Women’s Capacities In Adversities: Categorizing Women’s Disaster Resilience Through Exploratory Factor Analysis

ABSTRACT

Recent theories in developmental psychopathology tackle vulnerability from the standpoint of resilience. It is a significant approach in dealing with women’s disaster experiences: using women’s resilience as a factor. The World Risk Report 2015 named the Philippines as the third most disaster-prone country in the world. It is unfortunate that there is a dearth of studies statistically measuring women’s resilience in the midst of disaster despite a profusion of disaster experiences that the country goes through every year. A total of 205 women from flood-prone areas in the country, specifically from Barangays Bayog and Bambang in Los Baños, Laguna, participated in this study (N = 205). They answered a self-administered questionnaire entitled, “Women’s Resilience in Disaster Questionnaire.” Sixteen respondents also took part in focus group discussions. The data results were analyzed using Exploratory Factor Analysis (EFA) which is a statistical tool that correlates several variables into simpler categories. The results generated six categories related to women’s disaster resilience: (1) Community engagement; (2) Accessing resources; (3) Authority over one’s self; (4) Reflecting and having faith; (5) Inner strength and determination; and (6) Hope and a sense of humor. While women are predominantly stereotyped as weak victims in the context of disasters, this study reaffirms that on the contrary, they are immense catalysts of change and assume critical leadership roles during emergency and disaster situation. Women and men experience disaster differently, for instance, women experience double burden in terms of community and household work when disaster strikes, gender-differentiated coping mechanisms and the capacity to absorb shocks, and women tend to reduce the amount they eat so their children and husbands have enough. Hence, a gender-blind stance towards disaster response adds to the disempowerment of women. This study hopes to shed light on women’s disaster experiences from the point of view of women’s resilience. It provides recommendations to improve people’s understanding and responses to disasters before, during, and after a disaster while also considering women’s welfare and women’s capacities.

Keywords: disaster responses, exploratory factor analysis (EFA), gender, women in disaster, women’s resilience
INTRODUCTION

Current advances in developmental psychopathology tackle vulnerability from the standpoint of resilience (Rutter, 2012). Therefore, evaluating women’s disaster experiences through women’s resilience is highly relevant. Women experience disaster vulnerability differently from men (Bradshaw, 2015). They are stereotyped as weak victims in the context of disasters (Enarson, 1998). In reality, many case studies prove they are immense catalysts of change and assume critical leadership roles in society (Aguilar, 2004).

Reported disaster events worldwide continue to increase. The International Disaster Database (EM-DAT) compiled disaster data and demonstrated the tremendous adverse impacts of world disasters in terms of death toll, affected population, and total damages. Moreover, from the World Risk Report 2015, the Philippines was placed as the third most disaster-prone country in the world. It had a world risk index of 27.98 while the top two countries had 36.31 and 28.62 (Garschagen et al., 2015).

Rutter (2006) defined resilience as a decrease in vulnerability to environmental stress, an increase in surmounting challenges, and having relatively positive outcome in the face of problematic experiences. This definition is beneficial to the study because it pertains to the psychological perspectives as differentiated from sociological perspectives by Shaikh and Kauppi (2010).

Women are agents of change and have critical leadership roles in disaster response. They assist in issues concerning energy consumption, deforestation, population growth, policy-making, etc. (Aguilar, 2004). Gender impacts the capabilities and resources of women and men to lessen destruction, cope with hazards, and take action in the context of disaster because of extensive female networks and relationship, communication capacities, nurturing roles, and other women resources (Aguilar, 2004).

A recent trend in disaster response is the integration of gender perspectives (Bradshaw, 2015). There is a growing recognition that women and men experience and view disasters differently. Disaster vulnerability is gendered because of traditional gender roles and responsibilities given to women (Enarson, 1998). For example, how do pregnant women cope in times of calamities?

A gender-neutral approach to disaster response can contribute to disempowering women during these difficult conditions. It is in these views that the Hyogo Framework for Action 2000-2015 emphasized gender perspective as a cross-cutting principle in building resilience of communities to disaster (Bradshaw, 2015). In the same way, other international organizations actively promote gender perspectives and practices related to disaster risk management like The World Bank, The Oxfam, and The Mercy Corps (The World Bank, n. d.; Trohanis, Svetlosakova, & Carisson-Rex, n. d.; Ciampi, Gell, Lasap, & Turvill, 2011).

