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Adaptive Coping, Resilience, and Absence of Anxiety Among Displaced Disaster Survivors

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This study examined the relationships among adaptive coping, individual resilience, community resilience, and absence of anxiety among internally displaced survivors. Household interviews were conducted among 200 survivors of Super Typhoon Haiyan living in a resettlement area in Tacloban City 15 months after they were displaced from their homes. Rather than focusing on trauma, this study took a more positive and agentic approach using the conservation of resources theory as frame. Correlational analyses revealed a significant relationship between adaptive coping and individual resilience, adaptive coping and community resilience, and individual resilience and community resilience. Regression analyses also showed that individual and community resilience each uniquely predicted absence of anxiety among disaster survivors. Implications for practice are discussed, specifically the potential value of interventions that not only nurture individual resilience but also enable community resilience.

Keywords: disaster, resilience, coping, displaced survivors, Super Typhoon Haiyan

Disasters often connote destruction, pain, loss, and trauma. However, not everyone is affected by disasters in the same way as there are those who are more vulnerable to their impact. For example, studies show that individuals who are chronically exposed to social and economic deprivation and those who face structurally rooted

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diminishment of social well-being, health protection, principal industry, and environmental pollution are more vulnerable (Mitrovic, 2015).

A particularly vulnerable population postdisaster is the internally displaced. The United Nations defines internally displaced people as

> Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, violations of human rights or natural or human-made disasters, and who have not crossed an internationally recognized border. (Office of the United Nations High Commissioner for Human Rights, 2015)

In the aftermath of natural disasters, many internally displaced people lose their homes and need to be relocated to temporary resettlement areas. Internal displacement and resettlement take people away from their means of livelihood, material and cultural resources, and access to traditional coping that they had previously depended on (Bang & Few, 2012). Studies show a number of challenges for those living in resettlement areas including limited job opportunities, poor housing conditions, and lack of access to toilets, electricity, and water. Because most resettlement areas have poor health facilities, incidence of morbidity and mortality is high. Furthermore, other challenges in resettlement areas are the lack of common property and space, disrupted religious and cultural practices, and the loss of social networks. The lack of social capital among neighbors and confinement in small spaces have also been reported to lead to increased criminality (Bang & Few, 2012).

Internally displaced people are also vulnerable to trauma, prompting the World Health Organization to intensify its efforts in responding to their mental health needs (Brundtland, 2000). Several studies have linked internal displacement to trauma-related issues across different contexts and locations, such as posttraumatic stress disorder and depression among internally displaced people in war-torn Northern Uganda (Roberts, Ocaka, Browne, Oyok, & Sondorp, 2008), psychological and sexual abuse among internally displaced

children in Pakistan (Asad et al., 2013), and collective trauma among civil war survivors in Sri Lanka (Somasundaram, 2010).

The aforementioned studies show that much of the literature on displaced survivors of disasters has been framed in terms of problematic responses and trauma and there is a dearth of research on adaptive responses. This is despite the finding that most adults are resilient and rely on existing coping mechanisms when they are faced with difficult situations (Warchal & Graham, 2011). Even without receiving interventions, many disaster survivors are still able to function well in their daily life by drawing on their internal and external sources of strengths.

This paper takes a more positive approach to the study of displaced disaster survivors by examining their emotional well-being and how it is affected by adaptive coping and individual and community resilience. Rather than focusing on distress, it takes an agentic perspective and suggests that adaptive coping can influence both individual and community resilience. It also investigates the link between the more commonly studied construct of individual resilience and a relatively new concept called community resilience. Finally, this study explores the impact of individual resilience and community resilience on emotional well-being as measured by absence of anxiety among disaster survivors.

Adaptive Coping

Beyond looking at the characteristics of an individual, this study adopts an agentic perspective to disaster adaptation. Ryan and Deci (2000) defined agency as the inherent tendency to seek out novel challenges, explore, learn, and extend one's capacities. In the context of disasters, agency is manifested when individuals are able to harness their strengths and abilities in order to confront and survive their traumatic experiences (Fernando & Herbert, 2011). Adaptive coping refers to cognitive and behavioral efforts to manage internal and external demands that are taxing or exceeding the resources of the person (Lazarus & Folkman, 1984). These coping skills include problem solving, emotion-focused coping, cognitive restructuring, and obtaining social support (Tobin, Holroyd, Reynolds, & Wigal, 1989).

