that the survivor's dissatisfaction is unrealistic, irrational, and not to be taken seriously.

Survivors want "too much," so their expectations of what the government will provide is outsized and dismissible.

Our focus as practitioners should be the creation and delivery of assistance programs that fit the needs of disaster survivors, rather than expecting the survivors' experience conform to our programs. Right now, survivors are expected to navigate multiple government programs concurrently and make significant decisions about their future amid personal loss. I have never met a practitioner who does not want to see changes to our current processes and improve the survivor experience. Those who devote their livelihoods to government disaster assistance programs are keenly aware of its shortfalls but are hampered by legacy decisions as well as regulatory and statutory parameters. The primary federal government disaster assistance programs – from FEMA, SBA, and CDBG-DR – are governed by separate organizations and agencies, all of which have their own Congressional appropriators, authorizers, and political appointees. In an ideal world, these agencies would provide a synchronized, whole-of-government assistance platform that allows for seamless, easy-to-navigate support for survivors. However, transitioning from the status quo of program-specific assistance to a holistic assistance process will take a considerable paradigm shift and substantial political will. An integrated, whole-of-government approach should be our aspiration but, in the meantime, practitioners should seek out every opportunity to improve and simplify their programs. Further, consideration towards the shared responsibilities across the government, private sector, non-profit organizations, and the individual should be

paramount when delivering assistance, since the survivor is dependent on numerous actors – not just the government – to make recovery decisions.

Conclusion

The purpose of this study was to explore individuals' expectations of government disaster assistance. Using a phenomenological approach, I interviewed 24 participants who were unfamiliar with government disaster assistance and asked them questions about their experiences and beliefs using fictional vignettes. I found participants expect the government to provide disaster assistance to those in need, especially to individuals with low-income. Participants expect the assistance to be overly bureaucratic, but recognize certain bureaucratic procedures are necessary for a fair distribution. When exploring why participants held these expectations, I found that expectations are formed using direct and vicarious experiences, as well as perceived responsibility. Participants rely on their beliefs about the role of government and their level of trust in government to make judgements about what the government will do and should do during a disaster event.

My findings generally support the current disaster literature; however, there were unexpected insights. The participants' expectations of an unfamiliar concept like government disaster assistance were based primarily on perceived responsibilities and vicarious experiences. The expectations conveyed were generally modest and not out of sync with current governmental processes. The participants' expectations were also interwoven with the anticipation of shared responsibilities across a number of actors. These insights pave the way for additional studies about perceived and shared responsibility, as well as how unfamiliarity shapes pre-disaster behavior. This study's

results can be used to further explore government assistance and household behavior to enhance our understanding of the role expectations play in decision-making before, during, and after disasters.

REFERENCES

- Achen, C. H., & Bartels, L. M. (2004). Blind retrospection: Electoral responses to drought, flu, and shark attacks. Center for Advanced Study in the Social Sciences, Juan March Institute, *Working paper*, Retrieved November 8, 2017. http://www.ethz.ch/content/dam/ethz/special-interest/gess/cis/international-relations-dam/Teaching/pwgrundlagenopenaccess/Weitere/AchenBartels.pdf
- Adger, N., Quinn, T., Lorenzoni, I., Murphy, C., & Sweeney, J. (2013). Changing social contracts in climate-change adaptation. *Nature Climate Change*, *3*(4), 330-333.
- Adler, P. S., & Kwon, S. W. (2002). Social capital: Prospects for a new concept. *Academy of management review*, 27(1), 17-40.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Alase, A. (2017). The Interpretative Phenomenological Analysis (IPA): A Guide to a Good Qualitative Research Approach. *International Journal of Education and Literacy Studies*, 5(2), 9-19.
- Aldrich, D. P. (2012). Social capital in post disaster recovery: towards a resilient and compassionate East Asian community. *Economic and welfare impacts of disasters in East Asia and policy responses*, 157-178.
- Aldrich, D. P., & Meyer, M. A. (2015). Social capital and community resilience. *American behavioral scientist*, 59(2), 254-269.
- Allen-Collinson, J., Owton, H., & Crust, L. (2016). Opening up dialogues and airways: using vignettes to enrich asthma understandings in sport and exercise. *Qualitative Research in Sport, Exercise and Health*, 8(4), 352-364.
- Anagondahalli, D., & Turner, M. M. (2012). Predicting Psychological Ripple Effects: The Role of Cultural Identity, In-Group/Out-Group Identification, and Attributions of Blame in Crisis Communication. *Risk Analysis*, *32*(4), 695-712.

- Anderson, R. E. (1973). Consumer dissatisfaction: The effect of disconfirmed expectancy on perceived product performance. *Journal of marketing research*, 38-44.
- Andrews, T. (2012). What is social constructionism? *Grounded theory review*, 11(1), 39-46.
- Arceneaux, K., & Stein, R. M. (2006). Who is held responsible when disaster strikes? The attribution of responsibility for a natural disaster in an urban election. *Journal of Urban Affairs*, 28(1), 43-53.
- Arlikatti, S., Peacock, W. G., Prater, C. S., Grover, H., & Sekar, A. S. G. (2010). Assessing the impact of the Indian Ocean tsunami on households: a modified domestic assets index approach. *Disasters*, *34*(3), 705-731.
- Ausbrooks, C. Y. B., Barrett, E. J., & Martinez-Cosio, M. (2009). Ethical issues in disaster research: Lessons from Hurricane Katrina. *Population Research and Policy Review*, 28(1), 93-106.
- Avery, E. J., & Lariscy, R. W. (2010). FEMA and the rhetoric of redemption: New directions in crisis communication models for government agencies. *The handbook of crisis communication*, 319-334.
- Baker, S. E., Edwards, R., & Doidge, M. (2012). How many qualitative interviews is enough?: Expert voices and early career reflections on sampling and cases in qualitative research. *National Centre for Research Methods Review Paper*, UK Economic and Social Research Center.
- Barnett, B. J. (1999). US government natural disaster assistance: Historical analysis and a proposal for the future. *Disasters*, 23(2), 139-155.
- Barter, C., & Renold, E. (1999). The use of vignettes in qualitative research. *Social research update*, 25(9), 1-6.
- Barton, A. H. (1969). *Communities in disaster: A sociological analysis of collective stress situations* (Vol. 721). Garden City, NY: Doubleday.
- Basolo, V., Steinberg, L. J., Burby, R. J., Levine, J., Cruz, A. M., & Huang, C. (2009). The effects of confidence in government and information on perceived and actual preparedness for disasters. *Environment and Behavior*, 41(3), 338-364.
- Becker, J. S., Paton, D., Johnston, D. M., Ronan, K. R., & McClure, J. (2017). The role of prior experience in informing and motivating earthquake preparedness. *International journal of disaster risk reduction*, 22, 179-193.

- Becker, J.S., Paton, D., Johnston, D.M., & Ronan, K. R. (2014). Societal Influences on Earthquake Information Meaning-Making and Household Preparedness. *International Journal of Mass Emergencies & Disasters*, 32(2).
- Beggs, J. J., Haines, V. A., & Hurlbert, J. S. (1996). Situational contingencies surrounding the receipt of informal support. *Social forces*, 75(1), 201-222.
- Berg, B. L., & Lune, H. (2012). *Qualitative research methods for the social sciences*. Boston: Pearson Education.
- Berke, P. R., Kartez, J., & Wenger, D. (1993). Recovery after disaster: achieving sustainable development, mitigation and equity. *Disasters*, 17(2), 93-109.
- Bier, V. (2006). Hurricane Katrina as a bureaucratic nightmare. In D. Kettle (Eds), *On risk and disaster: Lessons from Hurricane Katrina*, 243-254. University of Pennsylvania Press.
- Bier, V. (2006). Hurricane Katrina as a bureaucratic nightmare. *On risk and disaster:* Lessons from Hurricane Katrina, 243-254.
- Birkland, T. A. (2006). Lessons of disaster: Policy change after catastrophic events. Georgetown University Press.
- Blaikie, P., Cannon, T., Davis, I., & Wisner, B. (2014). *At risk: natural hazards, people's vulnerability and disasters*. Routledge.
- Blanchard-Boehm, R. D., Berry, K. A., & Showalter, P. S. (2000). Should flood insurance be mandatory? Insights in the wake of the 1997 New Year's Day flood in Reno–Sparks, Nevada. *Applied Geography*, 21(3), 199-221.
- Bloomberg, L. D., & Volpe, M. (2012). Completing your qualitative dissertation: A road map from beginning to end. Sage Publications.
- Boin, A. and 't Hart, P. (2007). The crisis approach. *Handbook of Disaster Research*. New York: Springer, 43-54.
- Bolin, R. (1985). Disasters and long-term recovery policy: a focus on housing and families. *Review of Policy Research*, 4(4), 709-715.
- Bolin, R. C. (1986). Disaster impact and recovery: A comparison of black and white victims. *International journal of mass emergencies and disasters*, 4(1), 35-50.

- Bolin, R., & Stanford, L. (1999). Constructing vulnerability in the first world In A. Oliver-Smith & SM Hoffman. *The Angry Earth: Disaster in anthropological perspective*, 89-112.
- Boomgaarden, H. G., Van Spanje, J., Vliegenthart, R., & De Vreese, C. H. (2011). Covering the crisis: Media coverage of the economic crisis and citizens' economic expectations. *Acta Politica*, 46(4), 353-379.
- Booth, W. C., Colomb, G. G., & Williams, J. M. (2003). *The craft of research*. University of Chicago press.
- Box, P., Bird, D., Haynes, K., & King, D. (2016). Shared responsibility and social vulnerability in the 2011 Brisbane flood. *Natural hazards*, 81(3), 1549-1568.
- Box, P., Thomalla, F., & Van den Honert, R. (2013). Flood risk in Australia: whose responsibility is it, anyway? *Water*, *5*(4), 1580-1597.
- Boyd, E. (2011). Community Development Block Grant Funds in Disaster Relief and Recovery. *Congressional Research Service*, Report RL33330.
- Bradley, L. A., & Forgue, R. E. (2008). Unfulfilled Expectations: Hurricane Survivors' Views of the Road Home Program. *Presentation paper at the Eastern Family Economics and Resource Management Association 2008 Conference*. Retrieved November 8, 2017.

 http://www.fermascholar.org/wpcontent/uploads/2013/06/unfulfilled_expectations_bradle_y.pdf
- Brooks, S. K., Dunn, R., Sage, C. A., Amlôt, R., Greenberg, N., & Rubin, G. J. (2015). Risk and resilience factors affecting the psychological wellbeing of individuals deployed in humanitarian relief roles after a disaster. *Journal of Mental Health*, 24(6), 385-413.
- Brown, B. S. (1977). Political psychiatry: A post-Watergate perspective on 'The Revolution of Falling Expectations'." *Journal of Health Politics, Policy and Law*, 1,398-404.
- Brown, N. (2018). Special Report: In Puerto Rico, a housing crisis U.S. storm aid won't solve. *Reuters* news service, Business news. Retrieved from the internet January, 2019: https://www.reuters.com/article/us-usa-puertorico-housing-specialreport/special-report-in-puerto-rico-a-housing-crisis-u-s-storm-aid-wont-solve-idUSKBN1FQ211
- Bucher, R. (1957). Blame and hostility in disaster. *American Journal of Sociology*, 62(5), 467-475.

