



STRENGTHENING PSYCHOSOCIAL PREPAREDNESS IN DISASTER RESPONSE: EVIDENCE FROM THE SRI LANKA AIR FORCE A QUALITATIVE STUDY

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ABSTRACT

Psychological First Aid (PFA) is an internationally endorsed early intervention aimed at reducing acute distress and supporting functional coping among individuals affected by crises. The Sri Lanka Air Force (SLAF) serves as a primary responder to natural disasters; however, its personnel face considerable psychological strain due to repeated exposure to traumatic events. Despite global recognition of PFA as a foundational component of emergency response, its structured integration within the SLAF remains minimal. This study explored SLAF first responders' perceptions, experiences, and training needs related to PFA to identify contextual gaps and opportunities to strengthen psychosocial preparedness within disaster-response systems. A qualitative design was adopted, and in-depth semi-structured interviews were conducted with SLAF personnel representing diverse operational roles. Thematic analysis identified five themes: awareness and understanding of Psychological First Aid, experiential learning through disaster exposure, cultural and religious influences on emotional support, barriers to implementing Psychological First Aid, and recommendations for its effective integration into SLAF disaster-response operations. Findings indicate that responders experience significant emotional impact but lack access to structured psychosocial support or formal psychological preparedness mechanisms. Although awareness of PFA was limited, participants expressed strong readiness to receive training and recognized its importance in both personal resilience and mission performance. The study highlights the need for culturally adapted PFA training, institutional capacity building, and leadership-driven prioritization of mental health within the SLAF. Strengthening

psychosocial preparedness within disaster-response systems has broader implications for enhancing national disaster resilience and social stability in Sri Lanka.

Keywords: *disaster response, first responders, mental health, psychological first aid, Sri Lanka Air Force*

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1. Introduction

Natural and human-made disasters create substantial public-health challenges, with psychological consequences that frequently persist beyond physical recovery. Exposure to disasters has been consistently associated with increased levels of acute stress, anxiety, depression, and post-traumatic stress symptoms, particularly among first responders and affected communities (Beaglehole et al., 2018; Kumar et al., 2019). In low- and middle-income countries, where access to specialized mental-health services is limited, early psychosocial interventions are critical for reducing long-term psychological morbidity and supporting adaptive functioning following crises (World Health Organization [WHO], 2011; UNDRR, 2022).

Psychological First Aid (PFA) is a globally endorsed, evidence-informed approach that provides immediate emotional and practical support following traumatic events. The World Health Organization defines PFA as a humane, supportive, and practical intervention aimed at reducing initial distress and promoting adaptive functioning (WHO, 2011). International frameworks, including the Inter-Agency Standing Committee guidelines, recommend PFA as a core component of disaster response due to its emphasis on safety, calming, connectedness, self-efficacy, and hope (IASC, 2007; Hobfoll et al., 2007). Unlike psychotherapy or counselling, PFA can be delivered by trained non-specialists, making it particularly suitable for large-scale disaster contexts that require rapid, scalable responses (Brymer et al., 2006).

Despite global endorsement, the integration of PFA into institutional disaster-response frameworks remains inconsistent, especially within military organizations in the Global South (Dieltjens et al., 2014; Warbung et al., 2024). Much of the existing empirical evidence on PFA implementation originates from civilian or Western contexts, limiting understanding of how PFA can be adapted to hierarchical, culturally grounded military institutions (Evans et al., 2021). This gap is particularly relevant given the unique operational demands and organizational cultures of disaster responders.

Military forces play a central role in disaster response due to their rapid deployment capacity, logistical strength, and operational discipline (UNDRR, 2022). In Sri Lanka, the

Sri Lanka Air Force (SLAF) serves as a key first responder during floods, landslides, cyclones, pandemics, and other national emergencies, providing search and rescue operations, medical evacuation, and humanitarian logistics support (Sri Lanka Air Force [SLAF], 2024). SLAF personnel are frequently deployed to high-risk environments and are exposed to intense emotional stressors, including mass casualties, loss of life, and prolonged operational demands (Monaragala, 2019; Dayabandara et al., 2021).

Military first responders are frequently exposed to traumatic events and sustained operational demands during disaster deployments, conditions associated with increased psychological strain and burnout (Beaglehole et al., 2018; Kumar et al., 2019). Despite elevated risk, responders often underutilize formal mental-health services due to stigma, organizational culture, and concerns about professional consequences, particularly within the military context. In the absence of structured psychosocial support, responders may rely primarily on informal peer networks and culturally embedded coping practices. In addition to recurrent natural disasters, military personnel carry the psychological legacy of prolonged internal conflict, which has shaped institutional culture, coping norms, and attitudes toward mental health (Somasundaram & Sivayokan, 2013). These cultural and organizational factors may influence both help-seeking behaviours and the acceptance of formal psychosocial interventions.