The value of adaptive coping has been validated in studies among patients dealing with various medical conditions (Büssing, Ostermann, Neugebauer, & Heusser, 2010) and other populations under conditions of extreme stress such as maltreated children (Cicchetti & Rogosch, 2009). More importantly, adaptive coping has also been shown to be used by survivors of disasters such as African American parent-child survivors of Hurricane Katrina (Salloum & Lewis, 2010), American social work students in the aftermath of Hurricanes Katrina and Rita (Lemieux, Plummer, Richardson, Simon, & Al, 2010), and families coping with natural disasters (Miller et al., 2012).

Resilience in the Context of Disasters

Disasters erode the protective factors of individuals and threaten the well-being of both individuals and community. This makes resilience an important factor for those who have experienced traumatic events such as natural disasters. In this paper, resilience is examined both at the individual and community level and are considered as significant factors that affect the well-being of disaster survivors.

Individual resilience. The concept of resilience has mostly been studied in the context of traumatic events such as disasters. Bonanno (2004) defined resilience as:

> The ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially disruptive event such as the death of a close relative or a violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physical functioning as well as the capacity for generative experiences and positive emotions. (pp. 20-21)

Resilience has also been defined as the ability of an individual or community to cope positively with significant and protracted sources of stress. It describes two characteristics: (a) the durability of an individual to face shocks and stresses and (b) the capacity to bounce back and recover from perturbation (Manyena & Gordon, 2014). Moreover, resilience is said to be a function of an individual's acceptance of reality, a strong belief that life is meaningful, and the

ability to improvise (Coutu, 2002).

Bonanno, Galea, Bucciarelli, and Vlahov (2007) explored what predicts psychological resilience after disaster and found that the prevalence of resilience was uniquely predicted by participant gender, age, race/ethnicity, education, level of trauma exposure, income change, social support, frequency of chronic disease, and recent and past life stressors. Although it is influenced by various factors, there are usually two critical conditions that are implicit to the notion of resilience: (a) exposure to significant threat or severe adversity and (b) the achievement of positive adaptation despite major assaults on the developmental process (Luthar & Cicchetti, 2000). In view of the second critical condition, interventions to foster resilience among survivors usually aim to facilitate positive adaptation and promote emotional well-being including a sense of safety, calm, a sense of self- and community-efficacy, connectedness, and hope (Hobfoll et al., 2007).

Community resilience. Although the discipline of psychology has focused on resilience as an individual attribute, there is greater recognition for the need to take an ecological perspective to resilience (Bhamra, Dani, & Burnard, 2011). An emerging concept in disaster science is that of community resilience, which has been defined in a number of ways. It is commonly described as a community's ability to withstand crisis or disruption brought about by external stressors or disturbances and environmental change (Adger, 2000).

Chandra and colleagues (2013) also defined community resilience as the continued ability of a community to withstand and recover from adversity. In their literature review, they described five components of community resilience: physical and psychological health, social and economic equity and well-being, effective risk communication, integration of organizations, and social connectedness. Manyena and Gordon (2014) defined community resilience as a community's ability to self-organize, formulate, and agree on plans and to mobilize people to act. They suggested it is a function of community, financial, physical, natural, political, and human capital.

Leykin, Lahad, Cohen, Goldberg, and Aharonson-Daniel (2013) described community resilience as a product of leadership, collective efficacy, preparedness, place attachment, and social trust. Leadership

represents the extent to which community members have faith in decision makers and local leaders. It also includes the perception of fairness in the way local authority provides services, and functioning of the community. Collective efficacy describes the extent to which community members have a sense of collective efficacy, support, and involvement in the community. Preparedness represents community members' view of the town's readiness for emergency situations. Place attachment describes the emotional attachment to the community, a sense of belonging, pride in community, and identification with the community. Finally, social trust represents the quality of relationships between members of the community.

The impact of communities on individuals in the aftermath of disasters has been reported in a number of studies. For example, a longitudinal study on survivors of an earthquake in Turkey 3-6 months and a year after the disaster found no significant improvements in depression, anger and hostility, paranoid thoughts, obsessive-compulsive behavior, and somatization (Kisac, 2006). The author attributed these to lack of permanent housing, basic needs not being met, and conditions that did not foster feelings of safety. On the other hand, a study conducted in communities in Israel reported a positive correlation between individual and community resilience (Leykin et al., 2013).

Adaptive coping and resilience. Warchal and Graham (2011) described resilient individuals as having healthy self-esteem, high self-efficacy, and internal locus of control. They are also resourceful and have problem-solving and adaptive coping skills. Warchal and Graham explained further that coping behaviors such as seeking social support, providing structure to the day, relaxation techniques and healthy recreational activities, and seeking solutions are mechanisms that promote adaptive functioning after a disaster and prevent severe pathology from developing.

