

Social Capital and Natural Disaster Recovery: Insights from a Qualitative Study in St. Vincent and the Grenadines

Monique Constance-Huggins¹, Marika' Dillard², Kentrell Jenkins³

¹PhD, ²MSW candidate, ³BA candidate,
^{1,2,3}Winthrop University, Rock Hill, United States

Abstract: This qualitative study explored how social capital impacted victims of the devastating 2013 tropical trough in St. Vincent and the Grenadines as they attempted to rebuild their lives. The study was based on 10 in-depth interviews. The results support the claim that social capital facilitates disaster recovery, but also draws special attention to the individual's reliance on a spiritual being as a measure of coping with the effects of a natural disaster.

Keywords: Social capital, disaster, St. Vincent and the Grenadines.

I. INTRODUCTION

Natural disasters can have devastating effects on individuals, particularly those in developing countries. Disasters can negatively affect employment, health, and education as well as reverse developmental gains (Green, 2014). The impact of disasters on individuals in developing countries is compounded by the higher rates of poverty they experience compared to those in developed countries. Higher levels of poverty are associated with individuals and communities that have limited or low availability of resources. This is common in developing countries and could severely hinder recovery from a devastating disaster. Although individuals in developed countries can often mitigate their losses, those in developing countries have less financial support. For example, individuals in developed countries have insurance markets or other formal institutions that they can depend on to help cope with the effects of disasters (Tse, Wei & Wang, 2013). On the contrary, individuals in developing regions are not exposed to a plethora of stable insurance markets or formal institutions that can support them in the aftermath of a disaster (UNFCCC, 2009). Further, the nature of the economies in developing countries creates greater risks. Many of these countries, including those in the Caribbean, are dependent on industries (such as tourism, and agriculture) that are quite vulnerable to natural disasters (Reed, 2010). This in turn, places the economic fortitude of individual citizens at increased risk.

The ability of individuals to cope with the unpredictable effects of disasters must therefore be centered on the path of building resilience through the protection of individual and community developmental gains (Green, 2014). In essence, individuals in developing countries are forced to protect the fragile networks, capital, infrastructures and industries on which they depend. To strengthen disaster resilience among individuals, the factors that help individuals build their capacity for resilience should be examined. By building disaster resilience, the individual's vulnerability during disaster decreases. One factor that can help decrease vulnerability and increase coping probability is social capital.

Social capital, broadly defined as the advantages that are embedded in relationships (Coleman, 1988), can positively impact an individual's ability to rebound after a disaster. For example, having a strong social network and support system can help individuals to find resources to rebuild their lives and property faster. Although social capital is important, its role on the plight of individuals after disaster, has not been sufficiently studied (Chang, 2010). Therefore, this paper will explore the role of social capital in the recovery experience of victims of the devastating December 2013 storm in St. Vincent and the Grenadines. This study is relevant for small, developing countries such as St. Vincent, which due to their high community spirit and small size are often cited for having rich social capital.

II. BACKGROUND AND LITERATURE REVIEW

A. Case study: The Christmas disaster in St. Vincent and the Grenadines:

On December 24th 2013, St. Vincent and the Grenadines experienced its deadliest disaster on record. A tropical trough, which became known as the “Christmas disaster,” caused millions of dollars in damage and resulted in 10 deaths. The tropical trough caused widespread flooding and mudslides. Bridges collapsed and homes were damaged across the main land of St. Vincent. According to the National Emergency Management Organization (NEMO) of St. Vincent and the Grenadines, the severity of the trough system proved to be both unexpected and unpredictable (Searchlight, 2014). The report issued by the Meteorological Office advised of thunderstorms, which residents typically associate with heavy rain and lightning, but not persistent torrential rainfall. The severity of this particularly system was highly underestimated and unpredictable as Vincentians remained preoccupied with Christmas preparations, which exposed their vulnerability. The vigilance of Vincentians was diminished because the early onset of the heaviest rains fell in the distant mountains away from the main areas of Christmas activities. This level of unpredictability, preoccupation and non-expectancy also gripped the neighbouring Caribbean islands of St. Lucia and Dominica, which also suffered significant loss and damages.

