



Determinants of Helping Behaviour among Community-Based Disaster Volunteers in Yogyakarta

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Abstract

Community-based disaster volunteers are the backbone of effective disaster programs, therefore, their helpful behavior is crucial in disaster-prone areas. The delivery of psychosocial support will be streamlined if volunteers' helpful conduct is understood. The purpose of this study is to determine the acceptability of the suggested volunteer helpful behavior model. Altruism and egoism-helping behavior are the study's endogenous variables. Social and personal norms, the degree of dependence, and the length of time spent volunteering are the exogenous variables. To address the research questions, a survey-based quantitative study was carried out. 292 community-based volunteers in the Yogyakarta Special Region Province, ages 20 to 61, participated in the survey. Covariance-based structural equation modeling (CB-SEM) was employed for data analysis. In overcoming the anomalous data Maximum Likelihood Robust (MLR) was employed as the estimate. The model fits the data according to the model accuracy index. The analysis's findings indicate that altruism helping behavior is influenced by personal norms and dependency level, while egoism helping behavior is influenced by social norms and dependency level. From the results of the study, it can be implied that: Building volunteer capacity must focus on enhancing society values, personal values, and circumstances enabling help such as standardized physical equipment, knowledge, and abilities.

Keywords: helping behavior; community disaster volunteers; disaster-prone areas; psychosocial support.

Introduction

This research aims to find out the factors influence the helping behavior of community-based disaster volunteers. In this study, "volunteer helping behavior" refers to the conduct of helping others with the intention of promoting their welfare or the welfare of the community as described by Bierhoff (Marjanovic et al., 2012). Indonesia is a big country with many places that are prone to disasters. According to Yulianto et al. (2021), hydromedical catastrophes, floods, landslides, and tornadoes are the most common causes of natural disasters that have happened in Indonesia in the last ten years. Dalal & Sheng (2019) mentioned that some organizational and research literature have acknowledged that help can sometimes be unhelpful. This is because helping behavior is not a simple and easy thing to do in accordance with the purpose of helping. Sometimes there are problems in disaster management related to the process of providing assistance, where disaster-related volunteers who aim to help are often the source of new problems.



The disaster management, especially disaster psychosocial support, needs to be continuously scrutinized to avoid becoming a social disaster (Rodríguez et al., 2018). Social disasters are any conditions that can cause problems in the community, such as conflicts among disaster survivors or with volunteers involved in the relief effort. Another example is the erosion of positive local values and culture due to community distrust. This study examines the helping behavior of community-based disaster volunteers, i.e., volunteers who live in disaster-prone areas. For communities in disaster-prone locations, community-based volunteers are the first line of defense for life safety and disaster risk reduction. Because they reside in disaster-prone locations, these volunteers are strategically armed, trained, and empowered to the fullest extent possible. How these volunteers behave to help, both for the motivation of sacrifice and for the motivation of personal interest, needs to be further mapped out as the influencing factors so that sustainable volunteerism can be built.

Community volunteers carry out gotong royong activities in disaster situations. The definition of gotong royong is acting together for the common good (Koentjaraningrat, 1974). Mutual aid behavior is an altruistic behavior based on trust and cooperation. Altruistic behavior brimming with societal norms is a component of this mutual cooperative behavior. Strong social norms can lessen the likelihood that disasters will have detrimental psychological impacts for a long time. According to Kumala (2021), people who care for one another will be able to go through their tough times together more easily than those who live in an individualistic setting.

A study by Schein (2009) pointed out that helpful behavior is a complicated phenomenon which can happen in any circumstance. Help can be helpful in certain ways, but it can also be seen as having no effect on the person receiving it. Additionally, Laguna et al. (2020) clarified that the act of helping is influenced by the helper's perception. People are more inclined to offer unasked aid when they believe that others are in need of it, even if such support is not what the survivor needs (Laguna et al., 2020). It is not surprising that the results of the assistance given diverge from the needs of the disaster survivors if there are disparities in the perspectives of the rescuers and the helped. According to Bierhoff in Marjanovic et al. (2012), helping is an act motivated by both self-interest and altruism and intended to improve the wellbeing of others.

It is feasible to transform spontaneous helping behavior into planned helping behavior, based on Utomo & Minza (2018). According to the findings of Utomo and Minza (2018), there is a shift in helping behavior, transitioning from spontaneous helping, also known as spontaneous assistance, to planned helping, referred to as planned assistance by deciding to join a local volunteer organization. In Indonesia, there are community volunteers who are members of an organized group, and there are freelance volunteers or also called spontaneous volunteers. Compared to unorganized volunteers, organized volunteers have a greater chance of receiving government backing and capacity training. A volunteer group must be legally recognized in order to receive various forms of funding and capacity-building assistance from both public and private organizations.