- Burby, R. J. (2006). Hurricane Katrina and the paradoxes of government disaster policy: Bringing about wise governmental decisions for hazardous areas. *The Annals of the American Academy of Political and Social Science*, 604(1), 171-191.
- Busemeyer, J. R., & Stout, J. C. (2002). A contribution of cognitive decision models to clinical assessment: Decomposing performance on the Bechara gambling task. *Psychological Assessment*, *14*, 253–262.
- Calder, C. (2016). How much money can you expect from FEMA? Disaster grants sure to disappoint, analysis finds. *The Advocate, August 18*. Retrieved from the internet September, 2020:

 https://www.theadvocate.com/louisiana_flood_2016/article_22c86fe0-64cd-11e6-9bb2-07f95d36ee28.html
- Cameron, L., & Shah, M. (2015). Risk-taking behavior in the wake of natural disasters. *Journal of Human Resources*, 50(2), 484-515.
- Cardozo, R. N. (1965). An experimental study of customer effort, expectation, and satisfaction. *Journal of marketing research*, 244-249.
- Carpini, M. X. D. (1999). In Search of the Information Citizen: What Americans Know About Politics and Why It Matters. *Annenberg School for Communication Departmental Papers*.
- Carpini, M. X. D., & Keeter, S. (1996). What Americans know about politics and why it matters. Yale University Press.
- Chamlee-Wright, E., & Storr, V. H. (2010). Expectations of government's response to disaster. *Public Choice*, 144(1), 253-274.
- Chamlee-Wright, E., & Storr, V. H. (2011). Social capital as collective narratives and post-disaster community recovery. *The sociological review*, *59*(2), 266-282.
- Chanley, V. A., Rudolph, T. J., & Rahn, W. M. (2000). The origins and consequences of public trust in government: A time series analysis. *Public opinion quarterly*, 64(3), 239-256.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructionist methods. In *The Handbook of Qualitative Research*. Edited by N. K. Denzin and Y. Lincoln. Thousand Oaks, CA: Sage Publications, Inc.

- Charney, R. L., Rebmann, T., Dalawari, P., & Endrizal, A. (2016). Public expectations of hospitals to provide resources and services to the uninjured during disasters: a qualitative study. *Health security*, *14*(6), 389-396.
- Charney, R. L., Rebmann, T., Endrizal, A., & Dalawari, P. (2017). The General Public's Attitudes and Beliefs Regarding Resource Management, Collaboration, and Community Assistance Centers During Disasters. *Disaster Medicine and Public Health Preparedness*, 1-4.
- Christensen, T., & Lægreid, P. (2005). Trust in government: The relative importance of service satisfaction, political factors, and demography. *Public Performance & Management Review*, 28(4), 487-511.
- Clement, S., Zezima, K. & Guskin, E. (2018). Puerto Rico After Maria: Residents see a failure at all levels of government. *Washington Post*, September 12, 2018. Retrieved from the internet September, 2020: https://www.washingtonpost.com/news/national/wp/2018/09/12/feature/residents-see-a-failure-at-all-levels-of-government/
- Clukey, L. (2010). Transformative experiences for Hurricanes Katrina and Rita disaster volunteers. *Disasters*, *34*(3), 644-656.
- Coffey, A., & Atkinson, P. (1996). *Making sense of qualitative data: complementary research strategies*. Sage Publications, Inc.
- Comerio, M. C. (1998). *Disaster hits home: New policy for urban housing recovery*. University of California Press.
- Conrad, P. (1987). The experience of illness: recent and new directions. *Research in the Sociology of Health Care 6*, 1-31.
- Cook, T. E., & Gronke, P. (2005). The skeptical American: Revisiting the meanings of trust in government and confidence in institutions. *Journal of Politics*, 67(3), 784-803.
- Cope, J. (2005). Researching entrepreneurship through phenomenological inquiry: Philosophical and methodological issues. *International Small Business Journal*, 23(2), 163-189.
- Covello, V. T. (1989). Communicating right-to-know information on chemical risks. *Environmental science & technology*, 23(12), 1444-1449.

- Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed methods approaches (2nd ed). Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Dahlberg, K. (2006). The essence of essences—the search for meaning structures in phenomenological analysis of lifeworld phenomena. *International journal of qualitative studies on health and well-being*, *1*(1), 11-19.
- Danziger, S., & Danziger, S. K. (2006). Poverty, race, and antipoverty policy before and after hurricane katrina. *Du Bois Review: Social Science Research on Race*, *3*(1), 23-36.
- Darr, J. P., Cate, S.D. & Moak, D.S. (2018). Who'll Stop the Rain? Repeated Disasters and Attitudes Towards Government. *Social Science Quarterly*, forthcoming.
- Dash, N., & Gladwin, H. (2007). Evacuation decision making and behavioral responses: Individual and household. *Natural Hazards Review*, 8(3), 69-77.
- Dauber, M. L. (2013). The sympathetic state: Disaster relief and the origins of the American welfare state. University of Chicago Press.
- Davis, L. A. (2005). A phenomenological study of patient expectations concerning nursing care. *Holistic Nursing Practice*, *19*(3), 126-133.
- Davis, O. A., & Land, M. (2007). Southern women survivors speak about Hurricane Katrina, the children and the what needs to happen next. *Race, Gender & Class*, 69-86.
- De Boer, M., van der Hulst, R., & Slatman, J. (2015). The surprise of a breast reconstruction: A longitudinal phenomenological study to women's expectations about reconstructive surgery. *Human Studies*, 38(3), 409-430.
- De Soir, E., Knarren, M., Zech, E., Mylle, J., Kleber, R., & van der Hart, O. (2012). A phenomenological analysis of disaster-related experiences in fire and emergency medical services personnel. *Prehospital and disaster medicine*, 27(2), 115-122.
- Dennett, D. C. (1991). *Consciousness explained*. New York, NY, US: Little, Brown and Co.

- Denovan, A., & Macaskill, A. (2013). An interpretative phenomenological analysis of stress and coping in first year undergraduates. *British Educational Research Journal*, *39*(6), 1002-1024.
- Denzin, N. K., & Lincoln, Y. (2000). Qualitative research. Thousand Oaks, CA.
- DeYoung, S. E., & Peters, M. (2016). My community, my preparedness: The role of sense of place, community, and confidence in government in disaster readiness. *International Journal of Mass Emergencies & Disasters*, 34(2).
- DiJulio, B., Muñana, C., & Brodie, M. (2018). Views and Experiences of Puerto Ricans One Year After Hurricane Maria. *Henry J. Kaiser Family Foundation* (2018/September). California, Retrieved from the internet May, 2020: www.scielo.org.co/pdf/apl/v32n1/v32n1a04.pdf.
- Dillon, R. L., Tinsley, C. H., & Burns, W. J. (2014). Near-misses and future disaster preparedness. *Risk analysis*, *34*(10), 1907-1922.
- Donahue, A. K., Eckel, C. C., & Wilson, R. K. (2014). Ready or Not? How Citizens and Public Officials Perceive Risk and Preparedness. *The American Review of Public Administration*, 44(4 suppl), 89S–111S.
- Dooley, D., R. Catalano, S. Mishra, and S. Serxner. (1992). Earthquake preparedness: Predictors in a community survey. *Journal of Applied Social Psychology*, 22, 451-470.
- Dynes, R. R. (1999). The dialogue between Voltaire and Rousseau on the Lisbon earthquake: The emergence of a social science view. *Disaster Research Center*, preliminary paper #293.
- Dynes, R. R., & Quarantelli, E. L. (1968). Patterns of looting and property norms:

 Conflict and consensus in community emergencies. *The Ohio University Disaster Research Center*, Paper presented at the 1968 Annual Meeting of the American Sociological Association at Boston, Massachusetts.
- Dynes, R. R., & Tierney, K. (1994). *Collective Behavior, and Societal Organization*. Associated University Presses, Cranbury, London.
- Eaton, L. & Treaster, J.B. (2007). Insurance woes for Hurricane Katrina victims. *New York Times*, International Business section, September 2, 2007.
- Eatough, V. & Smith, J. (2017). Interpretive Phenomenological Analysis. In C. Willig & W.S. Rogers (Eds.) *The SAGE Handbook of Qualitative Research in Psychology*, 2nd Edition. Sage.

- Eburn, M., & Dovers, S. (2012). Sharing responsibility with governments and their agencies. *International Association of Wildland Fire*, Proceedings of 3rd Human Dimensions of Wildland Fire, April 17 19, 2012, Seattle, Washington, USA.
- Edgeley, C. M., & Paveglio, T. B. (2017). Community recovery and assistance following large wildfires: The case of the Carlton Complex Fire. *International journal of disaster risk reduction*, 25, 137-146.
- Edwards, W. (1954). The theory of decision making. *Psychological bulletin*, 51(4), 380.
- Eisenman, D. P., Williams, M. V., Glik, D., Long, A., Plough, A. L., & Ong, M. (2012). The public health disaster trust scale: validation of a brief measure. *Journal of public health management and practice*, 18(4), E11-E18.
- Eiser, J. R., Bostrom, A., Burton, I., Johnston, D. M., McClure, J., Paton, D., ... & White, M. P. (2012). Risk interpretation and action: A conceptual framework for responses to natural hazards. *International Journal of Disaster Risk Reduction*, 1, 5-16.
- Elliott, J. R., Haney, T. J., & Sams-Abiodun, P. (2010). Limits to social capital: Comparing network assistance in two New Orleans neighborhoods devastated by Hurricane Katrina. *The Sociological Quarterly*, *51*(4), 624-648.
- Emrich, C. T., Tate, E., Larson, S. E., & Zhou, Y. (2020). Measuring social equity in flood recovery funding. *Environmental Hazards*, 19(3), 228-250.
- Enarson, E., & Morrow, B. H. (1998). The gendered terrain of disaster. Westport, CT.
- Ewart, J., & McLean, H. (2015). Ducking for cover in the 'blame game': news framing of the findings of two reports into the 2010–11 Queensland floods. *Disasters*, 39(1), 166-184.
- FEMA. (2005). Help After a Disaster: An Applicant's Guide to the Individuals & Households Program. *FEMA.gov website publication*. Retrieved from the internet September, 2020: https://www.fema.gov/individual-disaster-assistance
- FEMA. (2010). Notice of Maximum Amount of Assistance Under the Individuals and Households Program. Federal Register Notice, 84 FR 55323, p. 55323-55324. Retrieved from the internet August, 2020:

 https://www.federalregister.gov/documents/2019/10/16/2019-22471/notice-of-maximum-amount-of-assistance-under-the-individuals-and-households-program
- FEMA. (2016). National Disaster Recovery Framework. *FEMA publications*. Retrieved from the internet May, 2020: www.fema.gov.