In summary, it was discussed that current studies support a paradigm shift from focusing on harmful elements to increasing resilience among individuals (Rutter, 2012). In addition, women and men experience and view disasters in different ways. A gender-neutral approach to disaster response increases the disempowerment of women (Bradshaw, 2015). Gender affects the skills and resources of women and men to decrease destruction, adapt to hazards, and take action in the context of disaster (Aguilar, 2004).

Nevertheless, there is still a data gap concerning the factors that are related to women’s disaster resilience. It is ironic that there is a lack of studies statistically measuring women’s disaster resilience despite the numerous disaster experiences that the Philippines is subjected to every year. It is therefore important to ask, “What constitutes resilience during disasters?” How do women experience resilience? What are the factors related to women’s disaster resilience?
The main goal of this study was to classify variables that affect women’s resilience in disaster into simpler categories. Its main objective is to describe the specific categories of women’s resilience in the context of disaster. Its sub-objectives were to describe the women’s disaster experience in Barangay Bayog and Bambang, analyze the categories of women’s disaster resilience using Exploratory Factor Analysis (EFA) and construct recommendations and the implications to practice of the said categories of women’s disaster resilience especially in terms of disaster response.

METHODOLOGY

This paper employed Exploratory Factor Analysis (EFA) because its purpose is to look at the relationship among several variables of women’s resilience in disaster. Examples of other studies using factor analysis on resilience are from Connor and Davidson (2003), Yu and Zhang (2007), Campbell-Sills and Stein (2007), and Karairmak (2010). The study also utilized focus group discussions (FGD’s) to encourage generation of multiple meanings of women’s experience as additional data.

Participants

Two hundred five respondents participated in this study (N = 205). One hundred of the participants are from Barangay Bayog (NBayog = 100) and 105 are from Barangay Bambang (NBambang = 105). They were all women between the ages of 18 and 77. Most of them are married and have an educational attainment of high school graduate. The average number of their children is 3.02. For the FGD’s, a total of 16 respondents participated with the range of 20-60 years old, married, and with children. All were from low income families.

Barangay Bayog and Bambang were selected for this study because they are both classified as poor communities and have both experienced disasters due to natural calamities. Bayog and Bambang are among the 14 barangays (villages) of the urban municipality of Los Baños, Laguna. Bayog has a total of 9,671 inhabitants while Bambang has a population of 7,021 (Census of Population and Housing, 2010). Both barangays lie along the Laguna Lake.

Procedure

Purposive sampling was utilized for this study because its goal is to gain knowledge into a specific set of sector in society, namely, women in disaster. The participants were screened through the following criteria: their sex should be female, they should be at least 18 years old, they should be residing in the field site for not less than a year, and they should have
experienced flooding or any disaster in the said area.

Instrument

The participants answered a self-administered questionnaire designed by the researchers (see Appendix A). The said questionnaire is in Filipino and is translated in this paper by the researchers. This 37-item Likert-scale is called Women's Resilience in Disaster Questionnaire. The participants were asked to rate themselves using a five-point measure with labels: 1 – Strongly disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, and 5 – Strongly disagree. Some examples of the items are:

1. I usually form or join new groups in response to disaster.
2. As a woman in the context of disaster, I’m more assigned the role of taking care of my children and husband.
3. I trust myself that I can do the things I want to do.
4. I’m the type of person who reflect about my experiences during disaster.
5. I share my experiences with other people during disaster.
6. I’m the type of person who looks for different means to survive during disaster.

The items for the questionnaire were based on existing literatures regarding women’s resilience (Crawford et al., 2009; Tuohy & Stephens, 2012; Castro, 2014; Rogers, 2000; Lopez-Fuentes & Calvete, 2015). The questionnaire was pilot-tested to 20 other women who have experienced disasters in another area.