Three elements were presented by Kassin et al. (2019) in their review of the helping behavior components, they are reward, empathy, and altruism and egoism as a single entity. First, Reward is what people get in return for helping others. Receiving material and psychological benefits is one of the reasons people assist. People frequently experience joy when they assist others. Second, Empathy is the sensation of directly or indirectly understanding another person's point of view and experiencing affection or sympathy for them. Third, Selfishness and altruism are two factors that simultaneously lead people to act in ways that are helpful. Those who provide altruistic assistance are motivated by a desire to better the lives of others and are not concerned with their own benefits. Egoism, or the desire to better one's personal well-being, can also motivate people to act in ways that are helpful. People act in a helpful manner in order to feel better about themselves.

In addition to the above understanding of the meaning of psychosocial, other experts, such as Chaplin (2006) and Baron & Byrne (2005), presented their own findings which tend to be different. Chaplin (2006) stated that

psychosocial is a psychological aspect that explains social relations that include various aspects of psychology. Meanwhile, Baron and Byrne (2005) suggest that psychosocial is knowledge that seeks to understand the causes of individual behaviour and thinking in the context of social settings.

Continuous psychosocial support has a reciprocal impact on people's social and psychological well-being as well as their social surroundings. As defined by Smet (1994), there are four components of psychosocial support: first, emotional support, which manifests as caring, empathetic, and concerned expressions for other people; second, appreciative support, which manifests as positive displays of regard for other people; third, Instrumental help, which takes the shape of tangible material aid; fourth, Informational support, which involves giving people counsel, recommendations, or comments.

Trained and equipped volunteers are very effective in the disaster management in disaster-prone areas. Dalal & Sheng (2019) developed review-based taxonomies of motives relevant to helping, knowledge, skills, and abilities (KSAs) relevant to helping, and types of help. But given Indonesia's vast territory, difficult-to-reach natural features, diverse cultural landscape, and constrained government funding, bolstering community-based disaster volunteers seems like a more sensible necessity for the country's disaster management. To create a ready-made volunteer community, community-based volunteers residing in disaster zones are a crucial focus. Studying the helpful behavior of these community-based volunteers in disaster-prone areas is essential to the effectiveness of psychosocial support supply. Thus, the questions raised in this study are: Is the proposed model of helping behavior of community-based volunteers accepted? What are the determinants of the helping behavior of community-based disaster volunteers?

Methods

Respondents

The respondents in this study were volunteers with the criteria of having at least 2 years of experience as natural disaster volunteers in Yogyakarta Special Region Province. There were 292 respondents aged 20-61 years ($M = 43.74$; $SD = 8.95$). They were community-based volunteers, i.e., those who live as residents in landslide/volcanic/drought/tsunami disaster-prone areas. The selected areas were Samigaluh and Girimulyo (Kulon Progo) for landslide hazard areas, Bolang hamlet and Gesing Beach (Girikarto, Panggang, Gunung Kidul) for tsunami hazard areas, and Girikarto and Glagaharjo (Cangkringan, Sleman) for volcanic eruption hazard areas. The distribution of respondents by gender, educational attainment, length of time spent volunteering, and kind of natural catastrophe danger is displayed in Table 1.

Table 1. Respondent Description

Criteria	n	%
<i>Sex</i>		
Male	208	28.77
Female	84	71.23
<i>Education level</i>		
Elementary School	42	14.38
Junior High School	80	27.4
Senior High School	147	50.34
University	22	7.53

Abstain	1	0.34
<i>Length of volunteering</i>		
2-5 years	97	33.22
5-10 years	128	43.84
> 10 years	67	22.95
<i>Types of Natural Disasters</i>		
Landslides	149	51.03
Tsunamis	8	2.74
Volcanoes	110	37.67
Droughts	25	8.56

Research Instrument

The instruments used in this study were developed by researchers based on their respective theoretical foundations. The instruments were tested for quality with evidence of validity based on internal structure (AERA et al., 2014) using confirmatory factor analysis (CFA) and the help of Mplus software version 8.3.

