

OPTIMISING COMMUNITY PARTICIPATION IN POST-DISASTER CRISIS RESPONSE: EVIDENCE FROM THE “DITWAH” CYCLONE, SRI LANKA

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ABSTRACT

Community participation is an important component of effective disaster response and recovery. However, understanding the behavioural drivers that motivate individuals to participate in community-based disaster response, as well as the challenges and constraints influencing such participation, remains limited, particularly in developing country contexts. This study addresses this gap by examining community participation that emerged following the 2025 Cyclone Ditwah in Sri Lanka by methodologically applying the theory of Planned Behaviour for understanding community participation in post-disaster recovery in developing-country settings. The research adopts a single embedded case study approach. Data were collected through document review and five semi-structured interviews with key initiators and volunteers involved in two major initiatives: a community kitchen programme and a digital rescue coordination platform. Findings were manually analysed and reveal that social, cultural, emotional, and contextual drivers strongly motivate community participation. Digital platforms also played a critical role in enabling rapid coordination and information sharing during the crisis. However, challenges such as resource constraints, misinformation, and operational difficulties in managing volunteer networks must be addressed to optimize community Participation in future disaster response initiatives.

Keywords: Behavioural Drivers; Community Participation; Ditwah Cyclone; post-disaster; Theory of Planned Behaviour.

1. INTRODUCTION

Disasters can cause immediate and long-term impacts on physical and emotional well-being, as well as indirect effects such as evacuation, social disruption, financial loss, lifestyle changes, damage to healthcare facilities, and shifts in social and socioeconomic conditions (Azhar *et al.*, 2022). To accelerate recovery and implement large-scale emergency responses to disasters, governments collaborate with state authorities, international relief agencies, and nongovernmental organisations. However, post-disaster recovery processes often fall short due to inefficiencies and poor management (Ngulube, 2024). Disasters often stimulate strong social responses, including reciprocal support among individuals and communities (Dinger *et al.*, 2020), inspired volunteerism and

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collective assistance among affected populations (Danasekara, 2025). In such contexts, individuals who feel capable of contributing and expressing their abilities are more likely to assist others (Xu *et al.*, 2024). Such behaviour plays a crucial role in shaping how individuals and communities respond to extreme adversity (Bansidhar, 2025; Stanculescu & Petruta, 2025). Although community participation, including local skills, experiences, ideas, and values, has become a critical foundation for successful recovery and livelihood restoration in the post-disaster phase (Kaklauskas *et al.*, 2009), its potential is still underutilised. In this context, global studies highlight that community participation can significantly improve the effectiveness of disaster recovery and relocation processes (Ngulube, 2024).

Unlike in many Western countries, behavioural theories and models are still limitedly applied in disaster preparedness and emergency management in developing countries (Azhar *et al.*, 2022). Consequently, knowledge about the factors influencing emotional and behavioural responses to emergencies remains limited (Gu *et al.*, 2021). To address this gap, the present study applies the Theory of Planned Behaviour (TPB) to examine community participation in post-disaster crisis response within the Sri Lankan context. The study identifies context-specific behavioural dimensions influencing participation and demonstrates the methodological applicability of TPB for understanding community participation in post-disaster recovery in developing-country settings. Given the complex interaction of influencing factors and their varying importance, effective post-disaster management strategies that incorporate community participation must be tailored to specific local conditions and contexts (Kaklauskas *et al.*, 2009).

Sri Lanka, a tropical island with diverse climatic zones and complex geographical features, is highly vulnerable to various natural disasters (Samaraweera *et al.*, 2024). Flood-related damage has occurred almost annually over the past 40 years, ranging from localised flooding to nationwide disasters (World Bank, 2025). Between 2010 and 2025, natural disasters affected 15,586,967 people, displaced 1,497,277 individuals, and caused 1,328 deaths (De Silva *et al.*, 2026). Most recently, the country experienced one of the most catastrophic disasters in its recent history, the “Ditwah” cyclone (Ditwah Disaster Relief Platform, 2026). As in many other countries, the government faced significant challenges managing post-disaster recovery independently and therefore relied on support from multiple sectors, including international relief agencies and nongovernmental organisations (Senanayke & Amaratunga, 2026). Despite persistent gaps in areas such as food security, health and safety, water and sanitation, and shelter coordination (Disaster Management Centre, 2025), community participation and public generosity have played a crucial role in supporting recovery efforts (Senanayke & Amaratunga, 2026).

