Mobilization of social capital during post Haiyan in the two municipalities of Leyte Province, Philippines

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Abstract: The paper describes how social capital has facilitated and hindered the disaster recovery of selected community residents of the municipalities of Tolosa and Dulag in Leyte Province who were victims of Typhoon Haiyan in 2013. A survey was conducted using questionnaire to 201 male and female respondents, on how they were able to utilize social capital in order to rebuild their lives, of their families and communities. The study revealed that the weak social capital displayed by the community could partly explain that the respondents felt moderate satisfaction with their state of recovery such as having more permanent and stable housing and livelihood. Having stronger social capital could possibly increase levels of satisfaction among the community residents of Tolosa and Dulag and improve their overall recovery and resilience by building back better.

1. Introduction

Efforts in responding to disaster vary all over the world. These are also happening in different communities in various countries. More recently, studies have focused on the vulnerability of human populations, emphasizing on the physical factors such as land use, building patterns, and identifying special populations at risk to encourage building disaster resistant communities [1]. The attention was mostly given to identifying local hazards and strengthening physical, especially infrastructure and building codes while little has been given to possible changes in the social systems of communities and how these make them more resilient. Some communities have more resilient behavior while others are having difficulties in terms of physical and psychosocial recovery from disasters.

In November 8, 2013 Typhoon Yolanda (Haiyan) brought havoc in the Philippines particularly in the Eastern Visayas Region which affected 14 million people across 44 provinces, displacing 4 million people and claiming 6,000 lives. About 1.1 million houses were damaged with an estimated overall damage of USD 5.8 Billion.
The Social Capital Theory suggests that capabilities and resources are embedded in a social network whereas social capital can be a source of solidarity, information, cooperation, collaboration and influence [2]. Looking into networks of developed strong personal relationships, it is the basis of trust, cooperation and collective action which were key for the survival and functioning of communities [3]. Social capital is important in the different phases of disaster especially in reducing disaster risks [4]. The destruction of human, economic, physical and environmental capital is caused by the occurrence of disasters. However, social capital is not reduced and can actually grow during a disaster [5]. It serves as the primary resource for a community to prepare for, respond to, and recover from disaster [6]. In a community, social capital helps members have access to a number of resources during the disaster management cycle, they claim that it facilitates warning, information exchange, shelter preparation and preposition of supplies, vulnerability assessments, hazard-mapping, designing evacuation routes and other preparedness exercises before a disaster occurs. Moreover, social capital helps vulnerable communities plan better evacuations, initiate debris removal, search and rescue, and the provision of shelter, child-care, land limited financial aid during a disaster. Equally crucial is that social capital contributes to initiating immediate emotional and psychological support [7].

Social capital has been defined and operationalized in varying ways across many studies [8]. An approach utilized in the study of social capital is by categorizing it into three types: bonding, bridging, and linking. Each category is characterized by the strength of relationships and composition of groups or networks; the resources produced from each type of social capital also vary [9].

Empirical studies have shown that bonding, bridging, and linking social capital contribute to recovery and resilience of communities struck by different forms of disasters. Comparative studies also show that communities that demonstrate stronger bonding social capital tend to recover better than those with weaker ties. The three types of social capital aid the survivors of disrupted communities [10]. High levels of similarity in terms of the characteristics of the individuals, attitudes, information, and resources of a group are attributes of bonding social capital [11].

Bridging social capital is found in social groups made up of acquaintances or individuals who have demographic diversity. They contribute to the larger community through the information and resources generated from them. Civic or political institutions and associations or clubs, intended for recreation, education, or religion create bridging social capital [12]. Finally, linking social capital is described as connecting citizens with authorities across formal or institutionalized groups, primarily the government. Trust and respect are demonstrated in the relationships of the individuals in these groups [13].

In this paper, I focused on the specific contribution of social capital in the recovery of the selected affected community residents of the two municipalities of Leyte Province in the Philippines.

2. Objectives and method

This paper aims to describe the role of social capital in the disaster recovery of selected affected community residents of the Municipalities of Dulag and Tolosa. Local enumerators were hired for the project to particularly in the data gathering. A survey questionnaire was conducted to 201 respondents from the 2 municipalities. These municipalities were chosen as the study site as these municipalities were greatly devastated by the super typhoon Haiyan “Yolanda” in November 8, 2013 where lives, livelihoods,
and properties in these areas were massively shattered.

Table 1. Location of the survey.

| Municipality | Frequency | %   |
|--------------|-----------|-----|
| Tolosa       | 105       | 52.2|
| Dulag        | 96        | 47.8|
| Total        | 201       | 100.0|
3. Result

3.1 Personal characteristics of the respondents

The average of the respondents is 37 years old, 15 years old as the youngest and 78 years old as the oldest. The age of the respondents varied as reflected on the value of its standard deviation (16.00). There were a number of students, adults, and senior citizens included in the study. Results showed that almost half (49.8%) of the respondents attended college, majority (92.0%) are Roman Catholic.