Helping Behavior

According to Bierhoff, helping conduct is an action motivated by self-interest or altruism that aims to improve the wellbeing of others (Marjanovic et al., 2012). Amato (1990) distinguished between two types of helpful behavior: planned helping and spontaneous helping. The volunteer helping behavior studied consisted of these two forms of behavior. According to the context of this research, namely community-based volunteer helping behavior, volunteer helping behavior is included in the criteria of mutual cooperation. The definition of mutual cooperation is working together or helping each other (Tim Penyusun Kamus Pusat Bahasa, 2002). Meanwhile, Koentjoroningrat (1974) said that mutual cooperation is the mobilization of human energy without payment for a project or work that is beneficial to the public or useful for development. Gotong royong is divided into two types. The first type is mutual help behaviour that benefits both parties, namely agricultural activities, household activities, parties, celebrations, and disasters. The second type of mutual cooperation behavior is mutual cooperation, which is for public (Koentjaraningrat, 1987). Material (money, products), physical (energy), and mental-spiritual (contributions of positive ideas, counsel, and prayer support) are some examples of the forms.

Helping behavior in this research consist two aspect: (1) The aspect of helping to improve the welfare of others altruistically. The definition of this aspects is helping for interests outside oneself. What is meant by outside himself is outside the personal interests of the volunteer and the family who live with the volunteer. Indicator of this aspects is volunteer helping behavior aimed at the welfare of others (not the welfare of oneself and the family who lives with them) both from a physical, mental and spiritual perspective. (2) The aspect of helping to improve the welfare of others is driven by selfish motives. The definition is helping for self-interested purposes, what is meant by oneself is the individual volunteer and the family who lives with him. The indicator is behavior of helping volunteers for self-interested purposes (for example: personal welfare and the family living with them) whether in terms of physical, mental, spiritual, or helping behavior so that it is considered good by the community.

The helping behavior instrument was developed based on Bierhoff's theory of helping behavior (Marjanovic et al., 2012), which consists of altruism and egoism. Altruism consists of 6 items, and egoism consists of 6 items arranged using a Likert scale with 5 response options (1 = very inappropriate to 5 = very appropriate). The estimated reliability using Cronbach's alpha for altruism is 0.66 (95% CI = 0.60-0.72), while for egoism it is 0.79 (95% CI = 0.75-0.83). The goodness of fit index shows that the model fits the data (RMSEA = 0.081 [90% CI = 0.066-0.096] p RMSEA < 0.05; CFI = 0.828; TLI = 0.786; SRMR = 0.081) with standardized factor loadings of altruism of 0.42-0.56 and egoism of 0.48-0.80. Furthermore, based on the CFA results, altruism and egoism were not significantly correlated ($r = 0.16$; $p = 0.18$).

Personal Norms

Personal norms are a person's feelings or activities in complying with a moral obligation to carry out or refrain from certain actions that result in helping (De Groot & Steg, 2009, 2010; Jackson, 2005; Schwartz, 1977). Personal norms consist of two aspects, namely Perceptual Aspect and Obedience Aspect. Definition of Perceptual Aspect is perceptions of what should and should not be done to support helping behavior. Indicator of this aspect are (1) Perceptions about what should and should not be done when helping (2) Sharing behavior: sharing information about assistance, sharing ownership, sharing time to help, sharing energy to help). Definition of Obedience aspect is obedience to moral norms to behave helpfully as expected by society. Indicator of Obedience aspect is form of behavior related to moral obedience in helping.

The personal norms instrument was developed based on the personal norms theory proposed by several experts (De Groot & Steg, 2009, 2010; Jackson, 2005; Schwartz, 1977) and consists of 22 items. The instrument was structured using a Likert scale with 5 response options (1 = strongly disagree to 5 = strongly agree). The estimated reliability using Cronbach's alpha resulted in a value of 0.88 (95% CI = 0.86-0.90). The model accuracy index showed that the model fit the data (RMSEA = 0.059 [90% CI = 0.051-0.067] p RMSEA < 0.05; CFI = 0.863; TLI = 0.849; SRMR = 0.057) with standardized factor loadings of 0.42-0.64.

Social Norms

The definition of social norms is what motivates collective patterns of behavior, why people do what they do (Bicchieri, 2006). Social norms provide explanations in terms of the expectations and preferences of people who follow these norms. Two social norms are related to helping behavior in this research, the first is the social responsibility norm, namely that we have an obligation to help individuals who need help Berkowitz & Daniels, in (Deaux & Wrightsman, 1984). Second, reciprocity norm. Gouldner in Deaux & Wrightsman (1984) said that individuals have an obligation to help other individuals who have previously helped themselves. Aspects of social norms are as follows:

(1) Aspects of the obligation to help people in need. The indicator are (a) Behavior of helping residents around the residence (b) Obligation to be involved in every activity/activities during a disaster

(2) The aspect of the obligation to help people who have helped themselves. The indicators are (a) Helping behavior as a form of self-satisfaction (b) Helping behavior as a form of reciprocation.