The effectiveness of such participation largely depends on the community’s capability to respond to disasters (Nian *et al.*, 2019). Various contextual, cultural, social, emotional, and behavioural drivers influence the development of community behaviours and consequently strengthen community participation in post-disaster crisis response (Al-Dahash *et al.*, 2022; Nian *et al.*, 2019; Staub & Vollhardt, 2008; Xu *et al.*, 2024). Therefore, identifying these key drivers and understanding their roles in shaping post-disaster human behaviour is essential for maximizing the benefits of community participation in recovery efforts.

However, policymakers often overlook community involvement in post-disaster planning, which can lead to ineffective recovery and reconstruction processes (Ngulube, 2024). Accordingly, this study contributes to the disaster management literature by applying TPB within post-disaster crisis response and providing empirical evidence on the behavioural drivers that shape community participation in Sri Lanka. Therefore, this paper aims to systematically examine the key drivers that strengthen community participation in post-disaster crisis response, as well as the challenges and constraints faced by communities during their involvement, to optimise community participation in post-disaster response within the Sri Lankan context. The paper first examines factors influencing community participation in post-disaster response and ways to enhance participation. It then outlines the case study, presents and analyses primary data, and concludes with key insights and future directions.

2. LITERATURE REVIEW

2.1 FACTORS AND DRIVERS AFFECTING COMMUNITY PARTICIPATION IN POST-DISASTER RECOVERY

The critical role of human behaviour in designing and implementing effective emergency response actions been widely recognised (Al-Dahash et al., 2022). Several behavioural theories have been developed to explain human decision-making, including the Theory of Reasoned Action (TRA), Value-Belief-Norm (VBN) theory, and the Theory of Planned Behaviour (TPB) (Fishbein & Ajzen, 1975; Stern et al., 1999). The VBN theory effectively explains environmentally motivated actions; however, it provides limited insight into intention-behaviour relationships in contexts that require consideration of both psychological and infrastructural factors. The Theory of Reasoned Action (TRA) explains that behavioural intention is shaped by attitudes and subjective norms (Fishbein & Ajzen, 1975). However, it assumes complete volitional control, limiting its applicability to the real world where individuals face structural and situational constraints. To address this, Ajzen (1991) extended the TRA into the Theory of Planned Behaviour (TPB) by incorporating perceived behavioural control, enabling consideration of both internal and external influences on behaviour. Among these, TPB provides a comprehensive framework for analysing community behaviour in crisis response by integrating cognitive, social, and situational determinants of behaviour (Al-Dahash *et al.*, 2022).

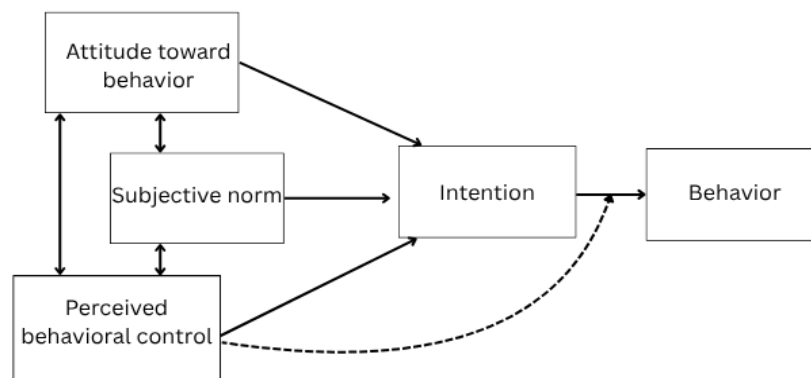


Figure 1: Theory of planned behavior

According to TPB, behavioural intention is shaped by three key variables: attitude toward the behaviour, subjective norm, and perceived behavioural control (Yuriev et al., 2020). Therefore, promoting community participation in post-disaster crisis response requires understanding these behavioural drivers and how they interact within the TPB framework.