There is empirical support for the relationship between adaptive coping and individual resilience. A study in China reported that coping behaviors (avoidance, problem-solving, and support-seeking) predict resilience (Van Haaften, Zhenrong, & Van de Vivjer, 2004). In addition, a study on survivors of an Asian tsunami and Hurricane Katrina found that spirituality and prayer were primary coping mechanisms for

survivors. Survivors also reported the value of seeking and receiving comfort and support from family and community members in their recovery (Fernando & Herbert, 2011).

Beyond individual factors, community-level factors also influence the resilience and well-being of disaster survivors. A study on psychological resilience after Hurricane Sandy in the United States of America showed that at the community level, living in an area with higher social capital is significantly associated with higher posttraumatic stress while higher community economic development is associated with lower risk of depression but only among participants who did not experience any disaster-related stressors (Lowe, Sampson, Gruebner, & Galea, 2015). The authors therefore claimed that individual- and community-level resources, and exposure operate in tandem to shape post-disaster resilience. Another study in India found that community members' inadequate adaptive coping capacity limited their sense of resilience, which prompted the authors to conclude that community-driven participatory solutions have beneficial effects in enhancing the resilience of communities to climate-related disasters (Joerin, Shaw, Takeuchi, & Krishnamurthy, 2012).

The Conservation of Resources Theory

This paper uses the conservation of resources (COR) theory (Hobfoll, 1989) as its framework. This resource-oriented theory is based on the supposition that people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources. The COR theory posits that individuals possess both internal and external resources and the loss of these resources reduces one's options and leads to distress (Hobfoll, 1989). Conversely, resilient individuals call on their internal resources to adapt to stress, which may include self-esteem, locus of control, empathy, and cognitive hardiness. They may also draw on their external resources including social and family support, employment, and other material resources (Fernando & Herbert, 2011).

Hobfoll (1989) identified four kinds of resources in which loss and gain result in either stress or eustress (i.e., well-being): (a) objects, which are usually tangible items such as a house or a car;

(b) conditions, which are less tangible resources but are valued and sought after such as status in one's group or community; (c) personal characteristics, which are resources to the extent that they generally aid stress resistance and could include one's traits and skills; and (d) energies such as time, money, and knowledge, which aid in the acquisition of other kinds of resources.

This study considered displaced survivors' individual and community resilience as internal and external resources, respectively, that would influence their emotional well-being as measured by their absence of anxiety. Specifically, individual resilience is seen as a personal characteristic that facilitates the survivor's stress resistance and community resilience is considered as a condition inasmuch as it lies outside the person and is valued as an ideal in the community.

The Present Study

Rather than focusing on trauma and problematic responses, this study takes a positive approach to the study of internally displaced survivors by examining the relationship among their level of adaptive coping, individual and community resilience, and emotional well-being as measured by their absence of anxiety. Moreover, this study adopts an agentic perspective by looking into how displaced survivors' proactive attempts to cope with disaster influence their individual resilience and suggests that adaptive coping is positively correlated with individual resilience (Hypothesis 1).

An agentic perspective likewise assumes that individuals can shape their environment. Manyena and Gordon (2014) argued that individuals are not mere subjects and have the power to create or transform systems. Changes in norms and behaviors lead to changes in policies and strategies. The present study seeks to validate this by examining the relationship between adaptive coping of disaster survivors and community resilience. Specifically, this study hypothesizes that adaptive coping is positively correlated with community resilience (Hypothesis 2).

This study also takes an ecological perspective by assuming that there is a symbiotic relationship between individuals and their environment. The link between individual and community resilience

is likely to be especially salient in cultures such as the Philippines that has been described as collectivist and interdependent (Hechanova, Waelde, & Ramos, 2015). In such cultures, social connections are an important source of strength and are manifested in mobilization of community members and sharing of labor (Galliard, Pangilinan, Cadag, & Le Masson, 2008). This study therefore suggests that individual resilience is positively correlated with community resilience (Hypothesis 3).

Following the assumptions of the conservation of resources theory, this study considers individual resilience as an internal resource (a personal characteristic) that influences the disaster survivor's well-being and assumes that individual resilience predicts absence of anxiety among disaster survivors (Hypothesis 4). Finally, this study considers community resilience as another resource—a condition—that affects the well-being of displaced survivors. It also seeks to contribute to knowledge of community resilience by examining its relationship with the well-being, specifically the absence of anxiety, of disaster survivors. As suggested by Markus and Kitayama (1991), in interdependent cultures, the self is connected to and less differentiated from others. In these cultures, the experience of emotions depends on the person's construal of his/her social situation. Thus, this research suggests that community resilience predicts absence of anxiety among disaster survivors (Hypothesis 5).