- FEMA. (2017). National Flood Insurance Program: Flood Insurance Requirements for Recipients of federal disaster assistance. FEMA publication F-695. Retrieved from the internet September, 2020: https://www.fema.gov/sites/default/files/2020-05/FloodInsuranceRequirements-080119.pdf.
- FEMA. (2019). Individual Assistance Program and Policy Guide. *FEMA policy guides*, FP 104-009-03. Retrieved from the internet September, 2020: https://www.fema.gov/assistance/individual/program-policy-guide
- FEMA. (2019). Pre-Disaster Recovery Planning Guide for Tribal Governments. *FEMA publication*, FP 104-008-02. Retrieved from the internet May, 2020: www.fema.gov
- FEMA. (2020). Individual Disaster Assistance. *FEMA.gov website*. Retrieved from the internet September, 2020: https://www.fema.gov/individual-disaster-assistance
- Filtenborg, A. F., Gaardboe, F., & Sigsgaard-Rasmussen, J. (2017). Experimental replication: an experimental test of the expectancy disconfirmation theory of citizen satisfaction. *Public Management Review*, 1-16.
- Filtenborg, A. F., Gaardboe, F., & Sigsgaard-Rasmussen, J. (2017). Experimental replication: an experimental test of the expectancy disconfirmation theory of citizen satisfaction. *Public Management Review*, 19(9), 1235-1250.
- Finch, C., Emrich, C. T., & Cutter, S. L. (2010). Disaster disparities and differential recovery in New Orleans. *Population and environment*, *31*(4), 179-202.
- Finch, J. (1987). The vignette technique in survey research. Sociology, 21(1), 105-114.
- Finlay, L. (2008). A dance between the reduction and reflexivity: Explicating the "phenomenological psychological attitude". *Journal of phenomenological psychology*, 39(1), 1-32.
- Finlay, L. (2009). Ambiguous encounters: A relational approach to phenomenological research. *Indo-Pacific journal of phenomenology*, *9*(1), 1-17.
- Finlay, L. (2011). *Phenomenology for therapists: Researching the lived world.* John Wiley & Sons.
- Fischer, H. W., & Harr, V. J. (1994). Emergency operating center response to media blame assignation: A case study of an emergent EOC. *Disaster Prevention and Management: An International Journal*, *3*(3), 7-17.

- Fishbein, M., & Raven, B. H. (1962). The AB scales: An operational definition of belief and attitude. *Human relations*, 15(1), 35-44.
- Floyd, D. L., Prentice-Dunn, S., & Rogers, R. W. (2000). A meta-analysis of research on protection motivation theory. *Journal of applied social psychology*, *30*(2), 407-429.
- Fong, K., Wright, R. A., & Wimer, C. (2016). The cost of free assistance: Why low-income individuals do not access food pantries. *J. Soc. & Soc. Welfare*, 43, 71.
- Fothergill, A. (2003). The stigma of charity: Gender, class, and disaster assistance. *The Sociological Quarterly*, 44(4), 659-680.
- Fothergill, A. (2012). Heads above water: gender, class, and family in the grand forks flood. SUNY Press.
- Fothergill, A., Maestas, E. G., & Darlington, J. D. (1999). Race, ethnicity and disasters in the United States: A review of the literature. *Disasters*, 23(2), 156-173.
- Freudenburg, W. R. (1993). Risk and recreancy: Weber, the division of labor, and the rationality of risk perceptions. *Social forces*, 71(4), 909-932.
- Friese, S. (2019). Qualitative data analysis with ATLAS. ti. SAGE Publications Limited.
- Furlong, S. R., & Scheberle, D. (1998). Earthquake Recovery: Gaps between norms of disaster agencies and expectations of small businesses. *The American Review of Public Administration*, 28(4), 367-389.
- GAO. (2020). Small Business Administration Disaster Loan Processing Was Timelier, but Planning Improvements and Pilot Program Evaluation Needed. *Report to Congressional Committees*, Report GAO-20-168.
- Gasper, J. T. and Reeves, A. (2011). Make it Rain? Retrospection and the Attentive Electorate in the Context of Natural Disasters. *American Journal of Political Science*, 55 (2), 340-355.
- Gephart, R. P. (1993). The textual approach: Risk and blame in disaster sensemaking. *Academy of Management Journal*, *36*(6), 1465-1514.
- Gibbins, J., & Thomson, A. M. (2001). Women's expectations and experiences of childbirth. *Midwifery*, 17(4), 302-313.
- Gillespie, D. F., & Perry, R. W. (1976). An integrated systems and emergent norm approach to mass emergencies. *Mass Emergencies*, *1*(4), 303-312.

- Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of phenomenological psychology*, 28(2), 235-260.
- Giorgi, A. (2009). The descriptive phenomenological method in psychology: A modified Husserlian approach. Duquesne University Press.
- GLO. (2020). CDBG-DR Overview. *Texas General Land Office, Community Development & Revitalization website*. Retrieved from the internet September, 2020: https://recovery.texas.gov/local-government/resources/overview/index.html
- Goldstein, Z. (2019). New data: Why 800,000 applicants were denied federal disaster assistance loans. *The Center for Public Integrity*. Retrieved from the internet September, 2020: https://publicintegrity.org/environment/new-data-reveals-why-800000-applicants-were-denied-federal-disaster-assistance-loans/
- Gorden, R. L. (1998). Basic interviewing skills. Waveland Press.
- Gowen, A. & Sellers, F.S. (2020). 'Iowa's Katrina': Help is slow to come for storm-battered state, local officials and residents say. The Washington Post, August 17. Retrieved from the internet September, 2020:

 https://www.washingtonpost.com/national/iowas-katrina-help-is-slow-to-come-for-storm-battered-state/2020/08/17/4eac3574-e002-11ea-8181-606e603bb1c4_story.html
- Groenewald, T. (2004). A phenomenological research design illustrated. *International journal of qualitative methods*, *3*(1), 42-55.
- Grothmann, T., & Reusswig, F. (2006). People at risk of flooding: why some residents take precautionary action while others do not. *Natural hazards*, 38(1-2), 101-120.
- Grube, L. E., Fike, R., & Storr, V. H. (2018). Navigating disaster: An empirical study of federal assistance following hurricane sandy. *Eastern Economic Journal*, 44(4), 576-593.
- Guba, E. G., & Lincoln, Y. S. (1981). Effective evaluation: Improving the usefulness of evaluation results through responsive and naturalistic approaches. Jossey-Bass.
- Guion, D. T., Scammon, D. L., & Borders, A. L. (2007). Weathering the storm: A social marketing perspective on disaster preparedness and response with lessons from Hurricane Katrina. *Journal of Public Policy & Marketing*, 26(1), 20-32.

- Haith, M. M. (1997). The development of future thinking as essential for the emergence of skill in planning. *The developmental psychology of planning: Why, how, and when do we plan*, 25-42.
- Hammersley, M. (2005). *Taking sides in social research: Essays on partisanship and bias*. Routledge.
- Hamnes, B., Hauge, M. I., Kjeken, I., & Hagen, K. B. (2011). 'I have come here to learn how to cope with my illness, not to be cured': A Qualitative Study of Patient Expectations Prior to a One-Week Self-Management Programme.

 Musculoskeletal Care, 9(4), 200-210.
- Han, Z., Hu, X., & Nigg, J. (2011). How does disaster relief works affect the trust in local government? A study of the Wenchuan earthquake. *Risk, Hazards & Crisis in Public Policy*, 2(4), 1-20.
- Hans, V. P., Nigg, J. M., & D'Souza, M. J. (1994). Contextual Effects on Responsibility Judgments. *University of Delaware Disaster Research Center*, Preliminary Paper #218.
- Hardin, R. (2006). The street-level epistemology of trust. *Organizational trust: A reader*, 21-47.
- Hart, C. (1998). *Doing a literature review: Releasing the social science research imagination*. Thousand Oaks, CA: Sage Publications.
- Hawkins, R. L., & Maurer, K. (2010). Bonding, bridging and linking: How social capital operated in New Orleans following Hurricane Katrina. *British Journal of Social Work*, 40(6), 1777-1793.
- Hayles, C. S. (2010). An examination of decision making in post disaster housing reconstruction. *International Journal of Disaster Resilience in the Built Environment*, *I*(1), 103-122.
- Healy, A., & Malhotra, N. (2009). Myopic voters and natural disaster policy. *American Political Science Review*, 103(3), 387-406.
- Hearns, A., & Deeny, P. (2007). The value of support for aid workers in complex emergencies: a phenomenological study. *Disaster Management & Response*, 5(2), 28-35.
- Hecker, E. J., Irwin, W., Cottrell, D., & Bruzewicz, A. (2000). Strategies for improving response and recovery in the future. *Natural Hazards Review*, 1(3), 161-170.

- Hefferon, K., & Gil-Rodriguez, E. (2011). Interpretative phenomenological analysis. *The Psychologist*, 24(10), 756–759.
- Heideggar, M. (1962). *Being and Time*. (J. Macquarrie & E. Robinson, trans.). Oxford: Basil Blackwell.
- Heidegger, M. (1968). What is called thinking (F.D. Wieck & J.G. Gray, trans.). New York, Evanston and London: Harper and Row.
- Hickcox, D.H. (1994). The great flood of 1993. Focus, 44(1)1, 27.
- Hoffrage, U., Hertwig, R., & Gigerenzer, G. (2000). Hindsight bias: A by-product of knowledge updating? *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 26(3), 566.
- Hooks, J. P., & Miller, T. B. (2006). The continuing storm: How disaster recovery excludes those most in need. *Cal. WL Rev.*, 43, 21.
- Horlick-Jones, T. (1995). Modern disasters as outrage and betrayal. *International Journal of Mass Emergencies and Disasters*, 13(3), 305-315.
- Horn, D.P. & Webel, B. (2019). Introduction to the National Flood Insurance Program (NFIP). *Congressional Research Service*, Report R44593.
- Horsley, J. S., Liu, B. F., & Levenshus, A. B. (2010). Comparisons of US government communication practices: Expanding the government communication decision wheel. *Communication Theory*, 20(3), 269-295.
- Houston, J. B., Spialek, M. L., & First, J. (2018). Disaster media effects: A systematic review and synthesis based on the differential susceptibility to media effects model. *Journal of Communication*, 68(4), 734-757.
- Howard, A., Blakemore, T., & Bevis, M. (2017). Older people as assets in disaster preparedness, response and recovery: lessons from regional Australia. *Ageing & Society*, *37*(3), 517-536.
- Hrostowski, S., & Rehner, T. (2012). Five years later: Resiliency among older adult survivors of Hurricane Katrina. *Journal of gerontological social work*, 55(4), 337-351.
- Humbert, T. K., Engleman, K., & Miller, C. E. (2014). Exploring women's expectations of recovery from intimate partner violence: a phenomenological study. *Occupational Therapy in Mental Health*, *30*(4), 358-380.