2.1.1 Attitude Toward the Behavior

Within the TPB, attitudes toward behaviour refer to individuals’ positive or negative evaluations of engaging in a particular action. In the context of post-disaster situations, attitudes shaped by personal values, emotions, beliefs, and psychological experiences significantly influence the willingness of individuals to participate in community-based crisis response (Bansidhar, 2025). Personality-related factors such as attitudes, wishes, desires, and knowledge about hazards have been identified as important determinants affecting behavioural responses during disasters (Al-Dahash *et al.*, 2022).

Psychological motivations play a key role in fostering community participation. Helping others who experience similar suffering can reduce survivor’s guilt while providing individuals with a renewed sense of meaning in life (Staub & Vollhardt, 2008). This empathy-driven helping encourages active support for affected communities. Likewise, religious beliefs and spiritual values shape positive attitudes toward helping behaviour (Al-Dahash *et al.*, 2022). In many cultural contexts, religious and philosophical traditions emphasize compassion, charity, and moral duty. For instance, in India, prosocial behaviour (voluntary actions intended to benefit others) is deeply embedded in principles such as *seva* (selfless service), *dharma* (righteous duty), and *karma* (moral causality), which promote compassion and service to others (Bansidhar, 2025). Natural disasters can strengthen spiritual engagement, leading individuals to participate in prayer or other spiritual activities that reinforce moral responsibility toward community support (Azhar *et al.*, 2022).

Prosocial behaviour during disasters is influenced by several psychological and situational drivers, including empathy, altruism, moral obligation, personal values, beliefs, mood, and emotions (Bansidhar, 2025; Dewangan *et al.*, 2025). Survivors often report sharing food, clothing, and emotional support, with many describing their motivation as altruistic (Staub & Vollhardt, 2008). Additionally, situational factors such as perceived risks and benefits can influence individuals’ willingness to help (Bansidhar, 2025). Together, these factors strengthen prosocial tendencies and enhance community participation in post-disaster crisis response.

Experiencing suffering itself can also stimulate helping behaviour. The concept of Altruism Born of Suffering suggests that individuals who endure hardship often reassess life’s meaning and become more compassionate, increasing behaviours such as donating money, donating blood, volunteering, and participating in rescue efforts (Xu *et al.*, 2024). Similarly, individuals who experience trauma often develop stronger prosocial attitudes and participate in short-term emergency volunteering (Xu *et al.*, 2024). In resilience literature, altruism and prosocial behaviour are also recognised as characteristics of resilient and socially competent individuals, sometimes contributing to the emergence of community leaders during crises (Charney, 2004). Finally, place attachment and emotional connections to communities further strengthen positive attitudes toward helping behaviour. Anthropological research shows that attachment to place can influence disaster-related behaviour (Al-Dahash *et al.*, 2022). Residents who feel emotionally

connected to their community often view themselves as direct stakeholders responsible for protecting community livelihoods during crises (Nian *et al.*, 2019). Community attachment, comprising emotional, cognitive, and behavioural dimensions, therefore, motivates participation in collective actions such as community support, volunteering, and local crisis response (Nian *et al.*, 2019).

2.1.2 Subjective Norm

Within the TPB, subjective norms refer to perceived social expectations and pressures that influence individuals' behaviour. In post-disaster contexts, social identity and collective expectations play a crucial role in shaping community participation in crisis response. Following disasters, attributes of social identity such as in-group solidarity and interdependency beliefs encourage collective actions that support recovery efforts (Stanculescu & Petruta, 2025). People react automatically to disaster trauma, which strengthens their sense of belonging to a social group or community (Al-Dahash *et al.*, 2022). This trauma response can act as a psychological trigger that promotes collective action through prosocial behaviour.

Social identity is closely associated with shared norms, values, interests, and emotions, which influence individuals' perceptions of risk and their behavioural responses during disasters (Al-Dahash *et al.*, 2022). Consequently, social norms and group values become key drivers of community participation in post-disaster crisis response. Similarly, ideologies and worldviews shaped by cultural group membership influence behavioural expectations within communities (Al-Dahash *et al.*, 2022), while religious beliefs often function as social norms guiding collective behaviour and moral obligations to help others (Bansidhar, 2025).

