



Examining Community Resilience in the Disaster-Prone City of Conway, SC

Craft, L. L., PhD

National Intelligence University, Bethesda, Maryland, United States

Contact: lamesha.l.craft35@gmail.com

Abstract

Social science research on disaster-prone communities often cites social capital and community resilience to examine methods for improving emergency management and disaster risk reduction. The City of Conway, South Carolina, is susceptible to numerous natural disasters throughout the year and it has sustained damage from four major flooding disasters since 2015. This qualitative, ethnographic case study used interview data collected from nine Conway residents to examine and analyze perceived threats to citizens of Conway following a large-scale natural disaster and the possible responses by citizens in need of government assistance. Findings reveal that participants have endured more than one large-scale disaster that has impacted their perceived level of community resilience. The results also indicate that while most citizens stated they liked their community, they did not think they could endure another large-scale disaster. The article discusses the viability of using FEMA's Building Resilient Infrastructure and Communities (BRIC) grant to develop local resilience planning groups (LRPGs). Implications for social change include cultivating efforts by governmental and non-governmental organizations to improve the level of community engagement, enhance the dissemination of information, improve disaster risk reduction; and build and maintain resilient communities. This research can also inform strategies to achieve several of the United Nations Sustainable Development Goals (SDGs) as well as the United Nations Office for Disaster Risk Reduction's Sendai Framework for Disaster Risk Reduction (SFDRR).

Keywords: *disaster risk reduction; community resilience; community competence; whole community approach; resilience*

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Introduction

Literature over the last 20 years suggests there is a general consensus at the local, state, and federal level that community resilience is a key policy issue and is critical to national health security and national preparedness. Social science research on disaster-prone communities often includes examinations of social capital and community resilience as methods for improving emergency management. There is also a growing awareness of the role and importance of communities in disaster risk reduction (Cretney, 2016; Markantoni et al., 2018; Vallance & Carlton, 2015). However, less clarity exists about what and how communities can build and

maintain resilience before a man-made or natural disaster (Chandra et al., 2010; Craft, 2019; Rice & Jahn, 2019). A review of current literature indicates the need for further exploration of the balance between the delivery of public service by government organizations and the responsibility and capability of the community in building and maintaining resilience.

The city of Conway (and other parts of Horry County) is susceptible to numerous natural disasters annually such as hurricanes, floods, tornadoes, winter storms, earthquakes, or wildfires (Horry County, 2015). In fact, Conway has sustained damage from four major flooding disasters since 2015. For this qualitative, ethnographic case study, I collected interview data from nine Conway residents to examine and analyze perceived threats to citizens of Conway, South Carolina, following a large-scale natural disaster and the possible responses by citizens in need of government assistance. Results from nine interviews demonstrated how the application of FEMA's Building Resilient Infrastructure and Communities (BRIC) grant and the establishment of local resilient planning groups (LRPGs) can help identify the appropriate balance between governmental organizations and local communities.

Purpose of Study

The purpose of this qualitative, ethnographic case study is to describe and analyze the perceived threats to citizens of Conway, South Carolina, following a large-scale natural disaster and the possible responses by citizens in need of government assistance. Conway, a city in Horry County, South Carolina, is part of the Myrtle Beach metropolitan area and the 19th largest city in South Carolina (World Population Review, 2020). While the city is inland, it has sustained damage from several natural disasters. Four major flooding disasters have affected many areas of South Carolina (including Conway) since 2015: the 2015 Historic Flood, Hurricane Matthew (2016), Hurricane/Tropical Storm Irma (2017), and Hurricane Florence (2018) (SC Floodwater Commission, 2019).

Research Questions

Central research questions: What are the perceived threats to citizens in a community within Conway, South Carolina, following a large-scale natural disaster and the possible responses by citizens in need of governmental assistance?

Sub-Questions

1. To what extent do the citizens of Conway, South Carolina, believe their local government can provide assistance before, during, and after a large-scale natural disaster?
2. To what extent does community resilience in a community within Conway, South Carolina, affect possible responses to a large-scale natural disaster?
3. To what extent does community competence in a community within Conway, South Carolina, affect possible responses to a large-scale natural disaster?