- Hurlbert, J. S., Haines, V. A., & Beggs, J. J. (2000). Core networks and tie activation: What kinds of routine networks allocate resources in non-routine situations?. *American Sociological Review*, 598-618.
- Hutt, C. H., Scott, J., & King, M. (1983). A phenomenological study of supervisees' positive and negative experiences in supervision. *Psychotherapy: Theory, Research & Practice*, 20(1), 118.
- Hycner, R. H. (1999). Some guidelines for the phenomenological analysis of interview data. In A. Bryman & R. G. Bergess (Eds.), *Qualitative Research*, (3) 143-164. London: Sage.
- Ingram, J. C., Franco, G., Rumbaitis-del Rio, C., & Khazai, B. (2006). Post-disaster recovery dilemmas: challenges in balancing short-term and long-term needs for vulnerability reduction. *Environmental Science & Policy*, 9(7-8), 607-613.
- Insurance Information Institute. (2019). Facts + Statistics: Flood insurance. *III Institute*National Flood Insurance Program website. Retrieved from the internet

 September, 2020: https://www.iii.org/fact-statistic/facts-statistics-flood-insurance
- James, O. (2011). Managing citizen's expectations of public service performance: Evidence from observation and experimentation in local government. *Public Administration*, 89(4), 1419-1435.
- Janzen, J. A., Silvius, J., Jacobs, S., Slaughter, S., Dalziel, W., & Drummond, N. (2006). What is a health expectation? Developing a pragmatic conceptual model from psychological theory. *Health Expectations*, 9(1), 37-48.
- Jasper, J. M. (1998). The emotions of protest: Affective and reactive emotions in and around social movements. In *Sociological forum*, 13(3), 397-424.
- Jenkins, N., Bloor, M., Fischer, J., Berney, L., & Neale, J. (2010). Putting it in context: the use of vignettes in qualitative interviewing. *Qualitative research*, 10(2), 175-198.
- Johnston, R., & Heineke, J. (1998). Exploring the relationship between perception and performance: priorities for action. *Service Industries Journal*, 18(1), 101-112.
- Jones, A., & Kovacich, A. (2012). Emergency management: The American experience 1900-2010. CRC Press.

- Jones, N. M., Garfin, D. R., Holman, E. A., & Silver, R. C. (2016). Media use and exposure to graphic content in the week following the Boston Marathon bombings. *American journal of community psychology*, *58*(1-2), 47-59.
- Jong, W., & Dückers, M. L. (2018). The Perspective of the Affected: What People Confronted With Disasters Expect From Government Officials and Public Leaders. *Risk, Hazards & Crisis in Public Policy*.
- Jung, K., Song, M., & Park, H. W. (2017). Filling the gap between bureaucratic and adaptive approaches to crisis management: lessons from the Sewol Ferry sinking in South Korea. *Quality & Quantity*, 1-18.
- Kamel, N. (2012). Social marginalization, federal assistance and repopulation patterns in the New Orleans metropolitan area following Hurricane Katrina. *Urban Studies*, 49(14), 3211-3231.
- Kamel, N. M., & Loukaitou-Sideris, A. (2004). Residential assistance and recovery following the Northridge earthquake. *Urban Studies*, *41*(3), 533-562.
- Kang, J. E., Lindell, M. K., & Prater, C. S. (2007). Hurricane evacuation expectations and actual behavior in Hurricane Lili. *Journal of Applied Social Psychology*, *37*(4), 887-903.
- Kaniasty, K., & Norris, F. (1999). The experience of disaster: Individuals and communities sharing trauma. *Response to disaster: Psychosocial, community, and ecological approaches*, 25-61.
- Kaniasty, K., & Norris, F. H. (1995). In search of altruistic community: Patterns of social support mobilization following Hurricane Hugo. *American Journal of Community Psychology*, 23(4), 447-477.
- Kapucu, N. (2008). Collaborative emergency management: better community organizing, better public preparedness and response. *Disasters*, 32(2), 239-262.
- Kartez, J. D., & Lindell, M. K. (1987). Planning for uncertainty: The case of local disaster planning. *Journal of the American Planning Association*, *53*(4), 487-498.
- Keene, E. P. (1998). Phenomenological study of the North Dakota flood experience and its impact on survivors' health. *Journal of Emergency Nursing*, *4*(3), 79-84.
- Kent, E. F. (2006). Where's the Cavalry? Federal Response to 21st Century Disasters. *Suffolk UL Rev.*, 40, 181.

- Kettle, N. P., & Dow, K. (2015). Comparing coastal planner expectations of change to climate science projections. *Journal of Environmental Policy & Planning*, 17(4), 475-494.
- Kirschenbaum, A. (2002). Disaster preparedness: A conceptual and empirical reevaluation. *International Journal of Mass Emergencies and Disasters*, 20(1), 5-28.
- Konrad, K. (2006). The social dynamics of expectations: the interaction of collective and actor-specific expectations on electronic commerce and interactive television. *Technology Analysis & Strategic Management*, 18(3-4), 429-444.
- Kousky, C. (2013). Facts about FEMA household disaster aid: examining the 2008 floods and tornadoes in Missouri. *Weather, Climate, and Society*, *5*(4), 332-344.
- Kousky, C., & Shabman, L. (2012). The realities of federal disaster aid. *RFF Issue Brief.* Washington, *DC: Resources for the Future*.
- Krech, D., & Crutchfield, R. S. (1948). *The field and problems of social psychology*. New York, NY, US: McGraw-Hill.
- Kreiser, M., Mullins, M. & Nagel, J.C. (2018). Federal Disaster Assistance Response and Recovery Programs: Brief Summaries. *Congressional Research Service*, Report RL31734.
- Kunreuther, H. C., & White, G. F. (1994). The role of the National Flood Insurance Program in reducing losses and promoting wise use of floodplains. *Journal of Contemporary Water Research and Education*, 95(1), 6.
- Kusenbach, M. (2017). "It's Not Where I'd be Running Like an Idiot for a Small One:" Hurricane Perceptions and Evacuation Decision Making Among Florida Mobile Home Residents. *International Journal of Mass Emergencies & Disasters*, 35(2).
- Lachlan, K. A., & Spence, P. R. (2007). Hazard and outrage: Developing a psychometric instrument in the aftermath of Katrina. *Journal of Applied Communication Research*, *35*(1), 109-123.
- Lally, J. E., Thomson, R. G., MacPhail, S., & Exley, C. (2014). Pain relief in labour: a qualitative study to determine how to support women to make decisions about pain relief in labour. *BMC pregnancy and childbirth*, *14*(1), 1-10.

- Lam, C., Lin, M. R., Tsai, S. H., Choy, C. S., & Chiu, W. T. (2007). Comparison of the expectations of residents and rescue providers of community emergency medical response after mudslide disasters. *Disasters*, 31(4), 405-416.
- Landry, C., Turner, D. & Petrolia, D. R. (2020). Flood Insurance Market Penetration and Expectations of Disaster Assistance (April 14, 2019). SSRN. Retrieved from the internet August, 2020: http://dx.doi.org/10.2139/ssrn.3371980.
- Langdridge, D. (2007). *Phenomenological psychology: Theory, research and method*. Pearson education.
- Larkin, M., Watts, S., & Clifton, E. (2006). Giving voice and making sense in interpretative phenomenological analysis. *Qualitative research in psychology*, 3(2), 102-120.
- Lechowska, E. (2018). What determines flood risk perception? A review of factors of flood risk perception and relations between its basic elements. *Natural Hazards*, 94(3), 1341-1366.
- Lester, S. (1999). *An introduction to phenomenological research*. Taunton UK: Stan Lester Developments. Retrieved from the internet, October 2018: www.devmts.org.uk/resmethy.pdf.
- Levine, J. N., Esnard, A. M., & Sapat, A. (2007). Population displacement and housing dilemmas due to catastrophic disasters. *Journal of planning literature*, 22(1), 3-15.
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social forces*, 63(4), 967-985.
- Lewis, T., & Nickerson, D. (1989). Self-insurance against natural disasters. *Journal of Environmental Economics and Management*, 16(3), 209-223.
- Lindell, M. K. (2013). North American cities at risk: Household responses to environmental hazards. In *Cities at risk* (pp. 109-130). Springer, Dordrecht.
- Lindell, M. K., & Hwang, S. N. (2008). Households' perceived personal risk and responses in a multi-hazard environment. *Risk Analysis*, 28(2), 539-556.
- Lindell, M. K., & Perry, R. W. (2012). The protective action decision model: theoretical modifications and additional evidence. *Risk Analysis*, 32(4), 616-632.
- Lindell, M. K., & Whitney, D. J. (2000). Correlates of household seismic hazard adjustment adoption. *Risk analysis*, 20(1), 13-26.