Although military adaptations of Psychological First Aid have been implemented in several Western countries, their direct application to the Sri Lankan military context may be challenging. Differences in cultural values, religious beliefs, organizational structures, help-seeking behaviours, and available mental-health resources may influence how psychological distress is experienced and managed among military personnel. Furthermore, Sri Lanka's disaster-response environment and military operational realities differ from those of many Western nations where most military PFA research has been conducted. As a result, existing evidence cannot be assumed to be directly transferable to the Sri Lankan Air Force, highlighting the need for context-specific research to examine the relevance, feasibility, and potential adaptation of Psychological First Aid within the Sri Lankan military setting.

Accordingly, this study aims to explore the significance and feasibility of integrating Psychological First Aid (PFA) into the disaster-response framework of the Sri Lanka Air Force. Specifically, it examines SLAF personnel's awareness and understanding of PFA, their psychological experiences during disaster response, and perceived barriers and facilitators to its implementation. By generating context-specific qualitative evidence, the study seeks to inform the development of a culturally responsive and operationally feasible PFA framework to strengthen responder resilience and enhance the effectiveness of disaster-response operations in Sri Lanka. Military institutions play a critical role in national disaster management, and strengthening psychosocial preparedness within these

systems contributes not only to responder well-being but also to broader social stability and disaster resilience. However, the structured integration of PFA within military training frameworks remains underexplored.

The study was guided by the following objectives:

1. To explore SLAF personnel's views on the role and purpose of Psychological First Aid in disaster operations.
2. To examine personnel's understanding of the psychological and social needs of victims and responders during crises.
3. To assess cultural considerations influencing the practice of Psychological First Aid within SLAF disaster contexts.
4. To identify practical and organizational barriers to integrating Psychological First Aid into SLAF operations.
5. To explore strategies for incorporating Psychological First Aid into the SLAF disaster-management framework.

2. Literature Review

Psychological First Aid in Disaster Contexts

Psychological First Aid (PFA) is widely recognized as a foundational early psychosocial intervention for individuals affected by disasters and traumatic events. It is defined as a humane, supportive, and practical approach designed to reduce initial distress and promote adaptive functioning in the aftermath of crises (World Health Organization [WHO], 2011). International frameworks, including those of the WHO and the Inter-Agency Standing Committee (IASC), endorse PFA as a core component of disaster response, emphasizing safety, calming, connectedness, self-efficacy, and hope (IASC, 2007; Hobfoll et al., 2007).

Unlike clinical interventions such as counselling or psychotherapy, PFA does not involve diagnosis or treatment. Instead, it focuses on meeting immediate emotional and practical needs while facilitating access to social and professional support systems (Brymer et al., 2006; WHO, 2011). This non-intrusive and flexible design enables PFA to be delivered by trained non-specialists, making it particularly suitable for emergency settings where mental-health professionals are scarce (WHO, 2011).

Although PFA is widely endorsed, the empirical evidence supporting its long-term effectiveness remains mixed. Systematic reviews indicate that most PFA research relies on observational and post-event evaluations rather than controlled trials, limiting causal conclusions regarding outcomes (Bisson et al., 2010; Dieltjens et al., 2014). Nevertheless, PFA continues to be recommended as a best-practice early intervention due

to its ethical grounding, cultural adaptability, and alignment with trauma-informed principles (WHO, 2011; Hobfoll et al., 2007).

Psychological Impact of Disasters on Responders

Disasters exert substantial psychological effects not only on affected communities but also on first responders involved in rescue and relief operations. Exposure to mass casualties, destruction, and prolonged operational stress has been associated with increased levels of anxiety, depression, burnout, and post-traumatic stress disorder (PTSD) among responders (Beaglehole et al., 2018; Kumar et al., 2021). Research consistently demonstrates that responders experience higher psychological distress compared to non-exposed populations following disaster deployments (Beaglehole et al., 2018; Kumar et al., 2021).

Military personnel engaged in disaster response face additional stressors related to role expectations, operational demands, and exposure to human suffering. Studies indicate that repeated disaster deployments may lead to cumulative psychological burden, emotional exhaustion, and impaired functioning if psychosocial support is inadequate (Kumar et al., 2021; Ravan et al., 2024). Without early intervention, these effects may compromise both individual well-being and mission effectiveness.