Theoretical Background: Social Capital Theory

Often the examination of emergency preparedness and disaster risk reduction includes an examination of the role of human capital and social capital in societies. As noted by Haney (2018), social science research on disaster-affected communities often incorporates social capital theory to both examine and explain civic engagement and response before, during, and after disasters. Inherent in social capital is the notion of social

trust, social connections, and social interactions at the individual and community levels (Aldrich & Meyer, 2015; Chamlee-Wright & Storr, 2011; Coleman, 1988; Glanville et al., 2013; Haney; Lin, 1999; McCrea et al., 2014; Putnam, 2000; Rostila, 2011; Rothstein, 2013). Scholars often discuss three types of social capital: bonding, bridging, and linking (Elliott et al., 2010; Hawkins & Maurer, 2010; Norris et al., 2008; Putnam; Rostila). Bonding social capital includes trusting relationships between members of a community or network of people who usually have shared identities. Bridging social capital describes a network of diverse individuals who recognize their differences (e.g. age, race, ethnicity, education, and possibly socioeconomic status). Lastly, linking social capital describes the extent to which individuals build relationships with organizations and individuals that have power and influence (Hawkins & Maurer; Rostila). It is important to note that all three types of social capital are likely to influence the environment before, during, and after disasters (Aldrich & Meyer; Chamlee-Wright & Storr; Elliott et al.; Reininger et al., 2013; Wukich, 2019).

Critics of the Social Capital Theory

Several scholars have criticized social capital theory for its ambiguity and variability (Durlauf & Fafchamps, 2004; Lynch et al., 2000 as cited in Claridge, 2018). In his examination of the criticisms, Claridge explored the argument that social capital is not a functioning theory, but more of an umbrella term (Haynes, 2009, as cited in Claridge) or a catch-all concept (Poder, 2011; Fine, 2002 as cited in Claridge) that allows each author to see what they want. Furthermore, he addressed arguments that aspects of social capital (like trust) cannot be observed directly, leaving researchers to use indicators that can be measured and subsequently used to identify causal relationships (Claridge). He also discussed one of the more well-known criticisms by economists (such as Kenneth Arrow, Robert Solow, and Samuel Bowles) that social capital does not meet the traditional definition of capital. Specifically, social capital “cannot be owned by an individual, and therefore cannot be traded” (Claridge, p. 4).

In his review, Claridge (2018) acknowledged the majority of criticisms of social capital theory tend to be related to the theoretical perspective of the scholars rather than social capital generally. As a point of comparison, Gannon and Roberts (2018) opined that criticisms of social capital theory are often the result of a mismatch between theoretical coverage of the concept and empirical work. Lastly, in underscoring the importance of exploring criticisms, Claridge argued that scholars and practitioners approaching social capital must ensure thorough examination of the literature to gain a broad understanding from different perspectives. In that vein, I will explore the implications of social capital to this research study in the Discussion section.

Scope and Delimitations

The research included interviews and the use of government documents, scholarly research, and archival data. In this study, I focused on residents within the City of Conway, South Carolina. Participants needed only be a citizen of Conway, which has an estimated population of 27,360 people. Approximately 70% of the population (18,654 people) are categorized as adults, with approximately 21% of adults classified as seniors. The overall median age is 35.6 years; 53% of the population are female, and 47% are male. The population is 61% White, 35.9 % Black or African American, 1.24% identify as multi-racial, and 1.09% are Asian. Approximately 65% of citizens are homeowners. The median household income is \$37,362 a year (World Population Review, 2020).

I planned to interview 25 to 30 individuals that represented the demographics of the population (gender, ethnicity, and age). However, this study was limited to the perspective of nine residents of Conway that did not represent the overall demographics of the population (see Figure 1). A larger participant pool may offer

disparate views regarding perceived community resilience and community competence among citizens in Conway.