- Lindell, M.K., Prater, C., and Perry, R.W. (2007). Introduction to Emergency Management. *Chapter 4: Risk Perception and Communication*. Hoboken, NJ: John Wiley & Sons, Inc.
- Lindsay, B.R. & Webster, E.M. (2019). FEMA and SBA Disaster Assistance for Individuals and Households: Application Processes, Determinations, and Appeals. *Congressional Research Service*, Report R45238.
- Liu, B. F., Fraustino, J. D., & Jin, Y. (2016). Social media use during disasters: How information form and source influence intended behavioral responses. *Communication Research*, 43(5), 626-646.
- Madill, A., Jordan, A., & Shirley, C. (2000). Objectivity and reliability in qualitative analysis: Realist, contextualist and radical constructionist epistemologies. *British journal of psychology*, *91*(1), 1-20.
- Maestas, C. D., Atkeson, L. R., Croom, T., & Bryant, L. A. (2008). Shifting the blame: Federalism, media, and public assignment of blame following Hurricane Katrina. *Publius: The Journal of Federalism*, *38*(4), 609-632.
- Malhotra, N., & Kuo, A. G. (2008). Attributing blame: The public's response to Hurricane Katrina. *The Journal of Politics*, 70(1), 120-135.
- Mantzoukas, S. (2004). Issues of representation within qualitative inquiry. *Qualitative health research*, 14(7), 994-1007.
- Martin, C. & Teles, D. (2018). Improving the disaster aid application process will ensure victims aren't left behind. *The Urban Institute*, Urban Wire Neighborhoods, Cities, and Metros Blog. Retrieved from the internet September, 2020: https://www.urban.org/urban-wire/improving-disaster-aid-application-process-will-ensure-victims-arent-left-behind
- Martin, C. (2018). Community development block grants-disaster recovery program: Stakeholder perspectives. *Statement of Carlos Martín, Senior Fellow, Urban Institute before the Subcommittee on Oversight and Investigations Committee on Financial Services*, United States House of Representatives. Retrieved from the internet September, 2020: www.urban.org.
- Martin, I. M., Bender, H., & Raish, C. (2007). What motivates individuals to protect themselves from risks: the case of wildland fires. *Risk Analysis: An International Journal*, 27(4), 887-900.

- Martin, W. E., Martin, I. M., & Kent, B. (2009). The role of risk perceptions in the risk mitigation process: the case of wildfire in high risk communities. *Journal of environmental management*, 91(2), 489-498.
- Marvel, J. D. (2015). Unconscious bias in citizens' evaluations of public sector performance. *Journal of Public Administration Research and Theory*, 26(1), 143-158.
- May, P. J. (1985). Recovering from catastrophes: Federal disaster relief policy and politics. Greenwood Press, CT.
- McCaffrey, S. M., Stidham, M., Toman, E., & Shindler, B. (2011). Outreach programs, peer pressure, and common sense: what motivates homeowners to mitigate wildfire risk? *Environmental Management*, 48(3), 475-488.
- McCarthy, F. X. (2014). FEMA's disaster declaration process: A primer. *Congressional Research Service*, Report R43784.
- McCarthy, F.X. (2010). FEMA Disaster Housing: From Sheltering to Permanent Housing. *Congressional Research Service*, Report R40810.
- McLennan, B. J., & Handmer, J. (2012). Reframing responsibility-sharing for bushfire risk management in Australia after Black Saturday. *Environmental Hazards*, 11(1), 1-15.
- McNeill, I. M., Dunlop, P. D., Heath, J. B., Skinner, T. C., & Morrison, D. L. (2013). Expecting the unexpected: predicting physiological and psychological wildfire preparedness from perceived risk, responsibility, and obstacles. *Risk analysis*, 33(10), 1829-1843.
- McPherson, H. J., & Saarinen, T. F. (1977). Flood plain dwellers' perception of the flood hazard in Tucson, Arizona. *The Annals of Regional Science*, 11(2), 25-40.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual review of sociology*, 27(1), 415-444.
- Meloy, J. M. (2001). Writing the qualitative dissertation: Understanding by doing. Psychology Press.
- Merriam, S. B. (2002). Introduction to qualitative research. *Qualitative research in practice: Examples for discussion and analysis*, *I*(1), 1-17.

- Michel-Kerjan, E., & Volkman-Wise, J. (2011). The risk of ever-growing disaster relief expectations. Working Paper # 2011-09. Presented at the *annual NBER Insurance Group conference*, *Cambridge*, *MA*. Retrieved from the internet April 2018 at www.opim.wharton.upenn.edu/risk/library/WP2011-09 ReliefExpectations.pdf
- Milch, K., Broad, K., Orlove, B., & Meyer, R. (2018). Decision science perspectives on hurricane vulnerability: Evidence from the 2010–2012 Atlantic hurricane seasons. *Atmosphere*, *9*(1), 32.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. SAGE Publications Limited.
- Mileti, D. (1999). Disasters by design: A reassessment of natural hazards in the United States. Joseph Henry Press.
- Miller, A., Roberts, S., & LaPoe, V. (2014). *Oil and water: Media lessons from Hurricane Katrina and the Deepwater Horizon disaster*. University Press of Mississippi.
- Miller, D. S. (2016). Public trust in the aftermath of natural and na-technological disasters: Hurricane Katrina and the Fukushima Daiichi nuclear incident. *International Journal of Sociology and Social Policy*, 36(5/6), 410-431.
- Mittler, E. (1997). An Assessment of Floodplain Management in Georgia's Flint River Basin. Institute of Behavioral Science, University of Colorado.
- Mole, L., Kent, B., Hickson, M., & Abbott, R. (2019). 'It's what you do that makes a difference' An interpretative phenomenological analysis of health care professionals and home care workers experiences of nutritional care for people living with dementia at home. *BMC geriatrics*, 19(1).
- Moline, M. (2019). It's taking forever for Hurricane Michael disaster aid to reach the wrecked Florida Panhandle. *Florida Phoenix*, August 23. Retrieved from the internet May, 2020: https://www.floridaphoenix.com/2019/08/23/its-taking-forever-for-hurricane-michael-disaster-aid-to-reach-the-wrecked-florida-panhandle/
- Montoya-Galvez, C. (2019). Former FEMA chief says agency is burdened by "unrealistic" disaster response expectations. CBS News, Face the Nation, September 1. Retrieved from the internet September, 2020:

 https://www.cbsnews.com/news/brock-long-on-face-the-nation-former-fema-chief-says-agency-is-burdened-by-unrealistic-disaster-response-expectations/
- Morgan, D. L. (2008). Snowball sampling. *The SAGE encyclopedia of qualitative research methods*, 2, 815-16.

- Morgeson, F. V. (2012). Expectations, disconfirmation, and citizen satisfaction with the US federal government: Testing and expanding the model. *Journal of Public Administration Research and Theory*, 23(2), 289-305.
- Moss, D. (1999). Courting disaster? The transformation of federal disaster policy since 1803. In *The financing of catastrophe risk* (pp. 307-362). University of Chicago Press.
- Moustakas, C. (1994). Phenomenological research methods. Sage.
- Moyle, W. (2003). Nurse–patient relationship: A dichotomy of expectations. *International Journal of Mental Health Nursing*, *12*(2), 103-109.
- Mulilis, J. P. & Duval, T. S. (1997). A Person-Relative-to-Event (PrE) Approach to Negative Threat Appeals and Earthquake Preparedness: A Field Study. *Journal of applied social psychology*, 29(3), 495-516.
- Murphy, H., Greer, A., & Wu, H. C. (2018). Trusting Government to Mitigate a New Hazard: The Case of Oklahoma Earthquakes. *Risk, Hazards & Crisis in Public Policy*, *9*(3), 357-380.
- National Governor's Association. (2007). A governor's guide to homeland security. NGA Center for Best Practices. Retrieved from the internet September, 2020: www.npstc.org
- Neal, D. M. (1984). Blame Assignment in a Diffuse Disaster Situation: A Case Example of the Role of an Emergent Group. *International journal of mass emergencies and disasters*, 2(2), 251-266.
- Neal, D. M. (1997). Reconsidering the phases of disasters. *International Journal of Mass Emergencies and Disasters*, 15(2), 239-264.
- Neal, D. M., & Phillips, B. D. (1995). Effective emergency management: Reconsidering the bureaucratic approach. *Disasters*, *19*(4), 327-337.
- Neale, B. (2013). Adding time into the mix: Stakeholder ethics in qualitative longitudinal research. *Methodological Innovations Online*, 8(2), 6-20.
- Nerlich, B., & Halliday, C. (2007). Avian flu: the creation of expectations in the interplay between science and the media. *Sociology of health & illness*, 29(1), 46-65.
- Nigg, J. M. (1995). Disaster recovery as a social process. Wellington After the Quake: The Challenge of Rebuilding Cities (Report), 81.

- Nigg, J. M., Barnshaw, J., & Torres, M. R. (2006). Hurricane Katrina and the flooding of New Orleans: Emergent issues in sheltering and temporary housing. *The Annals of the American Academy of Political and Social Science*, 604(1), 113-128.
- Nigro, H., & Císaro, S. (2014). Prediction of citizen satisfaction with local government based on perceptions of physical disorder. *Journal of Place Management and Development*, 7(2), 153-175.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American journal of community psychology*, 41(1-2), 127-150.
- Oh, O., Eom, C., & Rao, H. R. (2015). Research note—Role of social Media in Social Change: An analysis of collective sense making during the 2011 Egypt revolution. *Information Systems Research*, 26(1), 210-223.
- Olaniran, B. A. (2007). The role of perception in crisis management: A tale of two hurricanes. *Multicultural Education*, 15(2), 13.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 460-469.
- Oliver-Smith, A. (1991). Successes and failures in post-disaster resettlement. *Disasters*, 15(1), 12-23.
- Olson, J. M., Roese, N. J., & Zanna, M. P. (1996). Expectancies. In *Social Psychology: A Handbook of Basic Principles* (pp. 211-238). Guilford Press.
- Olson, R. S. (2000). Toward a politics of disaster: Losses, values, agendas, and blame. *Crisis Management*, 18(2), 154.
- Paek, H. J., Hilyard, K., Freimuth, V., Barge, J. K., & Mindlin, M. (2010). Theory-based approaches to understanding public emergency preparedness: implications for effective health and risk communication. *Journal of health communication*, 15(4), 428-444.
- Palm, R. (1998). Urban earthquake hazards: the impacts of culture on perceived risk and response in the USA and Japan. *Applied Geography*, 18(1), 35-46.

- Park, J., Neuman, H. B., Bennett, A. V., Polskin, L., Phang, P. T., Wong, W. D., & Temple, L. K. (2014). Patients' expectations of functional outcomes following rectal cancer surgery: a qualitative study. *Diseases of the colon and rectum*, 57(2), 151.
- Parks, L., & Walker, J. (2020). Disaster Media: Bending the Curve of Ecological Disruption and Moving toward Social Justice. *Media+ Environment*, 2(1), 13474.
- Paton, D. (2003). Disaster preparedness: a social-cognitive perspective. *Disaster Prevention and Management: An International Journal*, 12(3), 210-216.
- Paton, D. (2008). Risk communication and natural hazard mitigation: how trust influences its effectiveness. *International Journal of Global Environmental Issues*, 8(1-2), 2-16.
- Paton, D. (2019). Disaster risk reduction: Psychological perspectives on preparedness. *Australian journal of psychology*, 71(4), 327-341.
- Peacock, W.G. & Ragsdale, A.K., (1997). Social systems, ecological networks and disasters: towards a socio-political ecology of disasters. In: Peacock, W.G., Morrow, B.H., Gladwin, H. (Eds.), *Hurricane Andrew: Ethnicity, Gender and the Sociology of Disasters*. Routledge, London, pp. 20-35.
- Perry, R. W. (1979). Evacuation decision-making in natural disasters. *Mass emergencies*, 4(1), 25-38.
- Perry, R. W. (2007). What is a disaster? In *Handbook of disaster research* (pp. 1-15). Springer, New York, NY.
- Peters, R. G., Covello, V. T., & McCallum, D. B. (1997). The determinants of trust and credibility in environmental risk communication: An empirical study. *Risk analysis*, 17(1), 43-54.
- Petersen, L., Fallou, L., Reilly, P., & Serafinelli, E. (2020). Public expectations of critical infrastructure operators in times of crisis. *Sustainable and Resilient Infrastructure*, 5(1-2), 62-77.
- Petkova, E. P., Beedasy, J., Oh, E. J., Sury, J. J., Sehnert, E. M., Tsai, W. Y., & Reilly, M. J. (2018). Long-term recovery from Hurricane Sandy: evidence from a survey in New York City. *Disaster medicine and public health preparedness*, *12*(2), 172-175.