The social norms instrument was developed based on Berkowitz & Daniels' Social Responsibility Norm Theory in Deaux & Wrightsman (1984) and Gouldner's Reciprocity Norm Theory (Deaux & Wrightsman, 1984). The instrument is structured using a Likert scale with 5 response options (1 = Strongly Incongruent to 5 = Strongly Congruent) and consists of 7 items. The estimated reliability using Cronbach's alpha resulted in a value of 0.84 (95% CI = 0.81-0.86). The model accuracy index showed that the model fit the data (RMSEA = 0.058 [90% CI =

0.025-0.090] p RMSEA = 0.30; CFI = 0.972; TLI = 0.959; SRMR = 0.034) with standardized factor loadings of 0.50-0.82.

Dependency Level

The definition perception of the level of dependence of people affected by disasters is the characteristic that most influences the emergence of helping behavior is the nature of dependence that exists in the individual being helped (Deaux & Wrightsman, 1984). The perception of the level of dependency of communities affected by disasters is how volunteers view and believe that the communities being helped really need help, and that they are the right party to provide help. Dependency level consist of two aspects, namely (1) Aspects of the volunteer's beliefs about the person being helped. Definition of this aspects is a volunteer's belief that an individual or community really needs help. The indicator is : volunteer perspective on individual or community needs for help when a disaster occurs. (2) Aspects of volunteers' beliefs about themselves. The definition of this aspect is a volunteer's belief that he or she is the right party to provide the help the community needs. The Indicator is the volunteer's perspective on himself as a necessary party.

The level of dependency instrument was developed based on Deaux & Wrightsman's (1984) theory of the level of dependency of helped individuals and consists of 7 items. The instrument was structured using a Likert scale with 5 response options (1 = Strongly Disagree to 5 = Strongly Agree) with an estimated reliability value using Cronbach's alpha, which resulted in a value of 0.75 (95% CI = 0. 70-0.79) The goodness of fit index showed that the model fit the data (RMSEA = 0.064 [90% CI = 0.033-0.095] p RMSEA = 0.20; CFI = 0.936; TLI = 0.904; SRMR = 0.048) with standardized factor loadings of 0.40-0.72.

Research Procedure

The procedure in this study begins with the development of measurement instruments by the researchers, which are then reviewed by two disaster experts, two disaster volunteers, and the Research Ethics Committee of the Faculty of Psychology, Gadjah Mada University. This is done according to ethical standards to fit the context of variable measurement and the psychological research code of ethics. Data collection was conducted directly in the field/disaster-prone areas by first contacting key figures, namely BPBD officials and community leaders as well as coordinators of volunteer communities in three districts, namely in Kulon Progo, Sleman, and Gunung Kidul.

Data Analysis

The endogenous variables in this study are altruism and egoism helping behavior. The exogenous variables are personal norms, social norms, level of dependency, and duration of volunteering. Since the duration of volunteering variable is nominal data, this variable is coded using a dummy. The data were analyzed using covariance-based structural equation modeling (CB-SEM) using Mplus version 8.3 software. The estimator used is maximum likelihood robust (MLR) to overcome abnormal data (Yuan & Bentler, 2000).

Results

The model accuracy index shows that the model fits the data (RMSEA = 0.046 [90% CI = 0.042-0.050] p RMSEA = 0.95; CFI = 0.797; TLI = 0.787; SRMR = 0.072), although CFI and TLI do not meet the fit criteria. This is because RMSEA is used as the main assessment to prove model fit with data (Lai & Green, 2016; Shi et al., 2020). The analysis results show that the altruism helping behavior is influenced by personal norms ($\beta = 0.43$; $p < 0.01$; $R^2 = 0.28$) and the degree of dependency ($\beta = 0.30$; $p < 0.01$; $R^2 = 0.17$). Egoistic helping behavior is influenced by social norms ($\beta = -0.51$; $p < 0.01$; $R^2 = 0.20$) and the level of dependency ($\beta = 0.41$; $p < 0.01$; $R^2 = 0.10$).