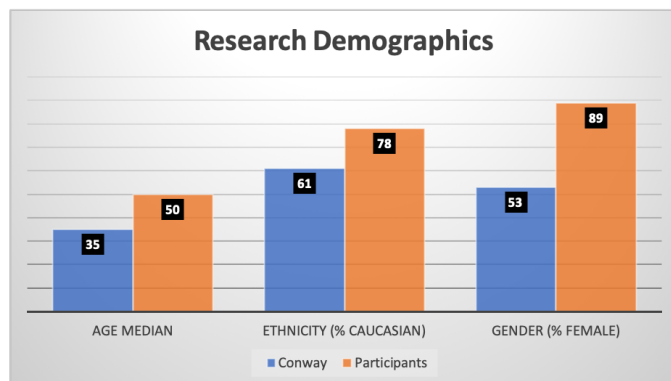


Figure 1. Research demographics

Limitations

This study was limited to the perspective of residents of Conway, South Carolina. Citizens residing in other areas within Horry County or South Carolina may offer disparate views regarding perceived community resilience. Additionally, the data collection phase of this study was limited by the COVID-19 pandemic. I began the data collection phase on February 10, 2020, which was 10 days after the U.S. declared a Public Health Emergency and 30 days before the World Health Organization declared COVID-19 a pandemic. Subsequently, on March 13, 2020, President Donald Trump declared COVID-19 a national emergency and announced social distancing guidelines on March 16, 2020. Given the pandemic, I did not conduct face-to-face interviews; 8 interviews were conducted over the phone and 1 interview was completed electronically. The data collection phase concluded on March 31, 2020. This limitation impacted the study because the thoughts and beliefs of nine individuals may not reflect the opinions of the larger population of Conway residents. Additionally, the use of telephonic interviews limits the researcher's ability to analyze participants' non-verbal communication.

Significance

This study is significant because it has the potential to improve the knowledge of the participants regarding their expressed feelings and perceived threats of natural disasters, the level of trust in their municipality to provide assistance, as well as their general knowledge and understanding of the services actually provided by the local government. It could also improve long-term preparation efforts for natural disasters that commonly occur in Conway. The results of this study may assist government officials in Conway in understanding the average citizen's expectations of government assistance and subsequently help officials determine ways to educate citizens regarding the roles and responsibilities of the government to provide assistance before, during, and after natural disasters—this could also help citizens manage their expectations. Additionally, this research project may address under-researched elements of perceived community competence and community resilience that could improve emergency management and community engagement at the state and local levels of government.

Moreover, this research can inform strategies to achieve several of the United Nations Sustainable Development Goals. It also supports priorities within the United Nations Sendai Framework for Disaster Risk Reduction (SFDRR). Implications for social change include cultivating efforts by governmental and non-

governmental organizations to improve the level of community engagement, enhance the dissemination of information, improve disaster risk reduction, and build and maintain resilient communities.

Findings

In discussing the findings, I highlight several themes: (a) perceived threats to disasters, (b) the perception of participants' relationship with government entities, (c) perceived community competence, (d) perceived community resilience, and (e) the likelihood of community participation.

Perceived Threats After Disasters

In this study, I interpreted the results of interview questions 3, 3a, 4, 4a, and 4b to analyze the participants' perceived threat after disasters. When identifying perceived threats to their family after a natural disaster, five out of nine participants specifically identified flooding as one of the greatest threats. Means of protecting themselves against natural disasters included preparation (e.g., weather proofing home and safeguarding property), developing evacuation plans, and protecting their health and welfare after the disaster. When identifying methods of gaining information before and after the disaster, citizens expressed disparate points of view regarding the best source of information. For example, eight out of nine participants specifically identified the local news (via television, mobile apps, Facebook, or the radio) as a source of information. However, all of the participants identified a second source of information: four out of nine expected the City of Conway's Facebook page to provide information; three out of nine expected the City's official website to continuously update information, and three out of nine relied on word of mouth from friends and neighbors (see Figure 2).

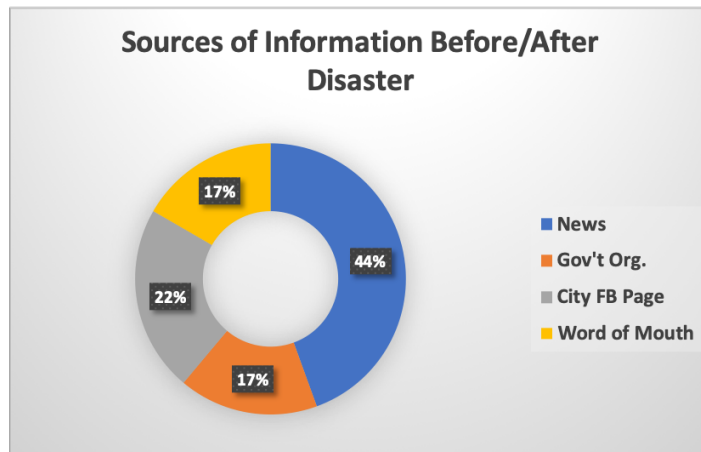


Figure 2. Sources of information

Perception of Participants' Relationship With Governmental Entities

In this study, I interpreted the results of interview questions 6–8, 8a, 9, 9a, 9b, and 10 to analyze the participants' trust and expectations of government entities. When asked how people in their community usually express concerns to the local government, the citizens identified multiple methods: five out of nine mentioned attending meetings (neighborhood crime watch, city council, and county council); four out of nine opined that citizens just complained (in person and on Facebook); three out of nine stated their neighbors would likely email or call officials; and two out of nine stated they were not sure how people in their community usually express concerns (see Figure 3). When asked to identify personnel in the local government