Around 13.1% of the members had no occupation while others were utility man/drivers (6.6%), farmers (6.3%), construction workers (4.8%), self-employed (4.6%), teachers (3.7%), and government employee (2.8%). Only very few were working as cook, nurse, security guard, butcher, mall attendant, “masahista”, household helper, cashier, fisherman, lay-out artist, office worker, lineman, gasoline boy, factory worker, janitor, barangay health worker, army, mechanic, sales lady, electrician, and welder.

3.2 Familiarity with the neighbors and community people

Based on the survey, 76.6% of the respondents were resettled after the occurrence of Yolanda. Before Typhoon Haiyan, 86.6% respondents knew their neighbors well while but after Typhoon Haiyan 82.1% of the respondents know their neighbor well. After Haiyan, around 53.9% of the respondents said that they can trust only few people in their community, 25.7% asserted that they cannot trust some of the people and only 18% perceived that they can trust most people. Only very few 6.3% believed that their families are always extending help to their neighbors. while more than half 52.3% agreed that their neighbors will help them when they will be in trouble. However, most of them 63.7% locked the door when going out of the house.

3.3 Affiliation with organizations

Around 15.9% were members of organizations before Haiyan while only very few (5.0%) had joined organizations after Haiyan. The respondents were affiliated with 10 different organizations before Haiyan and they had been a member for almost 5 years on the average. After Haiyan, there were only 3 organizations listed which respondents affiliated with. There is a decrease in the affiliation with varied organizations. Only 20% served as officers in the organization before and after Haiyan. Most of the respondents 60% are became more active as members of varied organizations after Haiyan. Being active means participating in different activities regularly.

3.4 Communication with friends, family and relatives

Around 34.8 of the respondents had communication with friends before Haiyan and while 38% of them communicated with friends after Haiyan. There is a slight increase in communication with friends. More than half (59.7%) of the respondents had interaction with the members of their families and relatives before Haiyan specifically with their spouse (36.9%), parents (22.0%), siblings (20.6%), other relatives (11.3%), and grandparents (9.2%). Likewise, prior to Haiyan, most of them (65.6%) had daily interaction with their families and relatives while others (24.6%) had it on weekly basis. After Haiyan, the number of respondents who made daily interaction with their family members reduced to 39.7%. which 40.5% did it on weekly basis.
3.5 Assistance received from family, relatives, friends and neighbors

Only around 29.4% of the respondents received assistance from their family members or relatives locally and abroad of which 83.7% of them received financial support on regular basis while the rest had been provided with assistance even before Haiyan. On the other hand, after Haiyan, 49.1% of them received financial assistance while 50.9% received relief goods. This confirms how resources were pouring out in Typhoon Haiyan areas including the study area. Before Haiyan, 70.6% of the respondents do not received assistance from family members and relatives both locally and abroad. Before and after Haiyan, friends and neighbors are likely the best people to approach when in need of money. Based on the survey 84.6% did not borrow money or materials from friends and 81.1% from neighbors before and after Haiyan.

3.6 Assistance from the local government officials (municipal and barangay)

During the occurrence of a disaster like Typhoon Haiyan, by virtue of the national law (Republic Act 101210 of 2010), the local government units (Province, City, Municipality and Barangay) are responsible in the whole gamut of disaster risk reduction and management from response until recovery. Barangay is the lowest political unit in the Philippines. The respondents were asked about the assistance and how satisfied are they in the assistance from the municipal and barangay officials. Based on the survey 46.3% of the respondents. Based on the survey, only 50% of them were provided with relief assistance and they feel that they are moderately satisfied with the municipal government assistance 46.3% and barangay assistance 45.1%.

3.7 Rate of recovery from Haiyan

Respondents were asked about their satisfaction with the recovery of the family from the effects of Haiyan. 50% of the respondents are moderately satisfied with the family recovery while 52.7% of the respondents are moderately satisfied with the rate of recovery of their community.

4. Discussion

Before Typhoon Haiyan strucked Tolosa and Dulag, Leyte, more than half of the respondents interacted with their families, including their spouse, parents, and siblings on a daily basis. However, after the disaster, the number of respondents who interacted with their families declined.

In terms of receiving aid, only few of the respondents received financial and material assistance from their family members or relatives before and after Haiyan. The decline in communication of family members after the disaster could be attributed to disaster-related factors such as the fatality of the disaster, disappearance of family members, and change of residence or location which is consistent to the study [14].

Literature on disaster resilience has extensively shown the significant role of bonding social capital. Studies show that bonding social capital at familial level is central to disaster recovery and resilience because it could provide immediate assistance such as getting supplies, shelter, and other forms of aid which is in support of the study [15].