III. SOCIAL CAPITAL AND NATURAL DISASTER

As mentioned previously, social capital means the norms and social relationships embedded within social structures that provide advantages to individuals (Coleman, 1988). The concept of social capital is not unidimensional because it incorporates structural, relational and cognitive components (Nahapiet & Ghoshal, 1998; Taylor 2007). The structural dimension of social capital focuses on the patterns of relationships and the extent to which people are connected within social networks (Taylor, 2007). The relational component is about the assets that are created and traded as a result of those relationships. The cognitive aspect of social capital is the common understanding and vision that people have through shared experience, narrative and language (Nahapiet & Ghoshal, 1998).

Several studies have shown the link between social capital and natural disasters (Helliwell, Huang & Wang, 2014; Rahill, Ganapati, Clérismé, & Mukherji, 2014; Chamlee-Wright & Storr, 2011; Chamlee-Wright & Storr, 2009; Tse, Wei & Wang, 2008; Nakawaga & Shaw, 2004; Hurlbert, Haines & Beggs, 2000). Tse et al. (2008), who conducted a study on the 2008 Sichuan earthquake in China, found that households with more social capital, as measured by the size of their network, rebuild faster than other households. This was attributed to the fact that households with larger social networks were better able to access government help. Yet in the same study, a competing concept of social capital, human capital, which was measured by the years of schooling, did not have any impact on housing reconstruction after the disaster.

Like Tse et al. (2008), Hurlbert and his colleagues (2000) explored how the density of one’s network affected the informal support received in a disaster in the case of Hurricane Andrew in the United States. The study concluded that individuals who were a part of a larger network were more likely to gain support from their network members. However, the study also found that networks with more family ties yielded more informal support. Networks with weak ties offered informational advantages (Hurlbert et. al, 2000).

Nakawaga and Shaw (2004) also examined the role that social capital played in helping individuals recover from the disasters in Kobe, Japan and Gujarat, India. The study showed that individuals and communities that had higher levels of social capital experienced faster recovery than those with lower levels of social capital (Nakawaga & Shaw, 2004). They also found that communities within Kobe and Gujarat were more satisfied with the disaster recovery processes than areas with lower levels of social capital. The study suggests that social capital is an essential ingredient for recovery, regardless of the developmental stage of the country (Nakawaga & Shaw, 2004).

Chamlee-Wright and Storr (2009), who explored social capital following Hurricane Katrina in the United States, similarly found that mixed networks (those comprised of both strong and weak ties) helped individuals and families rebound after the disaster. Hurricane Katrina destroyed physical structures, which resulted in the loss of lives and the displacement of over five hundred thousand residents. The researchers found that following this disaster, social capital, as measured by church membership, facilitated the rebound of the Vietnam community in East New Orleans. The social capital gave members of the Vietnam community access to resources such as ethnically appropriate aid (Chamlee-Wright & Storr, 2009).

In contrast to the above studies that examined the structural aspect of social capital, Chamlee-Wright and Storr (2011) measured social capital as collective narrative in the latter of their two studies cited. They examined the role of social capital in rebuilding after hurricane Katrina. Chamlee-Wright and Storr (2011) found that having a collective narrative encouraged community members to be self-reliant. Collective narratives emphasized hard work and reminded individuals of the history that the community has of overcoming challenges. As a result, collective narratives help facilitate recovery following a disaster.

Finally, a recent study by Rahill, Ganapati, Clérismé, & Mukherji, (2014) after the devastating earthquake of January 2010 on Haiti examined the positives and negatives of social capital in respect to the cultural understanding among Haitians from different socioeconomic communities. Overall, the study supports the claim that social capital “facilitated access to shelter-related resources” and recovery for those who had higher levels, but it also “worsened the inequalities that already existed” among Haitians in the different communities (Rahill et al, 2014).

IV. METHODS

A. Study design and participants:

The study utilizes a one time-point qualitative exploratory, case study design. This method was chosen based on the state of current research on social capital and disaster recovery at the individual level. The scholarship on disaster and social capital has generally shown a relationship between the two variables. However, little is known about how individuals specifically use social capital to cope after a disaster. According to Padgett, qualitative methodology is appropriate for studying a topic on which little is known (Padgett, 2008). The participants for this study were victims of the deadly storm that struck St. Vincent and the Grenadines on December 24th, 2013. The questions chosen were adopted or generated based on the existing literature on disaster and social capital. Appropriate Institutional Review Board (IRB) approval was obtained for this research study.