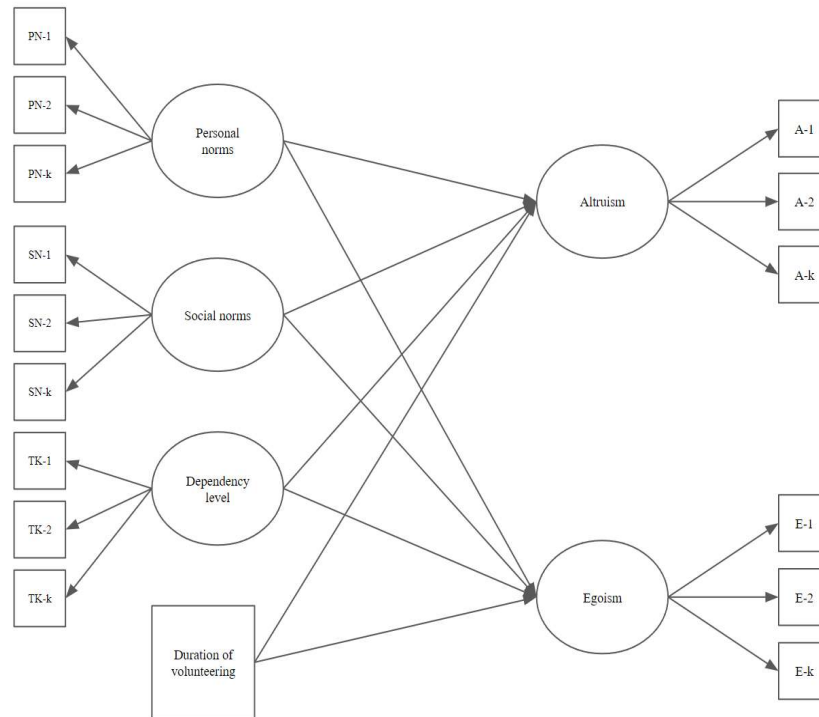


Figure 1. Conceptual Model of Volunteer Helping Behavior.

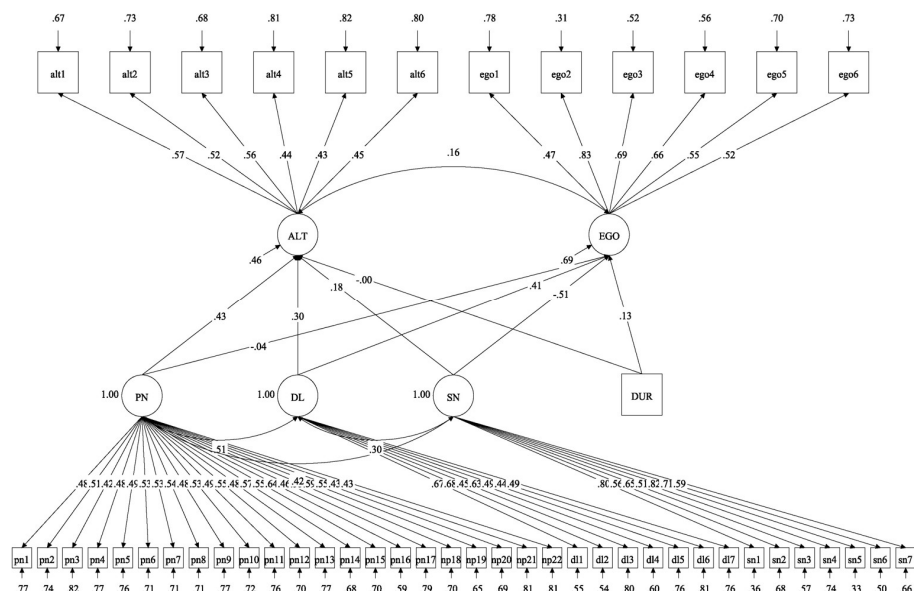


Figure 2. Model of Helping Behavior

Discussion

This study shows that altruistic helping behavior is influenced by personal norms and perceptions of dependency, whereas egoistic helping behavior is influenced by social norms and perceptions of dependency. Community-based volunteers who live and work together in disaster-prone areas experience and see firsthand difficult situations and potential problem-solving situations according to local wisdom. For example, volunteers who work as farmers and breeders on the slopes of Mount Merapi are able to remain calm and introspective while working in the area of Mount Merapi. They are able to be sensitive to the rumbling sounds inside the mountain that could be dangerous for them.

Similarly, farmers and residents in the Menoreh Mountains are vigilant when there is heavy rainfall after days of scorching heat in their area, which they see as a sign of new landslide ruptures that endanger the community. Volunteers who already have knowledge and skills, as well as daily experience, are easily moved to act. Silva et al. (2009) mentioned a similar condition, where individuals are more easily moved to help after seeing the situation on the ground, especially if there is a tradition of reciprocal altruism in the community. People in Indonesia have a tradition of reciprocal altruism, namely a culture of gotong royong in everyday life, both in disaster situations and in everyday life.

Schwartz et al. (2012) value theory classifies values into dimensions such as self-transcendence, which emphasizes collective well-being, and conservation, which prioritizes the preservation of traditions, highlighting their universal significance across cultures. Personal and social values, such as benevolence and universalism, can shape norms that foster inclusivity and sustainability, whereas values like conformity encourage adherence to societal standards. Additionally, these values play a role in challenging and transforming outdated norms, as evidenced by societal progress toward equality and justice.