that represent the views of most people in their community, some participants named one or more individuals while others either did not trust any officials or could not think of anyone by name (see Figure 4).

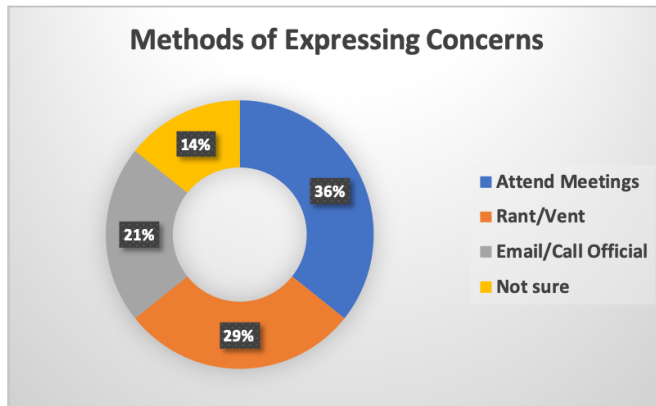


Figure 3. Methods of expressing concerns

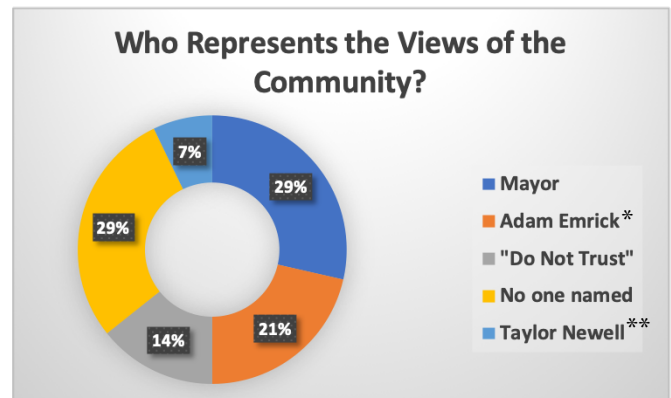


Figure 4. Who represents the views of community

*City Administrator **Public Information Officer

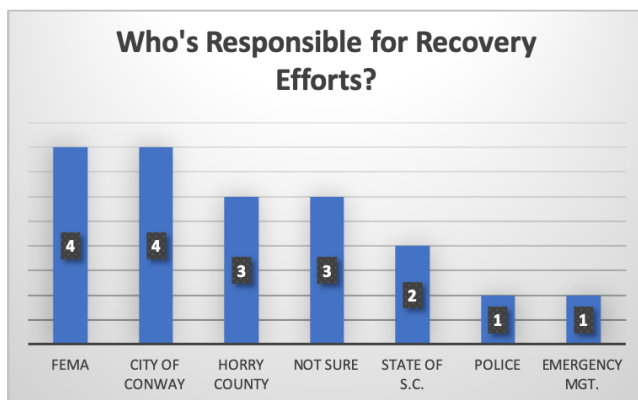


Figure 5. Who's responsible for disaster recovery

Only one of the nine participants could explain the local emergency management plan in the event of a natural disaster. Most of the participants that were not aware of the emergency management plan identified City Hall, the local news, and the library as resources to obtain such information. Additionally, participants were asked to identify which local and state agencies they believe are responsible for recovery efforts (see Figure 5). All of the participants trusted the local and state law enforcement to aid their family following a disaster to a high degree or to some extent.

Perceived Community Competence

Community competence is the collective capacity of individuals to learn about the social environment and use the information to take collective action and make informed decisions (Norris et al., 2008). It is highly reliant on social trust and communication as well as the existence of resources and networks. Communities tend to perform better before, during, and after disasters if they share a sense of empowerment, are socially cohesive, and believe in the good of the community (FEMA, 2011; McCrea et al., 2014; Norris et al.; Plodenic et al., 2014). In this study, I interpreted the results of interview questions 11–18 to analyze the participants' perceived community competence.