Data analysis

This study used the Principal Components’ Analysis (PCA) as an extraction method for EFA. This is because the goal is to extract the maximum variance for women’s resilience in disaster. The following items were not included in the analysis because they yielded low Cronbach’s alpha: Item 1 – Gathering needs for emergency; Item 16 – Coordinating with relatives; Item 20 – Facing people of a higher status; and Item 24 – Following the law.

RESULTS AND DISCUSSION

The results section is divided into two parts. First, it discusses the descriptive statistics of the women's resilience scores, which includes measures of central tendency and tests of normality. It discusses next the findings of the exploratory factor analysis and examines the six categories generated, which include the items under each category, correlation, and percentage of variance explained by each category.

Descriptive statistics

Most of the participants have a slightly high resilience score with an average score of 3.64 and a standard deviation of 0.27 (see Table 1). The median for the distribution is 3.62 and the mode is also 3.62.

Table 1 shows the descriptive statistics for the resilience scores among the participants. It also shows the results of the Shapiro-Wilk test which indicates that the distribution approximates a normal curve.

Table 1. Descriptive statistics of women's resilience scores

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.64</td>
</tr>
<tr>
<td>Median</td>
<td>3.62</td>
</tr>
<tr>
<td>Mode</td>
<td>3.62</td>
</tr>
<tr>
<td>Std. deviation</td>
<td>0.27</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.10</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>0.17</td>
</tr>
<tr>
<td>Shapiro-Wilk test</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Note. In the Shapiro-Wilk test, p > 0.05 indicates that the distribution is normal.

The following tests indicate that the data satisfies the requirements of EFA and thus factor analysis can be performed:

- The data gathered is highly reliable with a Cronbach’s alpha of 0.78.
• The amount of sample size is very sufficient with a Kaiser-Mayer-Olkin (KMO) value of 0.75.
• There is a sufficient amount of correlation among the variables with an r-value greater than 0.30 \((r > 0.30)\). The Bartlett’s test of sphericity supports this with a p-value less than 0.01 \((p < 0.01)\).

In addition, the scree plot indicates that there are eight categories greater than or equal to an eigenvalue of one. This signifies that the appropriate number of categories extracted should not be above eight. This ensures that this study did not over or under extract the number of factors.

The categories generated for women’s resilience in disaster are: (1) Community engagement; (2) Accessing resources; (3) Authority over one’s self; (4) Reflecting and having faith; (5) Inner strength and determination; and (6) Hope and a sense of humor (see Table 2).

Table 2 shows the summary of all the six categories of women’s resilience in disaster. It also shows the average scores for each factor, the corresponding Cronbach’s alpha, and the percentage of variance explained by each factor.

### Table 2. Descriptive statistics for the six categories of women's resilience in disaster

<table>
<thead>
<tr>
<th>Categories</th>
<th>Number of Items</th>
<th>M(SD)</th>
<th>Cronbach’s Alpha</th>
<th>% of Variance</th>
<th>Cumulative %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community engagement</td>
<td>5</td>
<td>3.30 (0.66)</td>
<td>0.78</td>
<td>17.23</td>
<td>17.23</td>
</tr>
<tr>
<td>Accessing resources</td>
<td>2</td>
<td>3.95 (0.50)</td>
<td>0.35</td>
<td>10.77</td>
<td>27.99</td>
</tr>
<tr>
<td>Authority over one’s self</td>
<td>2</td>
<td>3.83 (0.62)</td>
<td>0.64</td>
<td>6.99</td>
<td>34.98</td>
</tr>
<tr>
<td>Reflecting and having faith</td>
<td>3</td>
<td>4.16 (0.40)</td>
<td>0.60</td>
<td>5.20</td>
<td>40.17</td>
</tr>
<tr>
<td>Inner strength and determination</td>
<td>4</td>
<td>4.03 (0.38)</td>
<td>0.56</td>
<td>5.17</td>
<td>45.34</td>
</tr>
<tr>
<td>Hope and a sense of humor</td>
<td>3</td>
<td>3.41 (0.72)</td>
<td>0.57</td>
<td>4.50</td>
<td>49.84</td>
</tr>
</tbody>
</table>