Strengthening the personal and social values of disaster volunteers significantly influences norms; rules or shared expectations of the volunteer community, which guide behavior within the disaster volunteer community as well as residents living in disaster-prone areas. Here are ways to influence these norms (Schwartz, 2012):

- **Reinforcement of Positive Norms.** Personal values such as honesty, responsibility, and empathy guide individual behavior. When disaster volunteers consistently act in accordance with these values, they reinforce norms that align with these principles (e.g., integrity when distributing material assistance in the form of basic necessities in the volunteer community work environment or doing good in community interactions). Then, social values, such as respect for diversity or commitment to sustainability, when emphasized collectively, help maintain and promote community norms that reflect these values (e.g., inclusivity or environmental preservation). An example is the tradition of praying together across religions during the Merti Desa, Saparan, and 1 Suro ceremonies. This activities show that the various religious beliefs of volunteers do not prevent them from uniting to carry out disaster mitigation spiritually based on local wisdom (De Clercq et al., 2022).
- **Challenging and Changing Negative Norms.** Strong personal values can lead individuals to question the norms that are harmful or outdated (e.g., opposing discrimination when helping disaster victims, prioritizing people with disabilities). Likewise, social values often act as catalysts for change by encouraging collective action and dialogue. For example, increased emphasis on equality and human rights has led to shifting norms regarding gender roles or racial equality within the disaster relief community.
- **Encouraging Congruence with Shared Purpose.** When personal and social values align with broader societal goals, they create a sense of shared purpose. This alignment makes individuals more likely to adhere to norms that support group cohesion and collective success (e.g., cooperation and fairness in the workplace or community, women volunteers serving in important positions).

- Discouraging Norm Deviation. Reinforced values act as an internal compass, reducing the likelihood of deviation from constructive norms. For example, a disaster relief worker who highly values accountability is less likely to tolerate unethical behavior in professional or social settings such as the courteous and protective treatment of alone female volunteer in a predominantly male community.
- Creating New Norms. When a large number of individuals adopt and prioritize certain values, these values can evolve into new norms over time. For example, values around mental health awareness have shaped emerging norms about open discussion and seeking support. In short, strengthening personal and social values helps shape, reinforce, or redefine norms, ensuring that they are more aligned with ethical principles, collective well-being, and evolving societal priorities. An example is the intensive capacity building training of volunteers from government organizations, especially non-governmental organizations, on disaster issues, which is recognized as greatly increasing insight and forming new mindsets for volunteers about the importance of disaster preparedness.

Community volunteers and residents help each other in the community in the pre-disaster phase, such as building river banks to prevent flooding, cutting tree branches before the rainy season to prevent trees from falling, and cleaning the village before the rainy season. The tradition of reciprocal altruism is also seen in disaster situations, for example, sharing food with each other in times of disaster, giving each other news of aid that has arrived, and sharing the information about the location of families that have not been found. Some experts argue that helping behavior is an action that provides direct benefits to other individuals without providing benefits to the individuals who provide help (Baron & Byrne, 2005). However, this study shows that the altruistic behavior of community volunteers has a facet of altruistic sincerity as well as a facet of benefits or advantages they receive from helping. This is in line with the theory of Kassin et al. (2019), which states that altruism and egoism are two causes for individuals to engage in helping behavior. In the context of Indonesian culture, self-satisfaction for successfully helping is very commonly accepted as a benefit of helping parties even without receiving material rewards.

It's also likely that community volunteers operate in this helpful manner because they are motivated to feel better about themselves, such as when they see how well the helping party is succeeding. This finding is consistent with Cryder et al. (2013) and Jia & Xie's (2021) research that helping behavior creates feelings of satisfaction in the helping actor.

The results also show that perceptions of dependency affect helping behavior in both altruistic and selfish ways. Kim et al., (2023) stated that helping escalation leads to emotional exhaustion and work-to-family conflict through job demands. A person is less likely to help another person in need of help if he or she perceives that there are many other people who have the potential to perform the same action for the person in need of help (Deaux & Wrightsman, 1984). This is where volunteers who live in disaster-prone areas play an important role. In the context of disaster-prone areas in Indonesia, research by Rahmawati and Koentjoro (Koentjoro, et al. 2020) shows the need for a layer of helper groups in addition to survivors in disaster-prone areas. Community-based disaster volunteers are helpers because they are survivors who are trained and prepared to help each other. The stronger the capacity of community disaster volunteers to help, the lower the risk of negative impacts of disasters. Ensuring safer and sustainable development in disaster-prone regions necessitates predictive measures, such as hazard, vulnerability, and risk assessments. Hizbaron et al. (2012) research findings stated, without adequate knowledge and political support, any manifestation towards safer and sustainable development will remain meager and haphazard.