- Phillips, B. D. (1997). Qualitative methods and disaster research. *International Journal of Mass Emergencies and Disasters*, 15(1), 179-195.
- Phillips, B. D. (1998). Sheltering and housing of low-income and minority groups in Santa Cruz County, California. U.S. Geological Survey Professional Paper, *The Loma Prieta, California, Earthquake of October 17, 1989, Recovery, Mitigation, and Reconstruction, 17-27.*
- Phillips, B. D. (2009). Disaster Recovery. New York: CRC Press.
- Pitard, J. (2015). Using vignettes within auto-ethnography to explore layers of cross-cultural awareness as a teacher. *Qualitative Social Research*, 17(1).
- Platt, R. H. (2012). *Disasters and democracy: The politics of extreme natural events*. Island Press.
- Plummer, K. (1983). Documents of life: An introduction to the problems and literature of a humanistic method. Allen & Unwin.
- Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of counseling psychology*, 52(2), 137.
- Prater, C. S., & Lindell, M. K. (2000). Politics of hazard mitigation. *Natural Hazards Review*, *I*(2), 73-82.
- Prince, S. H. (1920). Catastrophe and social change, based upon a sociological study of the Halifax disaster (No. 212-214). Columbia university.
- Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches.* Sage.
- Putnam, R. D. (2000). Bowling alone: America's declining social capital. In *Culture and politics* (pp. 223-234). Palgrave Macmillan, New York.
- Quarantelli, E. L. (1982). Human resources and organizational behaviors in community disasters and their relationship to planning. *Article 76, Disaster Research Center*, University of Delaware. Retrieved from the internet May 2018 at http://udspace.udel.edu/handle/19716/453.
- Quarantelli, E. L. (1984). Organizational Behavior in Disasters and Implications for Disaster Planning. Paper produced for the Federal Emergency Management Agency, Volume 1, Number 2 (No. FEMA-104). Retrieved from the Internet May 2018 at http://www.dtic.mil/docs/citations/ADA225919.

- Quarantelli, E. L. (1986). Research findings on organizational behavior in disasters and their applicability in developing countries. *Article 107, Disaster Research Center*, Ohio State University. Retrieved from the internet May 2018 at http://dspace.udel.edu/handle/19716/481.
- Quarantelli, E. L. (1991). Disaster assistance and socioeconomic recovery at the individual and household level: Some observations. *University of Delaware Disaster Research Center*, Preliminary Paper #171.
- Quarantelli, E. L. (1995). Patterns of sheltering and housing in US disasters. *Disaster prevention and management: an international journal*, 4(3), 43-53.
- Quarantelli, E. L., & Dynes, R. (1989). Reconstruction in the context of recovery: Thoughts on the Alaskan Earthquake. In *Conference on Reconstruction after Urban Earthquakes, National Center for Earthquake Engineering Research. Buffalo, NY*. September, 1989.
- Quarantelli, E. L., & Dynes, R. R. (1976). Family and community context of individual reactions to disaster. *Article 98, Disaster Research Center*, Ohio State University. Retrieved from the internet May, 2018 at https://hazdoc.colorado.edu/handle/10590/2580.
- Racher, F. E., & Robinson, S. (2003). Are phenomenology and postpositivism strange bedfellows? *Western journal of nursing research*, 25(5), 464-481.
- Råholm, M. B., Arman, M., & Rehnsfeldt, A. (2008). The immediate lived experience of the 2004 tsunami disaster by Swedish tourists. *Journal of Advanced Nursing*, 63(6), 597-606.
- Raju, E., Becker, P., & Tehler, H. (2018). Exploring interdepencies and common goals in disaster recovery coordination. *Procedia Engineering*, 212, 1002-1009.
- Reese, S. (2018). FEMA Individual Assistance Programs: In Brief. *Congressional Research Service*, Report R45085.
- Reid, M. (2013, December). Social policy, "deservingness," and socio-temporal marginalization: Katrina survivors and FEMA. In *Sociological Forum*, 28(4), 742-763.
- Reinke, A. J., & Eldridge, E. R. (2020). Navigating the "Bureaucratic Beast" in North Carolina Hurricane Recovery. *Human Organization*, 79(2), 107-116.

- Rettke, H., Pretto, M., Spichiger, E., Frei, I. A., & Spirig, R. (2018). Using reflexive thinking to establish rigor in qualitative research. *Nursing Research*, 67(6), 490-497.
- Ricoeur, P. (1992). Oneself as Another. University of Chicago Press, Chicago.
- Ritchie, L. A., & Gill, D. A. (2007). Social capital theory as an integrating theoretical framework in technological disaster research. *Sociological Spectrum*, 27(1), 103-129.
- Rivera, J. D. (2016). *Acquiring federal disaster assistance: Investigating equitable resource distribution within FEMA's home assistance program* (Doctoral dissertation, Rutgers University-Camden Graduate School). Retrieved from the internet May, 2019: https://rucore.libraries.rutgers.edu/rutgers-lib/49079/
- Rivera, J. D. (2016). Representative Bureaucracy, Street-Level Bureaucrats and Bureaucratic Discretion in Federal Disaster Assistance. *Journal of Public Management & Social Policy*, 23(2), 2.
- Rivera, J. D. (2019). Bounded rationality and federal disaster recovery information. In B. Kar & D. Cochran (Eds.), *Risk Communication and Community Resilience* (p. 27-45). Routledge.
- Roberts, P. S. (2013). *Disasters and the American state: How politicians, bureaucrats, and the public prepare for the unexpected.* Cambridge University Press.
- Roberts, P.S., Ward & Wamsley, (2012). The evolving federal role in emergency management: Policies and Processes. Chapter 10 in *Emergency Management: The American Experience 1900-2010*, Rubin, C. B. (Ed.). CRC Press.
- Roch, C. H., & Poister, T. H. (2006). Citizens, accountability, and service satisfaction: The influence of expectations. *Urban Affairs Review*, 41(3), 292-308.
- Roese, N. J., & Sherman, J. W. (2007). Expectancy. In *Social Psychology: A Handbook of Basic Principles*. Guilford Press.
- Rolfe, G. (2006). Validity, trustworthiness and rigour: quality and the idea of qualitative research. *Journal of advanced nursing*, 53(3), 304-310.
- Rozario, K. (2007). *The culture of calamity: Disaster and the making of modern America*. University of Chicago Press.
- Rubin, C. B. (Ed.). (2012). Emergency Management: The American Experience 1900-2010. CRC Press.

- Saldaña, J. (2015). *The coding manual for qualitative researchers*. SAGE Publications Limited.
- Sapat, A., Li, Y., Mitchell, C., & Esnard, A. M. (2011). Policy learning and policy change: Katrina, Ike and post-disaster housing. *International journal of mass emergencies and disasters*, 29(1).
- Schneider, S. K. (1992). Governmental response to disasters: The conflict between bureaucratic procedures and emergent norms. *Public Administration Review*, 135-145.
- Schneider, S. K. (1995). Flirting with disaster: Public management in crisis situations. ME Sharpe.
- Schneider, S. K. (2008). Who's to Blame? (Mis) perceptions of the Intergovernmental Response to Disasters. *Publius: The Journal of Federalism*, 38(4), 715-738.
- Schneider, S. K. (2011). *Dealing with disaster: Public management in crisis situations*. Routledge.
- Schneider, S. K. (2018). Governmental Response to Disasters: Key Attributes, Expectations, and Implications. In *Handbook of Disaster Research* (pp. 551-568). Springer, Cham.
- Schneider, S. K., & Jacoby, W. G. (2003). Public attitudes toward the policy responsibilities of the national and state governments: Evidence from South Carolina. *State Politics & Policy Quarterly*, *3*(3), 246-269.
- Schutz, A. (1970) *Reflections On the Problem of Relevance*. New Haven: Yale University Press.
- Shapiro, R. Y., & Jacobs, L. R. (Eds.). (2011). *The Oxford handbook of American public opinion and the media*. Oxford University Press.
- Shaw, I. F. (2003). Ethics in qualitative research and evaluation. *Journal of social work*, 3(1), 9-29.
- Shaw, R., Kobayashi, K. S. H., & Kobayashi, M. (2004). Linking experience, education, perception and earthquake preparedness. *Disaster Prevention and Management:*An International Journal.
- Siddiqi, A., & Canuday, J. J. P. (2018). Stories from the frontlines: decolonising social contracts for disasters. *Disasters*, 42, S215-S238.