Cultural context further strengthens these influences. Behaviour during hazards is often embedded in cultural traditions and social values, rather than determined solely by the level of threat (Kulatunga, 2010). Certain societies inherently promote prosocial behaviour through collectivist orientations, familial and intergenerational bonds, community networks, reciprocity, and social obligations (Bansidhar, 2025). In countries such as India, prosocial behaviour is deeply rooted in cultural norms, religious values, ritual giving, and communal support practices (Bansidhar, 2025). Similarly, family characteristics and family and social expectations act as protective factors that enhance community resilience (Staub & Vollhardt, 2008). During the post-disaster phase, survivors often develop a sense of shared fate, strengthening social cohesion and collective action. This shared experience promotes expected mutual support, coordination of behaviour, and collective efficacy, enabling communities to self-organise during crises (Cvetković, 2023). In addition, post-traumatic growth can strengthen group cohesion, further encouraging collective participation in community-based disaster response (Xu *et al.*, 2024).

2.1.3 Perceived Behavioral Control

Within the Theory of Planned Behaviour, perceived behavioural control refers to individuals' perceptions of their capacity, resources, and ability to perform a behaviour. In post-disaster contexts, it reflects the extent to which individuals feel capable of contributing to community-based crisis response and recovery.

Individuals who have experienced disasters and possess relevant capabilities often take proactive roles in recovery processes. Residents with skills and experience may organise

community disaster reconstruction groups, establish community crisis response teams, and promote disaster awareness within communities (Danar & Pushpalal, 2014). These actions highlight the importance of leadership ability and perceived competence in facilitating organised community responses. Similarly, individuals are more likely to assist others when they perceive themselves as strong enough to shift attention beyond personal survival toward helping those in need, reflecting a belief in their ability to help (Staub & Vollhardt, 2008).

Resilience research also identifies personal resilience capacity as a factor that strengthens individuals’ confidence and preparedness for disaster response (Staub & Vollhardt, 2008). Prosocial behaviour is further supported by reciprocity, self-efficacy, and empowerment, which enhance individuals’ perceived control over their ability to contribute to community recovery (Bansidhar, 2025). Such perceptions of competence and empowerment encourage greater community participation in post-disaster crisis response. Strong communities also provide supportive environments that promote collective action and coping with uncertainty during crises (Grube & Storr 2018). When facing uncertainty, individuals often rely on familiar knowledge and past experiences to address immediate needs, frequently responding automatically without extensive deliberation (Dinger *et al.*, 2020). This reliance on existing knowledge and capabilities influences how effectively communities organise and respond to post-disaster challenges. Additionally, post-traumatic growth may strengthen individuals’ ability to support others, further enhancing participation in community-based recovery efforts (Xu *et al.*, 2024). . However, several barriers may also limit prosocial behaviour, including concerns for personal safety, lack of resources, restricted access to affected areas, emotional distress, time constraints, and previous negative experiences (Bansidhar, 2025).

In summary, the identified drivers influencing community participation are summarized in Table 1.

Table 1: Behavioural drivers influencing community participation

Variable	Identified behavioral drivers	References
Attitude toward the behavior	Personal attitudes and motivations; hazard knowledge and awareness; empathy and compassion; altruism and prosocial orientation; religious, ethical, and moral values; emotional responses and perceived personal benefits; place attachment and sense of responsibility.	(Al-Dahash et al., 2022), (Staub & Vollhardt, 2008), (Bansidhar, 2025), (Azhar et al., 2022), (Dewangan et al., 2025), (Staub & Vollhardt, 2008), (Xu et al., 2024), (Charney, 2004), (Nian et al., 2019)
Subjective norm	Social identity and group solidarity; socio-cultural, religious, and traditional norms; family and community networks; reciprocity and social obligations; family and social expectations; collective efficacy, behaviour coordination, and group cohesion.	(Stanculescu & Petruta, 2025), (Al-Dahash et al., 2022), (Bansidhar, 2025), (Kulatunga, 2010), (Staub & Vollhardt, 2008), (Cvetković, 2023), (Xu et al., 2024)
Perceived behavioral control	Previous experience and capability; leadership ability and self-efficacy; resilience and empowerment; ability to manage uncertainty and apply existing knowledge; resource and access	(Danar & Pushpalal, 2014), (Staub & Vollhardt, 2008), (Bansidhar, 2025), (Grube & Storr, 2018), (Dinger et al.,

Variable	Identified behavioral drivers	References
	constraints; emotional and time-related constraints.	2020), (Xu <i>et al.</i> , 2024) , (Bansidhar, 2025)

When examining these factors, it becomes evident that they are shaped by surrounding environmental, social, cultural, and economic contexts. As these conditions vary across regions and local settings, understanding the key drivers, their potential utilisation, and the main challenges and constraints within the local context is essential for optimising community participation in post-disaster crisis response.