In the study of attending family gatherings, such as Spring Festival, results to having larger size of network which increases the likelihood of house reconstruction after a disaster, as monetary and material support are brought in more into the family network [16].
Bonding social capital encompasses not only social connections but also resources, which capacitate the members of a group to provide assistance to those in need. This could partly explain that despite that more than half of the respondents interacted with their families, they only received little financial and material assistance from their family members after the disaster.

This could be explained by the fact that even their relatives and other family members were victims due to the magnitude of the disaster.

Other factors, which are not included in the survey, could have affected the strength of their bonding social capital and consequently their performance in disaster resilience. Nevertheless, fostering overall stronger bonding capital should be encouraged among the members of the families in the municipalities of Tolosa and Dulag.

Bonding social capital also exists in neighborhoods. Measures of social capital can be assessed through attitudinal and cognitive aspects, such as levels of trust towards relatives, neighbors, and government officials [17][18], as well as through behavioral manifestations, such as leaving doors unlocked, volunteering and having membership in organizations, among others.

Based on the results obtained in the study, only few of the respondents had been in communication and had been in touched with friends before and after Yolanda. After the disaster, more than half of the respondents said that they can only trust few and some people. Regarding the assistance exchanged between the respondents with their friends and neighbors, only few of them always provided assistance to their neighbors and vice versa. Majority of the respondents did not borrow money or materials from their friends and neighbors before and after Yolanda. Moreover, most of them locked the door when going out which demonstrate lack of trust with people outside of the house.

The results tell us that the respondents demonstrate low levels of social connections, trust, as well as assistance in both municipalities of Tolosa and Dulag, this could be translated to weak bonding social capital. Bonding social capital is instrumental not only to families, strong ties among friends and neighbors also significantly contribute to the quality of community recovery and resilience in disasters. Great levels of trust, norms, and participation in a community are associated with speedy and high satisfaction rate on the communities’ resilience and recovery after disaster. Households that received assistance from neighbors are more likely to recover quickly. Close proximity among the family members or neighbors is useful in providing immediate assistance [19] [20], study shows that despite being a low income community, because of the strong ties among the members of the community, they recovered better compared to less damaged and richer neighborhoods. In times that the local government officials (municipal and barangay) could not respond immediately, bonding social capital at community level could prompt the mobilization of the members of the community in response to the disaster. Therefore, developing stronger bonding social capital in the neighborhood of Tolosa and Dulag should be promoted.

Only few of the respondents were members of different organizations before and after Yolanda. The results show that the connection between the respondents and different organizations is relatively weak. It is encouraged that the communities of Tolosa and Dulag should enhance their community ties through membership in social organizations, civic participation, and the like. Organizations should also be encouraged to exhibit robust performance in terms of disaster response and recovery, because they have strategic and practical position in the community.
In times of disaster recovery and resilience, external recovery resources and other forms of support are more likely to be channeled to social organizations and distributed to the members of communities. Members who are part of these social organizations could greatly benefit as they would have access to these resources. For instance, information and resource accessibility, which are important in long-term recovery, are some of the benefits generated from this type of social capital. In addition, being a member in organizations has helped to improve the psychological recovery of individuals who survived the disasters [21].

With regards to the reception of assistance from the government, only less than half asked for assistance from the barangay and municipal officials before and after Yolanda. According to them, these officials provided little assistance to the community. Majority of the respondents were moderately satisfied with the assistance the officials did provide before and after Yolanda.

Studies reveal that such incident has also been apparent in other communities in Asia. For instance, [10] study shows that a part of the linking social capital in the community was not helpful because the members of the community perceived that the distribution of resources was not socially equitable and the resources were not immediately provided to them. In another community, leaders of disrupted communities negatively affected the recovery process of the communities due to their failure to follow the recovery measures provided by the national government and the ineffective leadership [22]. Thus, it is advocated in many studies that the government should improve their performance to achieve greater levels of success in disaster recovery. The role of community leaders and/or local government officials is instrumental to community recovery and resilience as they could utilize their political connections to different organizations to channel in resources to provide shelter, electricity, and healthcare to the communities [4].

5. Conclusions

This paper confirms the important role of social capital to hasten recovery of the affected community residents by a calamity like Typhoon Haiyan. Based on the overall results, the affected community residents in the Municipalities of Tolosa and Dulag in the Province of Leyte displayed a relatively weak bonding, bridging, and linking social capital. Although, majority of the affected community residents are still resettled in the municipalities after Haiyan, other aspects and measures of social capital should be looked into. The weak social capital displayed by the community could partly explain that the respondents felt moderate satisfaction with their state of recovery such as having more permanent and stable housing and livelihood. Having stronger social capital could possibly increase levels of satisfaction among the community residents of Tolosa and Dulag and improve their overall recovery and resilience by building back better.

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