Note. A Cronbach’s alpha above or around 0.60 is considered a reliable measure.
The percentage of variance produced by the data is 58.25%, meaning that this study accounts for 58.25% of explaining women's resilience in the context of disaster. The percentage of the variance explained for Community engagement is 17.23%; Accessing resources is 10.77%; Authority over one's self is 6.99%; Reflecting and having faith is 5.20%; Inner strength and determination is 5.17%; and Hope and a sense of humor is 4.50%. From this result, we may conclude that the category with the highest variance explained is community engagement while the lowest is hope and a sense of humor. Category 2, Accessing resources, has a poor Cronbach's alpha value, but this is expected since the goal of this study is to cluster different variables into fewer categories. This will be discussed further in the discussion section.

Community engagement. The first category of women's resilience in disaster is about Community engagement (see Table 3.1). It has five items with a Cronbach's alpha of 0.78. The following items loaded in the said category: Item 8 - Leadership in community activities; Item 7 – Joining new groups; Item 11 – Providing suggestions in community; Item 5 – Approaching organizations and authorities; and Item 18 – Joining community activities.

Table 3.1 shows the items that loaded into Category 1: Community engagement. It also shows the communalities of each item based on oblimin rotation.

<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership in community activities</td>
<td>0.83</td>
<td>0.71</td>
</tr>
<tr>
<td>Joining new groups</td>
<td>0.75</td>
<td>0.57</td>
</tr>
<tr>
<td>Providing suggestions in community</td>
<td>0.72</td>
<td>0.57</td>
</tr>
<tr>
<td>Approaching organizations and authorities</td>
<td>0.66</td>
<td>0.57</td>
</tr>
<tr>
<td>Joining community activities</td>
<td>0.53</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Note. A component loading above 0.45 indicates a moderate to very strong correlation.
Accessing resources. The second category concerns Accessing resources (see Table 3.2). It has two items with a Cronbach’s alpha of 0.35. The said items are: Item 2 - Looking for means to survive; and Item 22 - Solving problems.

Table 3.2 shows the items that loaded into Category 2: Being able to access resources. It also shows the communalities of each item based on oblimin rotation.

<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking for means to survive</td>
<td>-0.62</td>
<td>0.55</td>
</tr>
<tr>
<td>Solving problems</td>
<td>-0.47</td>
<td>0.49</td>
</tr>
</tbody>
</table>

Note. A component loading above 0.45 indicates a moderate to very strong correlation.

Accessing resources is an integral source of women’s resilience in the context of disaster. Women look for a means to survive and they attempt different means to solve problems. Material resources are imperative during disasters. This is because it is one of the basic needs to sustain life in the said context.

According to the FGD, some of the most common sources of livelihood for women in Brgy. Bayog and Bambang are collecting recyclables, selling vegetables, accepting laundry, and catering orders. Some engage in dressmaking, breeding dogs, raising ducks, collecting shellfish, and even tricycle driving. Women occupy various forms of job to help sustain their families.

Among the family, in times of emergency, women usually take the role of asking immediate relatives for help. In both the villages, women are the ones who are commonly tasked to borrow money from relatives and friends. Some families evacuated in relatives’ houses. This is also related to the category community engagement because women are the ones who participate in community organizations, engage their neighbors, and relatives.

Women pursue alternative livelihood during post-disaster. Some examples of these are: collecting shrimps and small fishes in the lake for food and collecting plastics to be sold as recyclables. They serve as house cleaners to middle-income families for a minimal fee of Php50-100.

Women scavenge seemingly unusable things in the aftermath and the debris. Some examples of these are dirty pots and kitchen wares. They scavenge rice soaked in flood and dry it before cooking. They learned that every resource is important and that nothing should go to waste. However, the current research specifies its finding to tangible and external resources. It cannot identify the type of resources because of the limitations of the research design.

Authority over one’s self. The third category of women’s resilience in disaster is Authority over one’s self (see Table 3.3). It also has two items with a Cronbach’s alpha of 0.64. The items that loaded under this category are: Item 9 – Deciding by herself; and Item 10 – Taking action by herself.