The majority of participants (seven out of nine) believe the friendliness of people in their community varies, with two out of nine believing they are not very friendly. Generally, seven out of nine citizens participate in community events, get together with members of their community regularly, and do favors for members of their community when required. Likewise, seven out of nine participants feel a sense of belonging in their respective community. Most of the residents (seven out of nine) listed more than one person they identified as a leader within their community, and they used several adjectives when describing these leaders such as knowledgeable, trustworthy, compassionate, helpful, and friendly. Most participants (eight out of nine) believed the leaders of their community listened to the residents to varying degrees.

Perceived Community Resilience

Various definitions exist for resilience and community resilience but in the context of this research, I define resilience as the ability to resist, absorb, and recover from or successfully adapt to adversity or a change in conditions (U.S. Department of Health and Human Services, 2012). Therefore, community resilience is defined as the ability of communities to resist, absorb, and recover from, or successfully adapt to, adversity or a change in conditions (Hyvarinen & Vos, 2015; Kulig et al., 2013; Leykin et al., 2016; Linnell, 2014; Plodinec et al., 2014; Smith & Lawrence, 2014; U.S. Department of Health and Human Services [US HHS]).

In this study, I interpreted the results of interview questions 19–23 to analyze the participants' perceived level of community resilience. The majority of the participants (seven out of nine) believed their community had a good reputation; eight out of nine like living in their respective communities; and six out of nine like living in the City of Conway. However, despite their mostly positive feelings towards their community, none of the participants felt confident that their community could endure another large-scale disaster. Specifically, five participants said “no,” two declared “one more [disaster] and I’m done!” and two said “it depends,” while acknowledging many families had already survived more than one flood. When proclaiming love for her community, one participant lamented, “but I live in fear of Crabtree [Swamp] flooding.”

Importance of Community Participation

The main objectives for community participation in development projects include increasing empowerment, competence, and capacity to increase the control over resources and decisions that affect the lives of all citizens within the community (Kassie, 2011). There are two approaches to community participation, the top-down approach and the bottom-up/partnership approach. The top-down approach implies that the government decides and provides for the communities. This approach is not ideal as it develops a sense of dependency and lethargy among people in communities. In the bottom-up/partnership approach, governments, donor agencies, and communities work hand in hand through clearly defined functions among the partners. This gives communities some degree of control over their affairs and supports sustainability of projects (Abbott, 1995). Prior to concluding each interview, I asked participants if they had any parting comments or thoughts. In response, eight out of nine participants provided recommendations that suggest a sense of bottom-up/partnership approach to improving disaster risk reduction in the City of Conway. The recommendations have been organized into four themes: information management and dissemination, resources, planning, and citizen responsibility.

Information management and dissemination

The majority of the participants identified the need to improve communication between the City officials and the citizens of disaster-prone areas before, during, and after disasters. Specifically, participants recommended government entities:

- Improve the accessibility and usability of official websites (FEMA, SC State, and Conway).

- Establish workshops/engagement sessions for citizens to learn about resources and express their concerns; forum should be a two-way discussion.
- Increase communication immediately following events/natural disasters.
- Disseminate information about emergency resources (like sandbags) via physical flyers, news, social media, and radio.
- Provide a list to citizens that describes (step by step) what to do if home is flooded.
- Improve transparency between developers, researchers, and the city council regarding the results of research studies and decisions related to flood disaster relief efforts.

Available resources

Some of the participants specifically named the State of South Carolina, Horry County, and the City of Conway when identifying entities that should be responsible for transportation, shelter, and financial support before and after a disaster.

- Provide transportation to citizens to get to and from their homes before and after disasters.
- Improve resources provided to citizens in the unincorporated areas.
- Develop more emergency shelters; ensure some allow pets or provide resources for boarding pets.
- Develop temporary and long-term housing for displaced persons.

Planning

When providing recommendations to improve planning for disasters, some participants acknowledged the importance of a whole community approach, which includes stakeholders from various levels of government. Moreover, some participants conveyed a concern for long-term planning and the impacts of climate change. Recommendations include:

- Improved coordination with the U.S. Army Corps of Engineers to develop a solution for the systemic flooding of Crabtree Swamp.
- Establish a natural disaster committee within the City of Conway that would be responsible for communicating information to the citizens before, during, and after disasters. The committee should include trusted members of the community as well as government officials and stakeholders.
- Consider ways to mitigate flooding (e.g., develop a canal plan, limit the removal of trees, plant trees in Lake Busbee, and restrict home development in flood prone areas).