METHOD

Locale and Sample

The study was conducted in Tacloban City, one of the worst-hit areas of Super Typhoon Haiyan. Recorded as the deadliest typhoon in the history of the Philippines, it hit the country in November 2013 and claimed over 6,000 lives, affected 16 million people (National Disaster Risk Reduction and Management Council, 2014), and displaced half a million families (Office of the Presidential Assistant for Rehabilitation and Recovery, 2014).

Data gathering was conducted in February 2015 in a temporary resettlement area in Abucay, Tacloban City that housed 200 families.

Interviewers conducted household surveys using quota sampling: they went from household to household inviting one adult to participate. A total of 200 residents agreed to participate in the study. Respondents were mostly women (70%) and married (61%). They were between 18-70 years old (M = 35.19, SD = 12.15). Forty-two percent had reached at least high school level of education. Their household size ranged from 1-17 persons with a median of 3 persons per household.

Measures

Structured interviews were conducted using instruments measuring adaptive coping, individual resilience, community resilience, and absence of anxiety. These scales were translated to Waray, the local language, for ease of understanding. Except for the Brief Cope, translation of the three other scales were done by the author, who is a native speaker of Waray, upon consultation with Waray-speaking colleagues. The Waray version of Brief Cope was taken from a separate project that translated several scales for use in research among disaster survivors.

Adaptive coping. To measure the ways that participants have been coping with the challenges they encountered after the disaster, they were asked to answer a modified version of the Brief Cope survey (Carver, 1997). Because this study focused on adaptive coping, items describing negative coping behaviors (e.g., criticizing oneself, blaming oneself, using alcohol and drugs) were deleted resulting in a 19-item scale that asked respondents to rate how frequent they have been applying certain coping strategies on a scale of 1 *(I haven't been doing this at all)* to 4 *(I've been doing this a lot)*. The coping measure was found to be reliable (α = .81).

Individual resilience. A 10-item (α = .72) version of the Connor-Davidson Resilience Scale (CD-RISC) was used to measure the ability of the participants to cope with adversity (Campbell-Sills & Stein, 2007; Connor & Davidson, 2003). Participants rated items on a scale of 0 *(not true at all)* to 4 *(true nearly all the time)*, with higher scores reflecting greater resilience. Sample items include "I am able to adapt to change," "Coping with stress can strengthen me," and "I tend to bounce back after illness or hardship." This scale has been

previously applied to displaced populations (Suarez, 2013).

Community resilience. The Conjoint Community Resiliency Assessment Measure (CCRAM; Leykin et al., 2013) was used to assess the ability of the participants' resettlement community to endure and survive crisis situations. Respondents indicated the extent of their agreement or disagreement on 10 items (α = .68) on leadership (e.g., "I trust the local decision makers."), collective efficacy (e.g., "There is mutual assistance and people care for one another."), preparedness (e.g., "My community is prepared for an emergency situation."), place attachment (e.g., "I am proud to tell others where I live."), and social trust (e.g., "Residents in my community trust each other.").

Absence of anxiety. The 20-item State-Trait Anxiety Inventory for Adults (STAI) Form Y-1 is composed of two types of items: anxiety present and anxiety absent (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). The 10 anxiety-absent items (α = .74) from the state subscale of STAI were utilized for this study. Participants were asked to indicate how much they felt (from not at all to very much so) the given statements at the time of the interview. Sample statements include "I feel calm," "I feel secure," and "I feel self-confident."

Procedure

Data were gathered by first obtaining consent from the Department of Social Welfare and Development, who then endorsed the researchers to the camp manager of the resettlement area. Household interviews were conducted with an adult representative of a family. The interviewer read the informed consent form and asked the participant to sign it to signify willingness to take part in the study. The interviewer then proceeded to read the items on individual resilience, community resilience, adaptive coping, and absence of anxiety, showing the response options on separate sheets of paper so that participants could simply point to their answers. The last part of the interview consisted of questions on the demographic details of the participants. Each of the respondents received Php100 as token for their participation in the study.