Table 3.3 shows the items that loaded into Category 3: Authority over one’s self. It also shows the communalities of each item based on oblimin rotation.

<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deciding by herself</td>
<td>-0.84</td>
<td>0.73</td>
</tr>
<tr>
<td>Taking action by herself</td>
<td>-0.75</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Note. A component loading above 0.45 indicates a moderate to very strong correlation.
Authority over one’s self is an important source of women’s resilience in the context of disaster. Women with high resilience decide and take action by themselves. They have the right and the power to determine their course of action in times of emergency.

In Brgy. Bayog and Bambang, the women, the elderly, and the sick people are usually left at home. Men are usually out of the community because of employment. This requires women to react to emergencies without the men. Therefore, women are left to decide and to have authority over themselves during disasters.

Women were expected to perform the following tasks: cleaning, borrowing blankets, clothes and even underwear; prioritizing saving and taking care of the children; nurturing the whole family; and washing clothes submerged in flood. They are in charge of training their children to prepare and how to respond to disasters. Women may also perform even the traditional roles of men like heavy lifting.

During emergencies, the most common tasks of women were: pack household items and clothes, secure the said things in a higher place like the second floor or a relative’s house, and ensure evacuation for their family. They stored rice, canned goods, safety matches, water, utensils, medicines, flashlights, tools for house repairs, and cell phone. They salvaged some things and properties like pots and pans. In the evacuation area, women from Brgy. Bayog and Bambang tried to plant in backyard gardens for food.

Unfortunately, some women admitted that being a house wife may impede their capacities. Their intellectual abilities are rarely roused because their minds are pre-occupied with household chores. In addition, residing in the evacuation site is challenging for women. They need to look after their children to avoid conflicts with other evacuees. Finally, the women recalled that they needed to overcome their fear of water and the need to be strong during the disaster experience.

Reflecting and having faith. The fourth category of women’s resilience in disaster is Reflecting and having faith (see Table 3.4). Three items loaded under it with a Cronbach’s alpha of 0.60. These are: Item 25 - Thinking positive; Item 35 - Reflecting about experiences; and Item 30 - Trusting God.

Table 3.4 shows the items that loaded into Category 4: Reflecting and having faith. It also shows the communalities of each item based on oblimin rotation.

Table 3.4 Category 4: Reflecting and having faith

<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking positive</td>
<td>-0.80</td>
<td>0.67</td>
</tr>
<tr>
<td>Reflecting about experiences</td>
<td>-0.55</td>
<td>0.60</td>
</tr>
<tr>
<td>Trusting God</td>
<td>-0.49</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Note. A component loading above 0.45 indicates a moderate to very strong correlation.

Reflecting and having faith is a crucial source of women’s resilience during disaster. Women remain positive in their thoughts despite the challenges ahead. They reflect about the lessons learned from their past experiences. They also have faith in a higher being. Contemplating and managing thoughts allow women to be resilient during disaster.

During the FGD, the women appreciated that the community self-organizes during disasters. Its members become more concerned with one another. They overlook their previous conflicts and grudges with their neighbors. They realized that they became stronger.

“Oo, naghahanda sa sakuna at magdadasal upang maligtas sa sakuna. (Yes, I prepare for the disaster and I will pray to remain safe.)” – Josephine, 32, Brgy. Bayog
“Nasa loob lang ng bahay, sama-sama kaming mag-anak, nagdadasal kami. (Just inside the house, our family is together, praying.)” – Fe, 36, Brgy. Bayog

This is supported by the study of Peres, Moreira-Almeida, Nasello, and Koenig (2007) who argue that spirituality increases resilience and decreases the effects of post-traumatic symptoms. However, culture may play an important role in this category. This will be discussed further in the recommendations section.

**Inner strength and determination.** The fifth category of women’s resilience in disaster is Inner strength and determination (see Table 3.5). It loaded four items under it with a Cronbach’s alpha of 0.56. These items are: Item 4 – Determined to look for livelihood; Item 27 – Trusting herself; Item 14 - Boosting emotions of other people; and Item 31 – Confidence.

Table 3.5 shows the items that loaded into Category 5: Inner strength and determination. It also shows the communalities of each item based on oblimin rotation.