Citizen responsibility

Some of the participants included an honest assessment of their fellow citizens when recommending ways to improve disaster risk reduction in the City of Conway. Specifically, several participants opined that their fellow citizens should “convey their concerns to the right people instead of just ranting on social media.” One participant acknowledged that some citizens may not want to “complain publicly and ruffle feathers,” but noted the importance of citizens using “their voices to drive change, not just complain.” Another participant shared a similar sentiment, stating “they [citizens] should not just assume things are going to happen.” Another participant suggested that citizens should “follow the advice of experts leading up to the natural disaster, instead of trying to compare what might happen to a previous natural disaster.”

Discussion

The Whole Community Concept

Literature over the last 20 years suggests there is a general consensus at the local, state, and federal level that community resilience is a key policy issue and is critical to national health security and national preparedness. However, there is less clarity about how communities can build and maintain resilience before a man-made or natural disaster (Chandra et al., 2010; Craft, 2019; Rice & Jahn, 2019).

Enhanced community resilience is considered critical to mitigating vulnerabilities (Aldrich & Meyer, 2015; Chen et al., 2013; Kulig et al., 2011, 2013; Plodenic et al., 2014; Smith & Lawrence, 2014), reducing negative health consequences, and rapidly restoring the functionality of the community following a crisis or disaster (Kulig et al.; Lee, 2010; Plodenic et al.; Smith & Lawrence; US HHS, 2012). For example, RAND Corporation developed a definition of community resilience with an emphasis on engagement at the community level, developing partnerships among organizations, sustaining local leadership, facilitating culturally relevant education about risks, and building individual-level and community-level preparedness and self-sufficiency. Ultimately, a general consensus remains regarding the importance of community resilience to national health and to the whole community partnership cited in the 2019 National Preparedness Report (DHS, 2019). Likewise, researchers share a consensus view about the importance of educating the populace on disaster risk reduction methods and developing resilient societies worldwide (Christenson et al., 2018; Forrest & Milliken, 2018).

Interpreting Social Capital

The social capital theory includes three types of social capital: bonding, bridging, and linking (Aldrich & Meyer, 2015; Chamlee-Wright & Storr, 2011). As previously discussed, all three types are likely to influence the environment before, during, and after disasters (Reininger et al., 2013; Wukich, 2019). Inherent in bonding social capital is communication, a sense of trust among members of the network, intracommunity ties, and a sense of purpose (Hawkins & Maurer, 2010; Rostilla, 2011). Data analysis from nine interviews will inform the interpretation of bonding social capital among the participants of this study.

Communication: Participants identified the importance of communication between the City of Conway officials and the citizens of disaster-prone areas. They recommended that officials improve transparency between developers, researchers, and the city council regarding research studies and decisions related to flood disaster relief efforts. The participants also suggested that officials improve the general dissemination of information before and after disasters as well as the accessibility and usability of official websites.

Sense of trust: Social scientists hypothesize that informal and formal ties will foster generalized trust because relationships enable individuals to form expectations of goodwill (Bromley et al., 2017; Faulkner et al., 2018; Glanville et al., 2013). This theme also emerges in the research. For example, the majority of the participants (seven out of nine) believe the members of their community are friendly and they also feel a general sense of belonging in their respective community. Additionally, most of the residents (seven out of nine) identified more than one person as a leader within their community and used descriptive terms such as knowledgeable, trustworthy, and compassionate.

Intracommunity ties

When providing recommendations, the majority of participants (eight out of nine) acknowledged the importance of the whole community approach. Specifically, two of the residents highlighted the importance of coordination between members of the community, stakeholders within the community, and government officials. One suggested the establishment of a natural disaster committee with the City of Conway. Furthermore, several participants provided an honest assessment of their fellow citizens and noted the

responsibility of all citizens to provide input to the appropriate entities for the sake of improving disaster risk reduction.

Sense of purpose

The aforementioned recommendations provided by the participants indicate a sense of purpose to improve community competence, community resilience, and disaster risk reduction.