3. RESEARCH METHODOLOGY

This research followed a systematic sequence of stages; each aligned with specific objectives. The process began with an extensive literature review to establish a theoretical foundation and develop a comprehensive understanding of the key behavioural drivers shaping community participation in post-disaster crisis response, as well as the challenges and constraints associated with implementing such participation. The second phase employed a case study approach to explore the key behavioural drivers (Yin, 2018), contributing to successful community participation in post-disaster response within the Sri Lankan context. Simultaneously, the study examined the main challenges and constraints related to implementing community participation initiatives during post-disaster recovery.

This study adopted an exploratory qualitative research design to enable an in-depth understanding of behavioural dynamics in a real-world post-disaster context. Accordingly, a single embedded case study design was adopted to investigate community-driven disaster response initiatives that emerged following Cyclone Ditwah in Sri Lanka. This approach enables an in-depth examination of behavioural drivers influencing community participation in a real-world context. The community kitchen initiative and the online rescue coordination platform were treated as embedded units within the broader case, enabling comparative insights while maintaining the contextual integrity of the post-disaster response environment. Primary data were collected through interviews with initiators and key role players, along with document review within the case study framework.

A purposive sampling technique was employed to select interview participants based on their direct involvement in post-disaster response activities and their ability to provide rich, experience-based insights relevant to the study objectives. In total, five key informants were selected, including initiators and active coordinators of the identified community-driven initiatives. The sample size is considered appropriate for this exploratory qualitative case study, where depth of insight and contextual understanding are prioritised over statistical generalisation. Data collection was guided by the principle of information richness rather than numerical representation, consistent with qualitative case study research practice (Yin, 2018).

The collected qualitative data were analysed using manual content analysis. Manual content analysis was selected due to the exploratory nature of the study and the relatively small dataset, allowing for an in-depth interpretation of contextual meanings and participant experiences while ensuring alignment with the study objectives.

Finally, the discussion section examines strategies to improve the effectiveness and efficiency of community participation in future disaster response initiatives.

4. DATA COLLECTION

4.1 CASE STUDY BACKGROUND: “DITWAH” CYCLONE

On 27th November 2025, Cyclone “Ditwah” triggered the most extensive flooding and landslide damage experienced in Sri Lanka in the past two decades, affecting approximately 2.3 million people across all 25 districts of the country (Disaster Management Centre, 2025). The total damage was estimated at US\$4.1 billion, equivalent to around 4 percent of the country’s 2024 GDP (World Bank, 2025). According to the Office of the Resident Coordinator (Disaster Management Centre, 2025), the Disaster Management Center reported that, as of 29 December 2025, the cyclone had resulted in 646 fatalities, with 173 people still missing. In addition, local authorities indicated that hundreds of houses were destroyed, key transport corridors were disrupted, and several thousand more became unsafe due to structural damage or landslide risks (International Organization for Migration, 2026).

Under these circumstances, government agencies faced significant challenges in managing post-disaster recovery independently. Consequently, community participation emerged as a critical support mechanism in responding to the crisis.

4.2 STAGE I: FINDINGS FROM DOCUMENT REVIEW

In response to the November 2025 Cyclone Ditwah floods in Sri Lanka, community kitchens and volunteer-driven initiatives were rapidly established to provide hot meals to thousands of displaced families, particularly in severely affected areas (Danasekara, 2025). What emerged during these early days was not a planned national programme, but rather a spontaneous movement of ordinary citizens responding to the urgent needs of others (Mohamed, 2025). Such grassroots initiatives illustrate how community members can quickly mobilise support through social obligations, compassion, and a sense of collective responsibility.