Using Statistical Package for Social Sciences (SPSS), the researcher performed correlational analysis to examine the relationship between

adaptive coping and individual resilience, adaptive coping and community resilience, and individual resilience and community resilience. Regression analyses were also conducted using absence of anxiety as dependent variable and individual and community resilience as predictor variables.

RESULTS

As hypothesized, adaptive coping was found to be significantly correlated with both individual resilience (r = .46, p < .01) and community resilience (r = .14, p < .05). Table 1 shows that there is also a significant correlation between individual resilience and community resilience (r = .18, p < .01). Although significant, one must note that these positive correlations are weak to moderate.

The results also support this study's fourth hypothesis: individual resilience predicts absence of anxiety among disaster survivors (ß = .48, p < .01) and explains about 23.50% of the variance in the outcome variable. The hypothesis that community resilience predicts absence of anxiety among disaster survivors was likewise supported (ß = .28, p < .01). Community resilience accounts for about 7.50% of the variance in absence of anxiety of displaced survivors.

The author also conducted simultaneous regression analysis using both individual resilience and community resilience as predictors of absence of anxiety. As shown in Table 2, both individual (ß = .49, p < .01) and community resilience (ß = .19, p < .01) uniquely predicts absence of anxiety. The explanatory value of the model increases when both variables are entered into the regression model. Together, individual and community resilience explain 27.10% of the variance in absence of anxiety among disaster survivors.

DISCUSSION

Using a more positive and agentic approach to the study of disaster adaptation, this study found support for the hypotheses that adaptive coping is positively correlated with both individual and community resilience. This finding is consistent with literature that relates adaptive coping skills with resilience (Warchal & Graham,

Table 1. Descriptive and Correlational Analysis of Four Variables Used in the Study

	M	*SD*	1	2	3	4
1. Adaptive Coping	2.96	0.43	(.81)			
2. Individual Resilience	2.43	0.64	.46**	(.72)		
3. Community Resilience	3.50	0.60	.14*	.18**	(.68)	
4. Absence of Anxiety	2.61	0.48	.03	.48**	.28**	(.61)

Note. *p < .05. ** p < .01. (Cronbach's alpha reliability)

Table 2. Regression Analysis of Absence of Anxiety

Variable	B	ß	*F*
Constant	1.26		36.55**
Individual Resilience	.33	.45**	
Community Resilience	.16	.19**	

Note. *p < .05. ** p < .01.

2011). It also validates the importance of interventions that facilitate positive adaptation by helping individuals develop skills that would promote calm, a sense of self and community efficacy, connectedness, and hope (Hobfoll et al., 2007).

This study also applied the conservation of resources (COR) theory (Hobfoll, 1989) as a frame and found support for the importance of internal and external resources in facilitating resilience and emotional well-being. The hypothesis that individual resilience predicts the absence of anxiety among displaced survivors was confirmed. This also supports Hobfoll and colleagues' (2007) finding that positive adaptations lead to positive outcomes.

Moreover, community resilience was found to be a significant predictor of absence of anxiety among displaced disaster survivors. These results highlight the importance of community resilience dimensions of leadership, collective efficacy, preparedness, place

attachment, and social trust, as well as their relationship with individual resilience (Aharonson-Daniel, Lahad, Leykin, Cohen, & Goldberg, 2015).

The COR theory posits that external conditions are an important resource for individuals. This was evident in the present study's results that showed a significant correlation between individual resilience and community resilience. As suggested by the COR theory's concept of resource caravans, personal, social, and material resources do not exist in a vacuum and have a symbiotic relationship with each other (Hobfoll, 2012). This may be particularly true among interdependent and collectivist cultures such as that of the Philippines. As described by Markus and Kitayama (1991), the interdependent self possesses attitudes and opinions that are shaped by context and the relationship one has with others. Thus, whatever happens at the community level is more likely to influence the individual's efforts to cope with negative events such as disasters.

In summary, this study used COR theory and found empirical support for the value of personal characteristics (individual resilience) and conditions (community resilience) as predictors of absence of anxiety among displaced disaster survivors. The study also validated the relationship between adaptive coping and individual and community resilience.

Limitations of the Study and Implications for Future Research

The aforementioned results should be viewed within the limitations of this study. Although the correlation coefficients are all significant, their effect sizes are weak to moderate. It is possible that there are other factors that influence displaced survivors' absence of anxiety other than individual and community resilience. In the same way, there may be other important factors that influence individual and community resilience that were not covered in the present study. Indeed, some studies show that psychological resilience after a disaster is predicted by a multitude of variables such as participant gender, age, race/ethnicity, education, level of trauma exposure, income change, social support, frequency of chronic disease, and recent and past life

stressors (Bonanno et al., 2007). This points to the multifaceted nature of resilience and the need for future studies to take into account other related variables that influence disaster adaptation.