Conclusion

Based on the research described and discussed in the previous section, it can be concluded that altruistic helping behavior is influenced by personal norms and perceptions of the degree of dependence on assistance, while egoistic helping behavior is influenced by social norms and perceptions of the degree of dependence on assistance.

Implication

The information from this research can be used by policy makers in implementing disaster risk reduction program strategies, especially in increasing the capacity of community-based volunteers. Programmes through training and mentoring volunteers that pay attention to strengthening personal and social values and situations that support altruistic helping behaviour and manage egoistic helping behaviour according to the local cultural context need to be developed. Continued efforts to preserve local wisdom values in disaster risk reduction programs will be very beneficial for implementation in the field. For further development, this conceptual model of community-based disaster volunteer helping behavior needs to be implemented for volunteers from outside the area with "need fulfilment" (or complementary fit) as a core feature of the model, so that the provision of disaster assistance in psychosocial support is appropriate and effective. Good governance is essential in providing aid and support to disaster-prone areas, particularly through the empowerment of community-based disaster volunteers. These volunteers are expected to preserve and sustain local wisdom rooted in personal and social norms while also being capable of demonstrating flexibility (adaptability) and openness to knowledge and skills from outside their community.

Limitation

This study used a more deductive approach from Western cultural theory rather than a local Indonesian context approach. More research is needed to understand this helping behavior in Indonesian society. For example, research on gotong royong in different regions in Indonesia as a form of helping behavior in the Indonesian context.

References

- AERA, APA, & NCME. (2014). *Standards for educational and psychological testing: National Council on Measurement in Education*. American Educational Research Association.
- Amato, P. R. (1990). Personality and social network involvement as predictors of helping behavior in everyday life. *Social Psychology Quarterly*, 53(1), 31. <https://doi.org/10.2307/2786867>
- Baron, R. A., & Byrne, D. (2005). *Psikologi sosial* (10th ed.). Erlangga.
- Bicchieri, C. (2006). *The grammar of society: The Nature and Dynamics of Social Norms*. Cambridge University Press.
- Chaplin, J. P. (2006). *Kamus lengkap psikologi*. PT. Raja Grafindo Persada.
- Cryder, C. E., Loewenstein, G., & Seltman, H. (2013). Goal gradient in helping behavior. *Journal of Experimental Social Psychology*, 49(6), 1078–1083. <https://doi.org/10.1016/j.jesp.2013.07.003>
- Dalal, R. S., & Sheng, Z. (2019). When is helping behavior unhelpful? A conceptual analysis and research agenda. *Journal of Vocational Behavior*, 110, 272–285. <https://doi.org/10.1016/j.jvb.2018.11.009>
- De Clercq, D., Haq, I. U., & Azeem, M. U. (2022). Religiousness, collectivism, and helping behavior: The invigorating role of abusive supervision. *European Review of Applied Psychology*, 72(2), 100702. <https://doi.org/10.1016/j.erap.2021.100702>