B. Sample:

Non-probability sampling methods were used to obtain the sample for the study. Ten families who were most affected by the disaster were interviewed. Five participants on the Leeward side of the island were conveniently recruited from an emergency center where storm victims were residing. Snowball sampling method was used to reach the other five participants on the Windward side of the island. A recruitment letter detailing the purpose of the study, the risk involved, and the participant’s right to refuse participation, was read to the participants.

C. Measurement:

This study primarily used semi-structured interviews to obtain information on how storm victims used their social capital to address their needs after the disaster. There were eight open-ended questions that served to outline and model individuals’ view of their social context and its effects on their disaster recovery. Tutty, Rothery, and Grinnell (1996), suggest that “this approach is less restrictive, allowing each individual to answer in a way that reflects his or her experience and opens up the number and type of potential responses.” Further, with this method the interviewer seeks in-depth information on the interviewee’s feelings, experience, and perceptions (Engel & Schutt, 2005).

D. Interview logistics:

The interviews were conducted in August 2014. Each interview lasted 20-30 minutes. The interviews were conducted face-to-face at a location that was convenient for the participants. The interview sessions began with a review of the purpose of the study and the participants’ right to refuse to participate in the study. The participants were reminded of the researcher’s obligation to keep their information confidential. With the participants’ permission, the interview was recorded.

E. Data analysis and coding:

Each interview tape was first transcribed then coded. The analysis of the information from the interviews took a theme-based approach. Themes related to individuals’ use of social capital as they address their post disaster needs. This is critical as the important work of social capital still remains elusive among disaster victims in the Caribbean. Themes were identified based on a combination of the persistent conclusions in the literature on social capital and characteristics of disaster victims. The context in which they were able to address post-disaster needs was also considered.

V. FINDINGS

This study explored the role of social capital in helping victims of a natural disaster in St. Vincent and the Grenadines rebuild their lives. Results are presented on the perception of help and the nature and extent of social capital among the neighborhood as a whole, family and friends as well as local organizations and churches. Results on the use of faith as a coping strategy are also presented.

A. Perception of help:

While the study did not attempt to provide a single definition of help to interviewees, it found that there are differing perceptions among the victims. Help was limited after the disaster, but its definition was also elusive among disaster victims. Individuals were conflicted on their characterization of aid. Some victims indicated that they received clothes and food from family or church, but no money. In several cases, the acknowledgement of food and clothing as aid was made after the victims initially stated that they did not receive any aid.

B. Neighborhood social capital:

The study participants had a positive perception of their neighborhood. Consistent with the view of small communities, victims characterized their neighborhoods as friendly or 'nice'. For example, one of the female victims eagerly expressed the following when asked about her neighborhood: "Yes, my neighborhood is very nice. The people are friendly and willing to help." Further to this, study participants knew many of their neighbors given their frequent references to a range of individuals within the community. This is not surprising given the size of the communities in which they live and the proximity of the communities to each other.

Although neighbors were friendly and willing to help, they were not dependable in delivering assistance. The support that storm victims received from neighbors was miniscule. Only a few individuals reported that the neighbors shared with them, and most individuals noted that their neighbors did not offer help or asked if they needed help after the disaster. For example, when asked about neighborhood help, one victim exclusively described the help she received from her sister in the United States, without making reference to any help from her neighbors.

In cases where help was given by neighbors, it was short-lived. Support was given immediately following the disaster but soon dissipated. For example, one victim stated; "when the storm just happened, people came around and brought things like clothes but now I am in shelter, although I still need the help, no one is coming around to help." The participants expressed feelings of abandonment by neighbors who were previously described as being nice or close.

C. Family:

Social capital among in the form of assistance from family and friends was important to disaster victims. Individuals noted that family members, including those who are residing abroad, particularly in the U.S, offered help with clothes and other small items. This help, however, was deemed inadequate and infrequent. Victims repeatedly used words, such as "...one-time...", "...only...", "...just clothes...", "...nothing..." to indicate the insignificance of the assistance from family members. Some individuals noted that their family members were willing to help but they were not able to do so, given their own financial constraints. Despite the limitation, aid from family was tangible in the form of clothes, food and for a few victims, money. One victim noted that her family provided her with "food or money to buy food." A few individuals were, however, not able to obtain any support from family.