<table>
<thead>
<tr>
<th>Category 5: Inner strength and determination</th>
<th>Component</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determined to look for livelihood</td>
<td>0.64</td>
<td>0.55</td>
</tr>
<tr>
<td>Trusting herself</td>
<td>0.63</td>
<td>0.62</td>
</tr>
<tr>
<td>Boosting emotions of other people</td>
<td>0.61</td>
<td>0.51</td>
</tr>
<tr>
<td>Confidence</td>
<td>0.54</td>
<td>0.50</td>
</tr>
</tbody>
</table>

Note. A component loading above 0.45 indicates a moderate to very strong correlation.

Inner strength and determination is a crucial source of women’s resilience in disaster. Women with high resilience are determined to look for livelihood; she trusts herself, she has confidence, and she boosts the emotion of others. Women’s resilience in disaster is highly affected by women’s self-confidence and perseverance.

In the FGD, many women mentioned that they braved the floodwaters to get to the evacuation sites. They were not able to save rice, other food items, and clothes. They endured hunger for a long time. Many lost their homes from the disaster.

The low-income families of Brgy. Bayog and Bambang have constrained choices of moving to safer settlements. In the next disasters, women started packaging things at the onset of rainy season. They stocked rice and dry fire wood for fuel. Bayog women use water lilies as a makeshift wall to protect them from waves. Lilies were placed in the shore to reduce the waves’ impact to their houses. They reinforce their rooftops with ropes and by adding more nails. They became very attentive to news reports about upcoming typhoons.

According to them, being married presents its burdens because they feel that their husbands’ vices and bad habits are stressful. The men habitually drink alcohol and, every now and then, drunk men will start a fight with their wives.

Women’s resilience manifest inside and outside the house (loob at labas). It can be uncovered both as a personal and as a collective resilience. Women exhibit resilience beyond disasters as well. During the FGD, some of them mentioned that they take time to grieve with family and relatives.

**Hope and a sense of humor.** The last category is Category 6: Hope and a sense of humor (see Table 3.6). It has three items with a Cronbach’s alpha of 0.57. These are: Item 28 – Continue to move forward; Item 26 - Having a sense of humor; and Item 23 – Not losing hope.

Table 3.6 shows the items that loaded into Category 6: Hope and a sense of humor. It also shows the communalities of each item based on oblimin rotation.
Table 3.6 Category 6: Hope and a sense of humor

<table>
<thead>
<tr>
<th>Items</th>
<th>Component</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue moving forward</td>
<td>0.75</td>
<td>0.62</td>
</tr>
<tr>
<td>Having a sense of humor</td>
<td>0.67</td>
<td>0.48</td>
</tr>
<tr>
<td>Not losing hope</td>
<td>0.62</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Note. A component loading above 0.45 indicates a moderate to very strong correlation.

Hope and a sense of humor is very important in women’s resilience in disaster. Women continue to move forward, do not lose hope, and have a sense of humor. Hopefulness is a crucial part of women’s resilience in disaster.

In the FGD, the women said that they ensure to allot time for fun even in the midst of difficulties. They tell jokes and recall their experiences with a sense of humor. They remain hopeful and see tomorrow with bright possibilities or with positivity.

“Bumabangon kami mula sa pagkakasalanta ng isang sakuna, pinagpapatuloy namin ang aming buhay. (We rise again from the disaster, we continue with our lives.)” - Jessica, 20, Brgy. Bayog

“Magpasalamat sa Diyos para sa kaligtasan. Ayusin ang dapat ayusin at harapin ang bagong bukas (We thank God that we are safe. We repair what needs fixing. We face the new tomorrow.)” - Evelyn, 62, Brgy. Bayog

This is supported by the study of Hechanova et al. (2015) which identify Kinabukasan (moving forward) as a factor in Filipino disaster resilience. This signifies a person who keeps her eyes on the possibilities of the future. It is also supported by the study of Rogers (2000) which include sense of humor as a facilitative characteristic of resilience.
CONCLUSION AND RECOMMENDATION

This study validates the assertion that researchers should focus on the affirmative factors of human life (Rutter, 2012). In the midst of disasters, women exhibit these six categories of disaster resilience: (1) Community engagement; (2) Accessing resources; (3) Authority over one’s self; (4) Reflecting and having faith; (5) Inner strength and determination; and (6) Hope and a sense of humor.