Concept into action: Developing local resilience planning groups

Experts with the RAND Corporation recommended developing a roadmap for building local community resilience that included eight levers of community resilience (areas in which communities may need to build capacity): wellness, access, education, engagement, self-sufficiency, partnership, quality, and efficiency (Chandra et al., 2010). In April 2020, the Federal Emergency Management Agency (FEMA) published a public notice for the Building Resilient Infrastructure and Communities (BRIC) grant program. The program is the result of amendments made to Section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) by Section 1234 of the Disaster Recovery Reform Act of 2018 (FEMA, 2020). Ultimately, this legislation recognized the need to focus efforts on hazard mitigation, rather than response. The program's guiding principle is focused on building capability and capacity of communities. The anticipated rollout of this program includes a notice of funding opportunity in Summer/Fall of 2020 with a grant application period opening in Fall 2020.

The development of Local Resilience Planning Groups (LRPGs) in Aberdeen, Scotland, serve as a case study for how the BRIC grant program could facilitate building capacity and capability to develop the aforementioned eight levers of community resilience in disaster-prone areas. Specifically, LRPGs are beneficial in communities that already have an active civil society because it can be used as a platform to deliver education and training opportunities. Inherent in this platform are opportunities to address social and economic issues that are directly related to a community's ability to prepare for and respond to disasters. However, as Baxter (2019) illustrates in her study of similar programs, the incorporation of stakeholders and an honest evaluation and improvement phase is also necessary. To put it simply, any approach to improving community resilience should include a clear delineation between what citizens can affect in their community as well as what is beyond their capability and power of influence. In that same vein, the LRPGs should focus their strategies on social innovations and place-based solutions. For example, LRPGs have the potential to leverage their stakeholders' ability to link external resources and capacities (such as resources provided by the state) to community-based initiatives led primarily by the citizens. Focusing on place-based solutions enables the LRPGs to do things such as: build and assess their own capacity as well as develop their own forums and community response groups. Increased participation empowers the citizens to help define and assess their community's state of readiness and resilience.

Recommendations

FEMA BRIC Grants and LRPGs

The FEMA Building Resilient Infrastructure and Communities (BRIC) grant is a significant paradigm shift in the way the federal government has dealt with disasters. Namely, it shifts the focus from reactive disaster funding to a pro-active strategy of shared responsibility and partnerships. The stated mission of this grant program is to empower states, local governments, tribes, and territories (SLTTs) to identify the resources needed to develop strong mitigation projects and build community resilience that is unique to the respective state, local government, tribe, or territory (FEMA, 2020). As evident in this research, the majority of participants provided recommendations that align with some of the eight levers of community resilience such as wellness, education, engagement, self-sufficiency, partnership, and quality. Therefore, it is imperative that the City of Conway strongly consider applying for this grant. The participant recommendations also

underscore the viability of local resilience planning groups. Ultimately, the combination of the FEMA BRIC grant and the LRPGs could cultivate efforts by governmental and non-governmental organizations to enhance community resilience and mitigate vulnerabilities. In turn, disaster-prone communities (such as Conway) could improve the ability to rapidly restore functionality following a crisis or disaster.

Education is a Source of Empowerment

Raising the level of public awareness and facilitating a means to improve individual participation in disaster preparedness through low-cost education programs could also assist governmental and non-governmental efforts to build resilient communities. Current emergency preparedness announcements provide information on what to do (e.g., be informed, make a plan, go to a website for more information) but not how to do it (e.g., ensure each person has a gallon of water per day for hydration and hygiene). In the author’s previous research she recommended a “Be Ready” trivia campaign as a vehicle to disseminate information about emergency management programs and procedures for the average citizen to understand by leveraging current trends of using social media technology for disaster warning, response, and recovery (Craft, 2018, 2019). The benefits support the goals of the BRIC grant program and the LRPGs construct. It can also aid in the long-term goals of enhanced community resilience. Specifically, local governments can leverage existing partnerships with local businesses/organizations to develop and support the education platform. Citizens participating in the trivia campaign demonstrate their knowledge. Subsequently, in examining the trivia results, local governmental officials and LRPG leaders gain insight of “on-demand” focus topics to address, as well as the best means of helping citizens manage their expectations of government relief (Craft, 2019).

Implications

The positive social change implications of this research are centered on promoting efforts by governmental (e.g., FEMA BRIC) and non-governmental organizations (e.g., LRPGs) to improve the level of community engagement, improve disaster risk reduction; and build and maintain resilient communities.