- Siler, B. B., & Kleiner, C. (2001). Novice faculty: Encountering expectations in academia. *Journal of Nursing Education*, 40(9), 397-403.
- Simon, M. (2011). *The role of the researcher*. Retrieved May, 21, 2016. http://dissertationrecipes.com/wp-content/uploads/2011/04/Role-of-the-Researcher.pdf
- Skidmore, M. J. (2012). Anti-Government Is Not the Solution to the Problem—Anti-Government Is the Problem: The Role of Ideology in Presidential Response to Natural Disasters From San Francisco to Katrina. *Risk, Hazards & Crisis in Public Policy*, 3(4), 1-17.
- Slovic, P. (2013). Risk, media and stigma: Understanding public challenges to modern science and technology. Routledge.
- Smiley, K. T., Howell, J., & Elliott, J. R. (2018). Disasters, local organizations, and poverty in the USA, 1998 to 2015. *Population and Environment*, 40(2), 115-135.
- Smith, G. (2012). Planning for post-disaster recovery: A review of the United States disaster assistance framework. Island Press.
- Smith, G. P., & Wenger, D. (2007). Sustainable disaster recovery: Operationalizing an existing agenda. In *Handbook of disaster research* (pp. 234-257). Springer, New York, NY.
- Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health psychology review*, *5*(1), 9-27.
- Smith, J. A., Jarman, M., & Osborn, M. (1999). Doing interpretative phenomenological analysis. *Qualitative health psychology: Theories and methods*, 218-240.
- Smith, J., & Osborn, M. (2003). Interpretative phenomenological analysis. In J.A. Smith (Eds.) *Qualitative psychology: A practical guide to methods*. London: Sage.
- Smith, J.A., Flower, P. & Larkin, M. (2009). *Interpretative Phenomenological Analysis: Theory, Method and Research.* London: Sage.
- Snelgrove, S. R. (2014). Conducting qualitative longitudinal research using interpretative phenomenological analysis. *Nurse researcher*, 22(1).
- Snohomish County. (2016). Snohomish County, WA Recovery Planning Lessons Learned Document. *Snohomish County website*. Retrieved from the internet September 2020: www.snohomishcowa.gov

- Sohn, B. K. (2017). Phenomenology and qualitative data analysis software (QDAS): A careful reconciliation. *Forum: Qualitative Social Research*, 18(1), 18.
- Spader, J., & Turnham, J. (2014). CDBG Disaster Recovery Assistance and Homeowners' Rebuilding Outcomes Following Hurricanes Katrina and Rita. *Housing Policy Debate*, 24(1), 213-237.
- Spear, A. D. (2011). Husserl on Intentionality and Intentional Content. *Internet Encyclopedia of Philosophy*, a peer-reviewed academic resource. Retrieved from the internet May, 2020: https://iep.utm.edu/huss-int/
- Spittal, M. J., McClure, J., Siegert, R. J., & Walkey, F. H. (2005). Optimistic bias in relation to preparedness for earthquakes. *Australasian Journal of Disaster and Trauma Studies*.
- Stallings, R. A. (2003). *Methods of disaster research*. Xlibris Corporation.
- Stallings, R. A., & Quarantelli, E. L. (1985). Emergent citizen groups and emergency management. *Public administration review*, 45, 93-100.
- Sterett, S. M. (2015). Disaster assistance and legal accountability: care and surveillance. In *Special Issue Cassandra's Curse: The Law and Foreseeable Future Disasters* (pp. 95-123). Emerald Group Publishing Limited.
- Strauss, A., & Corbin, J. (1994). Grounded theory methodology. *Handbook of qualitative research*, 17, 273-85. Retrieved November 8, 2017. http://www.depts.ttu.edu/education/ourpeople/Faculty/additional_pages/duemer/epsy_53
 82 class_materials/Grounded-theory-methodology.pdf
- Stubblefield, A. (2009). Race, disability, and the social contract. *The Southern Journal of Philosophy*, 47(S1), 104-111.
- Sutley, E. J., & Hamideh, S. (2020). Postdisaster Housing Stages: A Markov Chain Approach to Model Sequences and Duration Based on Social Vulnerability. *Risk Analysis*. DOI: 10.1111/risa.13576
- Sutton, J., Palen, L., & Shklovski, I. (2008). Backchannels on the Front Lines: Emergent Uses of Social Media in the 2007 Southern California Wildfires. *Proceedings of the 5th International ISCRAM Conference, Washington, DC*. University of Colorado.
- Sylves, R. (2008). FEMA, Katrina, and operations research. *Public Manager*, 37(1), 68.

- Sylves, R. (2014). *Disaster policy and politics: Emergency management and homeland security*. CQ Press.
- Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory, and the political economy of public health. *International journal of epidemiology*, *33*(4), 650-667.
- Tafti, M. T., & Tomlinson, R. (2019). Theorizing distributive justice and the practice of post-disaster housing recovery. *Environmental Hazards*, 18(1), 7-25.
- Terpstra, T. (2011). Emotions, trust, and perceived risk: Affective and cognitive routes to flood preparedness behavior. *Risk Analysis*, *31*(10), 1658-1675.
- Terpstra, T., & Gutteling, J. M. (2008). Households' perceived responsibilities in flood risk management in the Netherlands. *International Journal of Water Resources Development*, 24(4), 555-565.
- Thevenaz, C., & Resodihardjo, S. L. (2010). All the best laid plans... conditions impeding proper emergency response. *International Journal of Production Economics*, 126(1), 7-21.
- Thomas, C. W. (1998). Maintaining and restoring public trust in government agencies and their employees. *Administration & Society*, 30(2), 166-193.
- Thomas, M., & Menon, G. (2007). When internal reference prices and price expectations diverge: The role of confidence. *Journal of Marketing Research*, 44(3), 401-409.
- Tierney, K. (2006). Social inequality, hazards, and disasters. *On risk and disaster: Lessons from Hurricane Katrina*, 109-128.
- Tierney, K. (2014). *The social roots of risk: Producing disasters, promoting resilience*. Stanford University Press.
- Tierney, K. J. (2000). Implementing a seismic computerized alert network (SCAN) for Southern California: Lessons and guidance from the literature on warning response and warning systems. *University of Delaware Disaster Research Center*, Final Project Report #45.
- Tierney, K., & Oliver-Smith, A. (2012). Social dimensions of disaster recovery. *International Journal of Mass Emergencies & Disasters*, 30(2).
- Tierney, K., Bevc, C., & Kuligowski, E. (2006). Metaphors matter: Disaster myths, media frames, and their consequences in Hurricane Katrina. *The annals of the American academy of political and social science*, 604(1), 57-81.

- Trainor, J. E., & Subbio, T. (2014). *Critical issues in disaster science and management: a dialogue between researchers and practitioners*. FEMA Higher Education Project. Retrieved from the internet September, 2020: www.udel.edu
- Trumbo, C., Meyer, M. A., Marlatt, H., Peek, L., & Morrissey, B. (2014). An assessment of change in risk perception and optimistic bias for hurricanes among Gulf Coast residents. *Risk Analysis*, *34*(6), 1013-1024.
- Tuffour, I. (2017). A critical overview of interpretative phenomenological analysis: a contemporary qualitative research approach. *Journal of Healthcare Communications*, 2(4), 52.
- Turner, R. H. (1994). Rumors as intensified information seeking. In Dynes, R. R. and Tierney, K. J. (Eds.), *Disasters, collective behavior, and social organization*, (244-256). University of Delaware Press.
- Vagle, M. D. (2018). Crafting phenomenological research. Routledge.
- Van Manen, M. (1944). Practicing phenomenological writing. *Phenomenology+ Pedagogy*, 2(1), 36-69.
- Van Ryzin, G. G. (2004). Expectations, performance, and citizen satisfaction with urban services. *Journal of policy analysis and management*, 23(3), 433-448.
- Van Ryzin, G. G. (2005). Testing the expectancy disconfirmation model of citizen satisfaction with local government. *Journal of Public Administration Research and Theory*, 16(4), 599-611.
- Van Ryzin, G. (2007). Pieces of a puzzle: Linking government performance, citizen satisfaction, and trust. *Public Performance & Management Review*, 30(4), 521-535.
- Van Ryzin, G. G. (2013). An experimental test of the expectancy-disconfirmation theory of citizen satisfaction. *Journal of Policy Analysis and Management*, 32(3), 597-614.
- Van Teijlingen, E. R., Rennie, A. M., Hundley, V., & Graham, W. (2001). The importance of conducting and reporting pilot studies: the example of the Scottish Births Survey. *Journal of advanced nursing*, 34(3), 289-295.
- Veil, S. R., & Anthony, K. E. (2017). Exploring public relations challenges in compounding crises: The pariah effect of toxic trailers. *Journal of Public Relations Research*, 1-17.

- Vickers, M. H., & Parris, M. A. (2007). "Your Job No Longer Exists!": From Experiences of Alienation to Expectations of Resilience—A Phenomenological Study. *Employee responsibilities and rights journal*, 19(2), 113-125.
- Vinik, D. (2018). 'People just give up': Low-income hurricane victims slam federal relief programs. *Politico*. Retrieved from https://www.politico.com/story/2018/05/29/houston-hurricane-harvey-fema-597912.
- Vos, S. C., Sutton, J., Yu, Y., Renshaw, S. L., Olson, M. K., Gibson, C. B., & Butts, C. T. (2018). Retweeting risk communication: the role of threat and efficacy. *Risk analysis*, 38(12), 2580-2598.
- Vroman, W. (2019). Disaster Reporting in the United States. Urban Institute Center on Labor, Human Services and Population. Retrieved from the internet September, 2020: https://www.urban.org/research/publication/disaster-reporting-united-states
- Wachinger, G., Renn, O., Begg, C., & Kuhlicke, C. (2013). The risk perception paradox—implications for governance and communication of natural hazards. *Risk analysis*, 33(6), 1049-1065
- Walls, M. & Cortes, D.H. (2018). Recovering from Disasters: Evaluating FEMA's Housing Assistance Program in the 2017 Hurricane Season. Wharton School of Economics, University of Pennsylvania, Risk Management and Decision Processes Center Blog. Retrieved from the internet July, 2020: https://riskcenter.wharton.upenn.edu/lab-notes/recovering-from-disasters-evaluating-femas-housing-assistance-program-in-the-2017-hurricane-season/
- Waugh Jr, W. L. (2006). The political costs of failure in the Katrina and Rita disasters. The Annals of the American Academy of Political and Social Science, 604(1), 10-25.
- Weber, P. J. (2017). Poll finds many Harvey victims saying they still need help.

 Associated Press, December 5, 2107. Retrieved from the internet September,

 2020: https://apnews.com/article/a5cf978e930c466295338b9e54ec67c5
- Webster, E. (2019). FEMA Individual Assistance Programs: An Overview. Congressional Research Service, Report R46014.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization science*, 16(4), 409-421.

- Weinstein, N. D., Lyon, J. E., Rothman, A. J., & Cuite, C. L. (2000). Changes in perceived vulnerability following natural disaster. *Journal of Social and Clinical Psychology*, 19(3), 372-395.
- Weiss, R. W. (1994). *Learning from strangers: The art and method of qualitative interview studies.* New York: The Free Press.
- Wheeler, M. (2011). Martin Heidegger. *The Stanford Encyclopedia of Philosophy (Fall 2020 Edition)*, Edward N. Zalta (ed.). Retrieved from the internet September, 2020: https://plato.stanford.edu/archives/fall2020/entries/heidegger.
- Wilson, J. Q. (1989). Bureaucracy (Vol. 91). New York: Basic Books.
- Wisner, B. (2001). Vulnerability in disaster theory and practice: from soup to taxonomy, then to analysis and finally tool. In *International Work-Conference Disaster Studies of Wagningen University and Research Centre*. June, 2001.
- Yardley, L. (2008). Demonstrating validity in qualitative psychology. *Qualitative* psychology: A practical guide to research methods, 2, 235-251.
- Yi, Y. (1990). A critical review of consumer satisfaction. *Review of marketing*, 4(1), 68-123.
- Yungblut, H. E., Schinke, R. J., & McGannon, K. R. (2012). Views of adolescent female youth on physical activity during early adolescence. *Journal of sports science & medicine*, 11(1), 39.
- Zack, N. (2006). Philosophy and disaster. *Homeland Security Affairs*, 2(1).
- Zadvinskis, I. M., Chipps, E., & Yen, P. Y. (2014). Exploring nurses' confirmed expectations regarding health IT: A phenomenological study. *International journal of medical informatics*, 83(2), 89-98.