The overall data for the women’s resilience in disaster questionnaire showed a high reliability score. However, Category 2: Accessing resources, Category 5: Inner strength and determination, and Category 6: Hope and a sense of humor indicated low reliability scores. Nevertheless, according to Cortina (1993), this is anticipated in EFA since the goal of this study is to cluster different variables into fewer categories. In other words, this research...
intended to show high variance among the items as opposed to reliability measures which quantifies low variances.

For upcoming researchers, it is recommended to examine in future studies how these six categories correlate and interact with one another. For instance, does the category hope and a sense of humor impact the category inner strength and determination? Another question to ask is which characteristic of the participants is more salient in relation to resilience: their gender or the presence of disaster?

Although the Connor-Davidson Resilience scale (CD-RISC) (Connor & Davidson, 2003) is an impressive tool to measure resilience, the women’s resilience in disaster questionnaire is more appropriate in determining women’s resilience in the context of disaster. This is because resilience is affected by both the person and his or her surroundings. In this manner, different people in different context manifest different levels of resilience.

For the community and the disaster response practitioner or agencies, it is recommended to include community organizing efforts in disaster response programs. This is in line with the category community engagement. Practitioners should focus on forming organizations and not just on providing physical technology. Related to this, membership in organizations should not be discriminatory with regards to sex and gender. Women contribute a lot and they should be encouraged to be leaders as well.

Disaster response practitioners and agencies should improve women’s access to resources through trainings like problem-solving skills and resourcefulness, saving and financial management, and resource mapping. Furthermore, debriefing and counseling that focuses on instilling hope should be included in disaster responses. Finally, it is crucial to encourage a culture that empowers women and does not stigmatize them.

Positive thinking should be based from the strengths and capacities of women. It is therefore helpful to organizations to conduct capacity-mapping exercises with their women members. Moreover, it is also recommended to involve religious groups and churches in resilience-building activities since reflecting and having faith is a category for women’s disaster resilience.

However, the category reflecting and having faith may be heavily influenced by culture. The religious affiliation of the majority of the Philippine population is Christianity. In 2010, a total of 74.2 million Filipinos are Catholic while some six million people belong to other Christian denominations like Evangelicals, Iglesia ni Cristo, Bible Baptist Church, and United Church of Christ in the Philippines (National Statistics Office, 2014). The cultural and spiritual background of the disaster communities help shape the resilience of women and men during hardships. Belief in God and faith help build personal, familial and community resilience during disasters. People’s faith allows them to gain strength. Faith also provides a schema allowing people to make sense out of their experiences (Wilkinson, 2015).

For policy makers, it is recommended that they modify rules and procedures of disaster responses to be more gender-responsive and to include interventions for both the individual and community. For example, it was found that inner strength, determination, and having hope are related to women’s disaster resilience. How does one increase those characteristics in women? Faith-based organizations, religious groups, and churches should offer counseling services. On the other hand, community engagement and accessing resources are also related to women’s disaster resilience. Activities similar to micro-finance and lending projects should be included disaster response.

This research analyzed women’s disaster resilience using a quantitative design, specifically through EFA.
response incorporate gender perspectives since a gender-blind stance towards disaster response adds to women’s disempowerment (The Community Practitioners Platform for Resilience, 2015). The overall goal of this study was to classify multiple variables related to women’s disaster resilience into simpler categories. The results generated six categories related to women’s disaster resilience: (1) Community engagement; (2) Accessing resources; (3) Authority over one’s self; (4) Reflecting and having faith; (5) Inner strength and determination; and (6) Hope and a sense of humor. Women are a great source of initiatives towards change and they assume essential leadership roles even in disasters (Aguilar, 2004). In line with this, institutions, organizations, and communities would significantly benefit in the promotion and the fostering of women’s resilience before, during, and after a disaster.

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