One notable example was the Wijerama Community Kitchen, which distributed more than one hundred thousand meals within a week and delivered dry food, clothing, and basic medicines to over 75 locations across the island (Sunday Observer, 2025). The initiative was organised into three main sections, including the preparation and distribution of cooked meals, receiving, managing, and distributing donated items, and handling records (Sunday Observer, 2025). These practices reflect the emergence of self-organized coordination, collective efficacy, and the effective use of local capabilities within community-driven disaster response.

Individual participation within the initiative reflected deeper emotional and social motivations. For instance, a volunteer who had lost family members in a landslide continued to work in the kitchen to support affected communities. Notably, assistance was provided without regard to colour, religion, ethnicity, or language, highlighting the strong sense of collective responsibility and social solidarity that emerged during the crisis. Similarly, many beneficiaries remained unaware of the identities of those preparing or sending the aid they received (Sunday Observer, 2025). This illustrates a quiet form of mutual trust and solidarity that often develops during disasters. In situations of extreme

uncertainty, such actions demonstrate how empathy, a sense of shared fate, social identity, compassion, and collective action can guide community responses and strengthen social cohesion.

In addition, there was a need for development communications following a natural disaster, and digital platforms have proven to be very useful for development communications following natural disasters like cyclones (Kapucu, 2012). After Ditwah Cyclone, digital platforms, including social media tools, assisted in shifting communication and developing early warning systems (Lokumannage, 2025). According to Lokumannage (2025), digital and social media platforms run after the ditwah cyclone focused on raising awareness, encouraging donations and volunteerism. The government agencies, disaster management bodies, non-governmental agencies, as well as social agencies, can be utilised these platforms to coordinate the rebuilding programs, as well as share the verified information (World Health Organization, 2020). They enhanced fund raising initiatives aimed at rebuilding houses and livelihoods (Lokumannage, 2025).

However, the document review also highlights certain challenges associated with community-led relief distribution, where disputes occurred among adults over donated goods (Mohamed, 2025). issues such as digital divides, disinformation, unverified information that may hamper the efforts and imbalances in access to technology mitigated the impact of the digital platform campaign, especially in the rural areas (Lokumannage, 2025). These situations illustrate the complex behavioural dynamics that may arise during disaster contexts and highlight the importance of managing resources, expectations, and coordination effectively within community-based response initiatives.

4.3 STAGE II: FINDINGS FROM INTERVIEWS WITH INITIATORS AND KEY ROLE PLAYERS

In this stage, five respondents were interviewed to understand the implementation process, community support, and challenges encountered in coordinating the community kitchen and online rescue operations. Three respondents (R1–R3) were key contributors to the Wijerama community kitchen, while two respondents (R4–R5) were Sri Lankan technology entrepreneurs who developed the digital platform *floodsupport.org* to support rescue coordination and relief efforts. Reflecting on the motivation behind the initiative, R1 stated, *“Disasters are not unfamiliar to us, yet the empathy and compassion within our communities often surpass the destruction they cause.”* This perspective reflects how prior disaster experiences can strengthen empathy and a sense of personal responsibility to support affected communities.

Several respondents emphasised the emotional and moral motivations behind their participation. R2 explained that *“In the end, the satisfaction of helping others and saving lives makes the fatigue fade away.”* Similarly, R3 noted that volunteers contributed in different ways, stating that *“Some volunteers joined after work, others took turns, and some even took leave to contribute.”* These responses demonstrate that participation was not driven by external incentives but by intrinsic motivational factors such as moral satisfaction and emotional reward. This suggests that in post-disaster contexts, attitude toward behaviour operates as an affective-moral construct rather than a purely rational cost-benefit evaluation. R2 further observed that people from different ethnic and religious backgrounds worked together without expecting recognition, highlighting how solidarity, a sense of shared fate, and shared humanitarian values can encourage cooperative behaviour during crises. This indicates that subjective norms in this context

were not limited to perceived social pressure, yet were embedded in collective identity and intergroup solidarity, where normative influence operates through shared humanitarian consciousness.