- De Groot, J. I. M., & Steg, L. (2009). Morality and prosocial behavior: The role of awareness, responsibility, and norms in the norm activation model. *The Journal of Social Psychology*, 149(4), 425–449. <https://doi.org/10.3200/SOCP.149.4.425-449>
- De Groot, J. I. M., & Steg, L. (2010). Relationships between value orientations, self-determined motivational types and pro-environmental behavioural intentions. *Journal of Environmental Psychology*, 30(4), 368–378. <https://doi.org/10.1016/j.jenvp.2010.04.002>
- Deaux, K., & Wrightsman, L. S. (1984). *Social psychology in the 80s*. Brooks/Cole Publishing Company.
- Hizbaron, D. R., Baiquni, M., Sartohadi, J., & Rijanta, R. (2012). Urban vulnerability in Bantul district, Indonesia—towards safer and sustainable development. *Sustainability*, 4(9), 2022–2037. <https://doi.org/10.3390/su4092022>
- Jackson, T. (2005). *Motivating sustainable consumption: A review of evidence on consumer behaviour and behavioural change* (A report to the sustainable development research network). Centre for Environmental Strategy, University of Surrey. <https://timjackson.org.uk/wp-content/uploads/2018/04/Jackson.-2005.-Motivating-Sustainable-Consumption.pdf>
- Jia, H., Zhong, R., & Xie, X. (2021). Helping others makes me fit better: Effects of helping behavior by newcomers and coworker-attributed motives on newcomers' adjustment. *Journal of Business and Psychology*, 36(3), 401–416. <https://doi.org/10.1007/s10869-020-09680-w>
- Kassin, S., Fein, S., & Markus, H. R. (2019). *Social Psychology* (9th ed.). Wadsworth.
- Kim, A., Kim, Y., & Cho, Y. (2023). The consequences of collaborative overload: A long-term investigation of helping behavior. *Journal of Business Research*, 154, 113348. <https://doi.org/10.1016/j.jbusres.2022.113348>
- Koentjaraningrat. (1974). *Kebudayaan, mentalitas dan pembangunan*. Gramedia.
- Koentjaraningrat. (1987). *Kebudayaan mentalitas pembangunan*. Gramedia.
- Koentjoro, Rahmawati, I., Kurniawan, Y., Chizanah, L., Khoiroh, R. K., Fachrunisa, R. A., Kusujarti, S., Rahardjo, A. P., Pramumijoyo, S., Sujono, J., & Daryono, B. S. (2020). *Ragam ulas kebencanaan*. Deepublisher.
- Kumala, I. D. (2021). *Psikologi Bencana, Sebuah Pengantar*. Syiah Kuala University Press.
- Laguna, M., Mazur, Z., Kędra, M., & Ostrowski, K. (2020). Interventions stimulating prosocial helping behavior: A systematic review. *Journal of Applied Social Psychology*, 50(11), 676–696. <https://doi.org/10.1111/jasp.12704>
- Lai, K., & Green, S. B. (2016). The problem with having two watches: assessment of fit when RMSEA and CFI disagree. *Multivariate Behavioral Research*, 51(2–3), 220–239. <https://doi.org/10.1080/00273171.2015.1134306>
- Marjanovic, Z., Struthers, C. W., & Greenglass, E. R. (2012). Who helps natural-disaster victims? Assessment of trait and situational predictors. *Analyses of Social Issues and Public Policy*, 12(1), 245–267. <https://doi.org/10.1111/j.1530-2415.2011.01262.x>
- Rodríguez, H., Donner, W., & Trainor, J. E. (Eds.). (2018). *Handbook of disaster research*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-63254-4>
- Schein, E. H. (2009). *Helping: How to offer, give, and receive help*. Berrett-Koehler Publishers, Inc.
- Schwartz, S. H. (1977). Normative influences on altruism. in *advances in experimental social psychology* (Vol. 10, pp. 221–279). Elsevier. [https://doi.org/10.1016/S0065-2601\(08\)60358-5](https://doi.org/10.1016/S0065-2601(08)60358-5)
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1). <https://doi.org/10.9707/2307-0919.1116>

- Shi, D., Maydeu-Olivares, A., & Rosseel, Y. (2020). Assessing Fit in Ordinal Factor Analysis Models: SRMR vs. RMSEA. *Structural Equation Modeling: A Multidisciplinary Journal*, 27(1), 1–15. <https://doi.org/10.1080/10705511.2019.1611434>
- Silva, J. L., Marks, L. D., & Cherry, K. E. (2009). The Psychology Behind Helping and Prosocial Behaviors: An Examination from Intention to Action. In K. E. Cherry (Ed.), *Lifespan Perspectives on Natural Disasters* (pp. 219–240). Springer US. https://doi.org/10.1007/978-1-4419-0393-8_11
- Smet, B. (1994). *Psikologi Kesehatan*. PT Gramedia Widasarana Indonesia.
- Tim Penyusun Kamus Pusat Bahasa. (2002). *Kamus Besar Bahasa Indonesia(Edisi Ketiga)* (3rd ed.). Balai Pustaka.
- Utomo, M. H., & Minza, W. M. (2018). Perilaku Menolong Relawan Spontan Bencana Alam. *Gajah Mada Journal of Psychology (GamaJoP)*, 2(1), 48. <https://doi.org/10.22146/gamajop.31871>
- Yuan, K.-H., & Bentler, P. M. (2000). Three Likelihood-Based Methods for Mean and Covariance Structure Analysis with Nonnormal Missing Data. *Sociological Methodology*, 30(1), 165–200. <https://doi.org/10.1111/0081-1750.00078>
- Yulianto, S., Apriyadi, R. K., Aprilyanto, A., Winugroho, T., Ponangsera, I. S., & Wilopo, W. (2021). Histori Bencana dan Penanggulangannya di Indonesia Ditinjau Dari Perspektif Keamanan Nasional. *PENDIPA Journal of Science Education*, 5(2), 180–187. <https://doi.org/10.33369/pendipa.5.2.180-187>