The length of time between the disaster and the conduct of this study (more than a year after Super Typhoon Haiyan struck Tacloban City) could also be another reason for the weak effect sizes. A number of changes that could have influenced the participants' level of resilience and emotional well-being (e.g., employment, marriage, loss of resources, etc.) have already transpired in the lives of the displaced survivors since the disaster happened—factors which were not considered in the present study. Moreover, the study's participants come from an urban poor sample: a select group that is already used to hardships and whose experiences prior to the disaster may have already made them more resilient.

In order to ensure validity and reliability of the instruments, the scales were translated into Waray, the local language. However, during administration, it seemed that not all items were understood, perhaps due to the low educational attainment of most of the participants. The translated scales were likewise not back-translated and pilot-tested because of time constraints. Future researchers may therefore wish to explore simpler instruments that would be more appropriate for non-English speaking populations with low literacy, employ better translation strategies, and pilot test these instruments to gauge the respondents' understanding of the questions.

It must also be emphasized that the results of the study are based on correlational data; thus, no causal relationships were established among the different variables. The existence of causal relations among the variables considered in the present study can be examined in future research using experimental designs. Another limitation of the study is the cross-sectional nature of the data. Longitudinal data examining resilience and adaptive coping would be important to tease out the impact of adaptive coping on resilience and the impact of resilience on absence of anxiety or emotional well-being.

This study focused on a positive outcome, specifically the absence of anxiety. Future studies can examine other manifestations of adaptive outcomes such as hope, optimism, physical well-being, etc. In addition, future studies can also examine other factors that may

contribute to the well-being of displaced survivors such as self-efficacy, self-esteem, internal locus of control, and resourcefulness (Warchal & Graham, 2011).

Implications for Practice

Limitations notwithstanding, the results of the present study suggest the potential value for interventions that may enhance individual resilience such as teaching disaster survivors specific coping skills. The past decade has seen a number of these resilience interventions. The National Center for PTSD developed an intervention called Skills for Psychosocial Recovery that consists of modules designed to build coping skills (Berkowitz et al., 2010). Another example is a self-help, web-based intervention called My Disaster Recovery (Steinmetz, Benight, Bishop, & James, 2012). Similarly, a universal, school-based intervention called ERASE-Stress that has been tested among children survivors of war is composed of 16 modules designed to provide adaptive coping strategies (Berger, Gelkopf, & Heineberg, 2012). In the Philippines, a six-module resilience program for disaster survivors called Katatagan was developed by the Psychological Association of the Philippines in the aftermath of Super Typhoon Haiyan. Pilot data show evidence that survivors who went through this intervention report decreased depressive symptoms and anxiety compared to those who did not (Flores et al., 2014; Hechanova, 2014). It must be noted, however, that future research is needed to evaluate the effectiveness of these programs in our context, especially those developed by Western scholars and practitioners.

Beyond building individual resilience, the present study also highlights the potential value of understanding and fostering community resilience. In the context of resettlement areas, the study's results point to the importance of good camp management. Ensuring that camp managers and leaders are trained and competent is important to enabling community resilience. Some studies suggest that forms of organization and management in resettlement areas that consider elements of dignity, participation, and respect for the capacity of the survivors to control their own lives are relevant factors for effective individual and community coping after a catastrophe (Perez-Sales,

Cervellon, Vazquez, Vidales, & Gaborit, 2005). Community resilience also requires emergency preparedness and clear roles during disasters. This makes putting in place disaster risk reduction and management systems in resettlement areas imperative.

Finally, community resilience is a function of the quality of relationships and trust among members. Building this sense of community requires mechanisms and skills in communication and conflict resolution. Given that resettlement camps are temporary, providing residents skills in positive coping and models for community management may pave the way for smoother transition when they are relocated to more permanent housing.

Summary

Most studies on displaced disaster survivors tend to focus on challenges and needs of survivors from a trauma perspective. This study sought to fill a gap in the literature by taking a positive, agentic, and ecological perspective in examining disaster survivors using the conservation of resources theory as frame. Specifically, it contributes to the literature on disaster psychology by examining adaptive coping, individual resilience, and community resilience and how these variables are related to each other as well as their impact on the well-being of displaced survivors. The study's results suggest the potential value of interventions that not only nurture individual resilience but also enable community resilience.

AUTHOR'S NOTES

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