In some cases, individuals even redirected personal resources to support affected families. For instance, some parents reportedly used money originally planned for Christmas celebrations to purchase clothes for children affected by the disaster. These actions illustrate how personal attitudes, moral values, and social responsibility can influence community participation in disaster response. This behaviour reflects the transformation of normative beliefs into direct behavioural action under crisis conditions, where moral obligation overrides planned resource allocation. Additionally, one participant described their involvement as similar to conducting a “*dansal*,” indicating how religious traditions, beliefs, and cultural practices can also shape motivations for helping behaviour. This highlights the integration of cultural-religious norms into behavioural drivers, suggesting that subjective norms in the Sri Lankan context are strongly mediated by religiously grounded moral frameworks, which function as behavioural reinforcement mechanisms.

Beyond the kitchen operations, online platforms enabled wider coordination by allowing citizens to share updated information on damaged infrastructure, identify relief camps, and communicate urgent needs. Such digital exchanges helped volunteers coordinate donations, identify priority locations, and respond more efficiently to emerging needs. This demonstrates that perceived behavioural control was not only an individual-level perception but was significantly enhanced through digital infrastructure, which functioned as an enabling system that expanded individuals’ capacity to act.

R4, a key initiator, explained that at the operational level, requests submitted through the platform were verified by volunteers who contacted affected individuals to confirm their situation and identify the most urgent cases. However, R4 noted that the number of requests increased rapidly, creating operational challenges and requiring the recruitment of additional volunteers through online networks. According to R5, who played a key role in volunteer coordination, the rapid onboarding of new volunteers initially created difficulties because many were unfamiliar with the verification process and digital system. To address this challenge, organizers introduced hourly online training sessions and standardised communication scripts to ensure consistent interactions with affected individuals. This suggests that behavioural effectiveness in disaster response depends not only on willingness but also on procedural knowledge and operational literacy, expanding perceived behavioural control to include skill-based and institutional learning dimensions.

Another major challenge highlighted by R4 was prioritising rescue requests, as available rescue resources were limited, and not all cases could be addressed immediately. Volunteers were required to assess the urgency of requests and prioritise vulnerable groups such as pregnant women, elderly individuals, sick patients, and children. This highlights a critical constraint where resource scarcity introduces ethical decision-making pressures that influence behavioural execution. According to R5, the nature of this work also created emotional pressure for volunteers, who frequently handled distress calls from individuals seeking urgent help. Despite these challenges, confirmation messages indicating successful rescues played an important role in maintaining motivation and morale among volunteers.

5. DISCUSSION

Community disaster resilience and response have become important social priorities attracting increasing attention from researchers and policymakers across multiple sectors (Jehoshaphat & Oghenah, 2021). The Cyclone Ditwah case study illustrates how community participation, supported by both social networks and digital platforms, can significantly strengthen post-disaster response efforts. Understanding the psychological drivers that motivate individuals to assist others during disasters is essential for designing interventions that effectively mobilise local communities and ensure culturally appropriate and sustainable outcomes (Bansidhar, 2025). However, the evidence from this study suggests that these drivers are not purely psychological yet are structurally embedded within social, cultural, and technological systems. However, the findings reveal complex behavioural dynamics within community-led initiatives, including opportunistic behaviours and perceived behavioural control factors that may hinder the effectiveness of collective action. While positive behavioural drivers such as attitudes and subjective norms strongly encouraged participation in the Sri Lankan context, several challenges emerged, including limited resources, lack of experience or knowledge, restricted access to affected areas, volunteer fatigue, time constraints, and uncertainty during emergencies. These constraints demonstrate that perceived behavioural control is a key structurally sensitive TPB component in disaster contexts, acting as the primary mediator between intention and actual participation. Figure 2 illustrates the key behavioural drivers identified in Table 1 and their alignment with major post-disaster activities observed in this case study, while highlighting the associated constraints, challenges, and behavioural control factors that should be considered in strategy development.