.

APPENDICES

APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL



Oklahoma State University Institutional Review Board

10/22/2019 Application Number: EN-19-22

Proposal Title: Expectations and Government Disaster Assistance

HANNAH VICK Principal Investigator.

Co-Investigator(s):

Faculty Adviser. Haley Murphy

Project Coordinator: Research Assistant(s):

Exempt

Exempt Category:

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal investigator, it is your responsibility to do the following:

- Principal investigation, it is your responsionity to other endowing.
 1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures

- and consent/assent process or forms.

 Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.

 Report any unantitopaled and/or adverse events to the IRB Office promptly.

 Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744-3377 or fribglokstate.edu.

Sincerely,

Oklahoma State University IRB

APPENDIX B

INSTITUTIONAL REVIEW BOARD CONSENT FORM



Fire & Emergency Management Program

CONSENT FORM

Expectations and the Disaster Assistance Experience

Background Information

You are invited to be in a research study about your thoughts and feelings about possible disaster scenarios. We ask that you read this form and ask any questions you may have before agreeing to be in the study. Your participation is entirely voluntary.

This study is being conducted by: Hannah Vick, Fire & Emergency Management Program, Oklahoma State University – Stillwater, under the direction of Haley Murphy, Fire & Emergency Management Program, Oklahoma State University – Stillwater.

<u>Procedures</u>
If you agree to be in this study, we would ask you to do the following things: Participate in an audio-recorded interview with the researcher.

Participation in the study involves the following time commitment: 30-60 minutes.

Risks and Benefits of being in the Study

The study involves the following foreseeable risks: There are no known risks associated with this project, which are greater than those ordinarily encountered in daily life.

The benefits to participation are: There are no direct benefits to you. More broadly, this study may help the researchers learn more about government disaster assistance. It may also help government workers improve the way assistance is provided after a disaster.

Compensation
You will receive a \$10 gift card to a local business as compensation for your participation. You will receive payment at the conclusion of the interview.

Confidentiality

The information that you give in the study will be handled confidentially. Your information will be assigned a code number/pseudonym. The list connecting your name to this code will be kept in a password protected computer file. When the study is completed and the data have been analyzed, this list will be destroyed. Your identity will not be revealed in any publications, presentations, or reports resulting from this research study.

We will collect your information through audio recordings. This data will be stored on a password protected flash drive and computer file. When the study is completed and the data have been analyzed, the code list linking names to study numbers will be destroyed. This is expected to occur no later than December, 2020. The audio recording will be transcribed. The recording will be deleted after the transcription is complete and verified. This process should take approximately four weeks after the interview. This informed consent form will be kept for three years after the study is complete, and then it will be destroyed. Your data collected as part of this research project, may be used or distributed for future research studies.

Voluntary Nature of the Study

Your participation in this research is voluntary. There is no penalty for refusal to participate, and you are free to withdraw your consent and participation in this project at any time. You can skip any questions that make you uncomfortable and can stop the interview/survey at any time.

Contacts and Questions
The Institutional Review Board (IRB) for the protection of human research participants at Oklahoma State
University has reviewed and approved this study. If you have questions about the research study itself, please



APPENDIX C

INSTITUTIONAL REVIEW BOARD FACE-TO-FACE RECRUITMENT



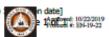
Fire & Emergency Management Program

Script for Face to Face Recruitment of Interview/Data Collection Topic: Expectations and the Disaster Assistance Experience

Hi, my name is Hannah Vick. I am a doctoral student at Oklahoma State University – Stillwater and I am doing a research study about disaster assistance. Would you be interested in participating in my study? This is completely voluntary and you may say no. If you agree and we start talking and you decide you no longer want to do this, we can stop at any time. I will not identify you or use any information that would make it possible for anyone to identify you in any presentation or written reports about this study. If it is okay with you, I might want to use direct quotes from you, but these would only be cited as from a person (or if person has a specific label or title, it might be used). There is no expected risk to you for helping me with this study. The interview would take about 30-45 minutes and I am offering a \$10 gift card for participants. Do you still want to talk with me?

If yes, I will lead the participant to the interview room/quiet room and begin working through the informed consent form. If no, I may still talk with the person, but will not use any information as part of my research study.

[PI Last Name] [Protocol #, e.g., 12182010.043] [title, e.g., Participant Consent Group



APPENDIX D

EXAMPLE PARTICIPANT FOLLOW UP EMAIL

Dear [participant],

Thank you so much for your interest in participating in my dissertation project! I appreciate your willingness to help me.

About this Project: Participating in this study means answering questions about your thoughts and opinions during 30-60 minute in-person interview. The questions will be about disasters, but you do not need to have any special knowledge or experiences. First, I will ask questions about living in Parkfairfax; then, I'll walk through several fictional scenarios and ask what you'd do/think/feel during each. The interview will be audio recorded, but your privacy will be protected. (I don't really ask any personal questions, but your name and identifying information will be removed from all transcripts/documents.) In compensation for your time, you will receive a \$10 gift certificate to Amazon.com. I am happy to answer any questions you may have!

Next steps: If you'd like to participate in an interview, first I would need to know where you would like to meet. I can go wherever is most convenient to you. In the past, I've done the interviews at a café (like Best Buns – The Carlisle), a restaurant, or the seating area at a grocery store. Just let me know what you'd prefer.

Second, let me know when is a good time for you. I am available to meet you after 2pm any day between Wednesday, January 1 and Sunday, January 5. If those dates/times do not work for you, just let me know and I can work with your schedule. I'm also available the weekend of Jan 11-12.

That's it! If you tell me the location and the time, I'll respond with a confirmation email and meet you there. And, you'll have my wholehearted appreciation for helping me with my dissertation project (and a gift card!)

Most sincerely,
Hannah Vick

(phone number)

APPENDIX E

RECRUITMENT AD IN COMMUNITY NEWSLETTER

Research Study: Parkfairfax resident and PhD student is looking for volunteer participants to interview for her dissertation. The topic is disaster preparedness, but participants do not need to have any disaster experience. The in-person interview would last 30-60 minutes with a small gift card as compensation. To volunteer or learn more, please email hannah. vick@okstate.edu

APPENDIX F

INTERVIEW GUIDE

Expectations and Disaster Assistance

INTERVIEW GUIDE

INTERVIEWEE:	CONTACT INFORMATION:
DATE:	LOCATION:
INTERVIEW START TIME:	INTERVIEW END TIME:

Short survey

- How many people live in your household?
- What is your age?
- What is your profession?
- What is your gender?
- Do you have a political affiliation?

Questions

- 1) How long have you lived here (in this community)? What's it like to live here? Have you heard about your community experiencing a disaster before?
- 2) In your lifetime, have you personally experienced a disaster? Can you tell me about that experience?

Script: In order to ask you more questions, I'd like to hear your thoughts and feelings about a fictional scenario where you and your family experience a hurricane. I'm going to walk you through this in stages, from when you learn the event is coming to your recovery from said event. When I read parts of the story, I'd like you to imagine you're experiencing the scenario and share how you think you would feel, what actions you think you would take, and what you'd expect the government to do in said scenario.

Vignette 1: You hear a hurricane warning has been issued for your community. It sounds like it will be a powerful storm that could produce a lot of damage. It is forecasted to make landfall and will impact your neighborhood within the next 24 hours.

- 1) What are some things you would do before the hurricane arrives?
- 2) What do you expect the government would be doing before the hurricane arrives?

Vignette 2: Let's imagine that you evacuated, the hurricane struck, and your family is safe, but your home has suffered some damage. It's livable, but there's enough damage you'll need to do some home repairs. There is debris all over the streets and some buildings in town are severely damaged.

- 1) What do you think you would do when you returned to your damaged home?
- 2) How would you get your home repaired? Do you believe insurance would cover your losses?
- What kinds of things would the government do during this time? What kinds of resources would you expect to have access to?

Vignette 3: Let's say, instead of your home only getting slightly damaged, it is completely destroyed. You and your family are safe, but you must find somewhere else to stay for a while. Many other homes in your neighborhood

were also destroyed. The American Red Cross has opened a shelter in town and the Governor stopped by to see the damage.

- 1) After figuring out you lost your home, what would be your next step?
- 2) Where would you go?
- Would you ask for assistance? From where? Why or why not? Do you believe insurance would cover your losses?
- 4) What do you expect the government to do in this scenario? How should the government help? What kinds of resources would you expect to have access to?

Vignette 4: Now imagine after the hurricane struck. Your home was largely undamaged, but your neighbor's home was completely destroyed, along with many other homes in town.

- 1) What types of things would you encourage your neighbor to do?
- 2) What types of government assistance would you encourage your neighbor to apply for?
- 3) How do you think the government should help your neighbor?

Vignette 5: Let's say in one of the scenarios where either you or neighbor had their home destroyed. You heard on the news that FEMA may provide resources to help.

- 1) Would you ask for assistance from FEMA? Would you encourage your neighbor to call FEMA?
- 2) Have you heard about FEMA or other government disaster assistance? What do you know about it?
- 3) What kinds of assistance do you think FEMA would provide? How much assistance do you believe FEMA will offer? How would it be provided?
- 4) Do you know of anyone who received FEMA assistance?

T 1		
Final	question	l:

1) Do you trust the government to help you during a future disaster if you need it? What makes you think that?

VITA

Hannah M. Vick

Candidate for the Degree of

Doctor of Philosophy

Dissertation: GOVERNMENT DISASTER ASSISTANCE: AN EXPLORATION OF EXPECTATIONS

Major Field: Fire & Emergency Management

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Fire & Emergency Management at Oklahoma State University, Stillwater, Oklahoma in December, 2020.

Completed the requirements for the Bachelor of Arts in Political Science at University of Wisconsin – River Falls, River Falls, Wisconsin in 2010.

Experience:

Adjunct Lecturer, Georgetown University, School of Continuing Studies, Emergency & Disaster Management Master's program, 2018-present. Outstanding Faculty Award, 2018.

Senior Advisor, Federal Emergency Management Agency, Washington, DC 2005-present