D. Local organizations including churches:

Church-based social capital was important in the recovery efforts of both individuals and organizations. The church was the primary local organization that victims felt provided some assistance towards their recovery. When asked about the help that they received from churches and other organization, disaster victims only referenced the limited help they received from churches. Victims stated that help from churches was mostly in the form of food and clothing, but not money. Several victims, however, indicated that the churches in the community did not provide them with any assistance other than spiritual support. Some claimed that this lack of assistance could be attributed to them not being members of the church.

The church to church support was striking. One of the study participants was the pastor of a church that was severely affected during the disaster. He noted that the church received tremendous assistance from the parent organization. This

is not surprising given Putnam's (2000) operationalization of social capital as membership in organizations. The church also received support from the individual members. This support came in the form of building materials and money above and beyond their regular tithes and offering.

With inadequate local aid, many victims leaned on the national government, which several considered more resourceful than local organizations. Several individuals indicated contentment with the support of government. One individual noted that "the Prime Minister helped provide food for 6 months." Another stated that "the Prime Minister gave me this house."

E. Support and coping strategies:

One of the advantages of being embedded in relationships is receiving emotional support. This is especially critical after a disaster. Victims of the Christmas 2013 disaster noted that they received little emotional assistance from social workers and other individuals from the helping profession. One victim reflected that a social worker supported him in dealing with his bills, but others suggested that social workers simply "asked about how we were coping" or provided contact information if they needed support. The majority did not have any contact with a social worker. On the other hand, most victims stated that it was the church that provided encouraging words in emotional and spiritual support. Additionally, when asked who they talked to when they are down, almost all interviewees made reference to God or expressed faith in God with words such as "Thank God," "the Holy Spirit," "prayer," "faith," or "Almighty." One interviewee summed up the general coping view in saying "everybody should come together and thank the Prime Minister and God that are we still alive."

VI. SUMMARY AND CONCLUSION

Using the Christmas disaster in St. Vincent as a context, this paper provided a case on how social capital influenced an individual's and community's ability to rebound after a devastating disaster. The study analyzed the viewpoints of the disaster victims on how they are dealing with the recovery. Consistent with previous studies (Hawkins & Maurer, 2010) on social capital and natural disaster, the current study found that although limited, social capital was important in the lives of the disaster victims. Individuals received material help such as clothes and food from neighbors. While this help was important to the disaster victims, its limited nature appeared antithesis to the general description of neighbors being friendly. This could be explained by the lack of financial resources in low-income neighborhoods. This signals the role of class in the shaping an individual's social capital.

Similarly, although help from family members was important, it was limited. This could be explained by the economic status of the individuals. The disaster victims came from poor families who had limited financial resources, and therefore were unable to provide financial assistance to their needy relatives. This is consistent with Granovetter's (1983) view that weak (non-kin) ties provide greater opportunities for advancement than close ties (bonding social capital). It is also consistent with Hawkins and Maurer's (2010) findings that while bonding social capital provided more immediate support to victims of Katrina, weak ties were more instrumental in providing pathways to longer-term survival.

Another theme that emerged was faith as social capital. The in-depth interviews revealed that individuals relied on their belief in God to help them cope with the effects of the disaster. This is surprising given that individuals claimed that instrumental social support such as monetary aid, food, shelter, clothing, and services from church groups were limited. However, this is consistent with the idea that there is an increase in spirituality despite a decrease in religious participation (Saguaro seminar, 1998). The results of the study therefore suggest the importance of emphasizing church support and faith in God as separate dimensions of faith-based social capital.

Although the current study exposes social capital as an important factor in rebounding after a natural disaster, the study has several limitations. First, the study is limited by the small sample size. Accordingly, findings cannot be generalized to the entire island of St. Vincent and the Grenadines or to the wider Caribbean region. This is however consistent with qualitative inquiries, which are designed to raise new questions and build theories (Strauss & Corbin, 1998). Second, the study was conducted six months after the disaster. It is therefore possible that interviewees had forgotten some of the details and emotions associated with the disaster. Third, the study did not use a representative sample of those affected by the disaster. Convenience and snowball methods were used to obtain the sample for the study. Despite these limitations, the current study provides important insights into the use of social capital after a disaster, among poor individuals within the Caribbean.

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