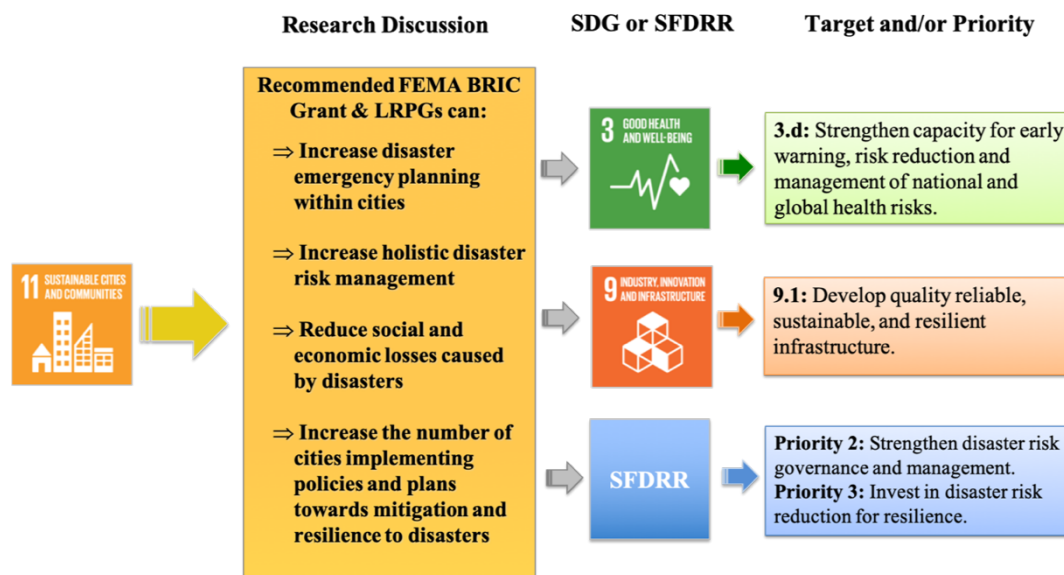


Figure 6. Links between the author’s research and United Nations’ initiatives

As illustrated in Figure 6, this research study also supports social change initiatives of the United Nations. Namely, the recommendations to apply for the FEMA BRIC grant and establish local resilience planning groups (LRPGs) can aid in the achievement of some of the United Nations Sustainable Development Goals

(SDGs) as well as the United Nations Office for Disaster Risk Reduction's Sendai Framework for Disaster Risk Reduction (SFDRR). Specific SDG targets and SFDRR priorities include SDG #3.d (strengthened capacity for risk reduction); SDG #9.1 (develop quality, reliable, sustainable, and resilient infrastructure); SDG #11.b (increased disaster and emergency planning and response in line with SFDRR), and SFDRR Priorities 2 and 3 (strengthen and invest in disaster risk reduction).

Conclusion

The City of Conway, South Carolina, is susceptible to numerous natural disasters throughout the year and it has sustained damage from four major flooding disasters since 2015. This qualitative ethnographic case study used interview data collected from nine Conway residents to examine and analyze perceived threats to citizens of Conway following a large-scale natural disaster and the possible responses by citizens in need of governmental assistance. Recent federal legislation highlights the importance of focusing on hazards mitigation and disaster risk reduction rather than response. Ultimately, research on disaster risk reduction underscored the importance of engagement at the community level to build individual-level and community-level preparedness and self-sufficiency. The results also indicate that while most citizens stated they liked their community, they did not think they could endure another large-scale disaster.

This research contributes to the body of literature on disaster risk reduction by exploring the balance between the delivery of public service by government organizations and the responsibility and capability of the community in building and maintaining resilience. The development of Local Resilience Planning Groups (LRPGs) in Aberdeen, Scotland, served as a case study for how the BRIC grant program and LRPGs could facilitate building capacity and capability to developing the eight levers of community resilience (wellness, access, education, engagement, self-sufficiency, partnership, quality, and efficiency) in Conway, South Carolina. The author recommends additional research, including interviews, to improve the response rates of Conway citizens impacted by natural disasters. The author also recommends further community engagement between the stakeholders and citizens of Conway to examine the perceived impacts that natural disasters have on the community and develop a whole community approach to disaster risk reduction. Lastly, the author recommends that disaster-prone cities and/or counties strongly consider the establishment of LRPGs and apply for the FEMA BRIC grant to improve community resilience, mitigate vulnerabilities, and reduce the risks of disasters.

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