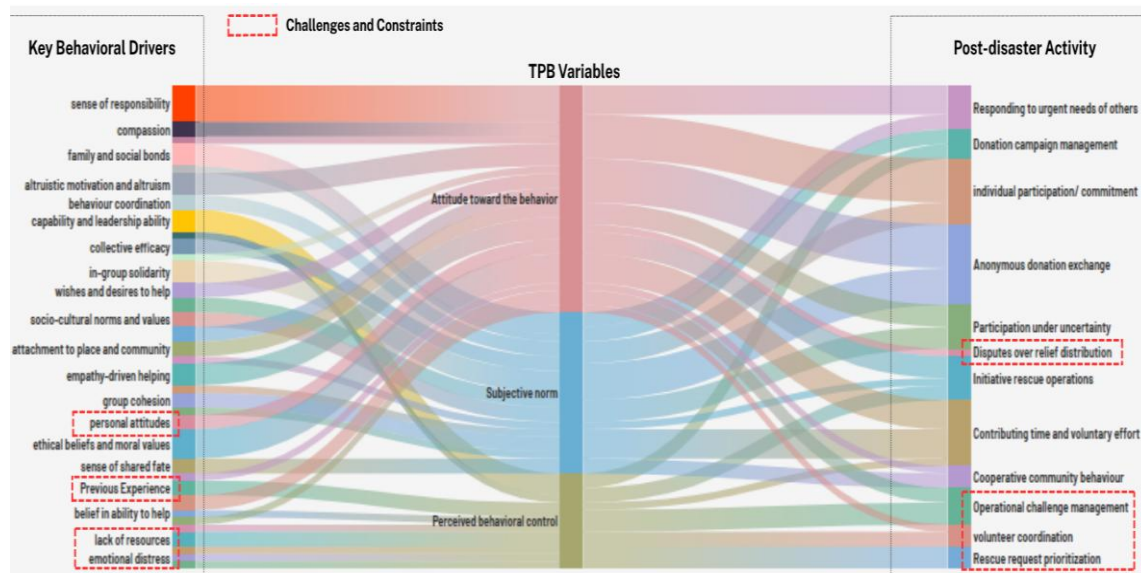


Figure 2: Key behavioral drivers and their alignment with post-disaster activities

Addressing these constraints requires context-sensitive, human-centred, and data-driven strategies that integrate community participation into decision-making processes. Importantly, the findings suggest that enhancing behavioural outcomes requires strengthening not only individual motivation yet institutional coordination capacity and digital infrastructure readiness. Notably, as online platform systems can support more effective crisis communication and contribute to the development of explicit knowledge

resources (Kaklauskas et al., 2009), their development may reduce rumours and misinformation during emergencies that often hinder response operations (Gu et al., 2021). In this study, digital platforms emerged as behavioural enablers that directly enhanced perceived behavioural control by reducing uncertainty and improving response coordination efficiency. In addition, programs that foster kindness, empathy, and the ability to understand others’ perspectives have been shown to increase prosocial behaviour among early adolescents while improving emotional well-being (Stanculescu & Petruta, 2025). Notwithstanding, the case study indicates that behavioural drivers influencing community participation may evolve over time during disaster response; therefore, authorities should implement context-sensitive strategies that mobilise community support at appropriate stages of recovery, including fundraising initiatives, volunteer mobilisation, and labour donation programmes.

Lastly, strengthening collaboration between authorities, institutions, and local communities can improve the effectiveness and sustainability of recovery initiatives and enhance resilience in disaster-affected areas (Ngulube, 2024). Although the post-disaster period represents a vulnerable stage for affected regions, it also provides opportunities for institutional learning and long-term development (Nian et al., 2019), and effective coordination with optimised community participation during this phase can support recovery while building stronger and more resilient communities. Overall, the study contributes to TPB literature by demonstrating that behavioural drivers in post-disaster contexts are dynamically activated, structurally constrained, and culturally embedded, thereby extending the explanatory boundaries of the theory in developing-country disaster settings.

6. CONCLUSIONS

Community participation engagement plays a vital role in post-disaster response and recovery, particularly in the Sri Lankan context, where strong social ties and collective values encourage voluntary support during crises. Drawing on the Theory of Planned Behaviour (TPB), this study identified attitudes, subjective norms, and perceived behavioural control as key drivers of community participation, while also highlighting several challenges that may affect its effectiveness. Understanding these factors is essential for optimising community involvement and informing future disaster management strategies. The study contributes to the disaster management literature by providing empirical insights into the behavioural drivers influencing community participation in a developing-country disaster context. This study is subject to certain limitations. The findings are based on a single case study and five semi-structured interviews; therefore, they should be interpreted within the context of the selected case rather than generalised to all disaster settings. Future research should investigate multiple disaster contexts and develop analytical models to better understand how behavioural drivers interact and evolve during different phases of post-disaster response and recovery.

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