SLAF personnel are routinely deployed in high-risk disaster environments, including flood response, humanitarian rescue, and emergency logistics operations (Sri Lanka Air Force [SLAF], 2024). Such deployments often involve exposure to distressing events, mass casualties, and prolonged operational stress. In recent years, military organizations have increasingly recognized the importance of integrating psychosocial support into disaster and operational response systems. Research from high-income countries suggests that PFA and Mental Health First Aid-based programmes improve awareness of psychological distress, enhance peer-support behaviours, and reduce stigma associated with mental health within military populations (Kitchener et al., 2017).

Military-specific adaptations of PFA have been developed to address hierarchical structures, confidentiality concerns, and cultural norms related to emotional control. For example, the Israeli Defense Forces' Six Cs model demonstrates how PFA principles can be operationalized within military culture while maintaining discipline and cohesion (Shalev et al., 2024). Similar initiatives within European military health services report improved psychological preparedness and resilience among personnel (Bourdon et al., 2024).

However, the majority of military PFA research originates from Western contexts. Dieltjens et al. (2014) caution that direct transfer of such models to non-Western or resource-limited settings may be ineffective without cultural and organizational adaptation. This gap is particularly evident in South Asian contexts, where institutional structures, belief systems, and coping practices differ substantially.

Mental Health Challenges in South Asian Military Contexts

South Asian military organizations operate within sociocultural environments characterized by strong hierarchies, collective values, and expectations of endurance and stoicism. These factors significantly shape attitudes toward psychological distress and help-seeking (Perera et al., 2004; Dayabandara et al., 2021). Studies conducted in South Asia report elevated levels of burnout, adjustment disorders, and anxiety among military personnel, often compounded by limited access to structured mental-health services (Hanwella et al., 2004; Islam et al., 2021). It has been reported that a significant prevalence of burnout among Sri Lankan military personnel highlights the need for early intervention strategies. Adjustment disorders and acute stress reactions are also commonly reported, particularly among personnel exposed to repeated operational stressors (Rajkumar & Krishnan, 2023).

The increasing involvement of South Asian militaries in disaster response, humanitarian assistance, and pandemic control has further intensified psychological strain (Islam et al., 2021). Despite this, early psychosocial interventions such as PFA remain poorly institutionalized, underscoring a critical gap between global recommendations and local practice.

The Sri Lanka Air Force and Disaster Response

The Sri Lanka Air Force (SLAF) plays a central role in national disaster management through search and rescue operations, medical evacuation, and humanitarian logistics (Sri Lanka Air Force [SLAF], 2024). However, research indicates that SLAF personnel are frequently exposed to psychological stressors during disaster operations, including witnessing loss of life and working under hazardous conditions (Monaragala, 2019; Dayabandara et al., 2021).

Although Sri Lanka has implemented various psychosocial initiatives following major crises such as the 2004 tsunami and the Easter Sunday attacks, these interventions have largely focused on civilian populations and lacked systematic evaluation (Asia Foundation, 2024). Military personnel have often been excluded from structured psychosocial training, resulting in reliance on informal coping strategies and cultural or religious practices. Emerging initiatives, such as hybrid PFA training programmes

delivered through A-PAD Sri Lanka, demonstrate growing awareness of the importance of psychosocial preparedness among responders (A-PAD Sri Lanka, 2023). However, these efforts remain non-institutionalized and inconsistent, with limited integration into formal SLAF training frameworks.

Despite strong international endorsement of Psychological First Aid, there is limited empirical research examining its integration within military organizations in the Global South. In Sri Lanka, no published studies have systematically explored SLAF personnel's perceptions, experiences, and training needs related to PFA, even though they are the preliminary responders during a crisis. The absence of context-specific evidence limits the development of culturally appropriate and operationally feasible psychosocial frameworks within disaster-response systems.

Although Psychological First Aid is widely recommended as an early psychosocial intervention, debate persists over the strength of the evidence supporting its effectiveness. While international organizations such as the World Health Organization and the Inter-Agency Standing Committee endorse PFA as a best-practice approach, systematic reviews have highlighted the limited availability of controlled studies evaluating its long-term outcomes (Deltjens et al., 2014). Furthermore, much of the existing evidence originates from Western civilian settings, raising questions regarding its transferability to military organizations operating within different cultural and institutional contexts. Military-specific adaptations have demonstrated promising outcomes in enhancing psychological preparedness and peer support; however, findings remain inconsistent across settings, and little evidence exists from South Asian military populations. Understanding how SLAF personnel perceive psychological distress, utilise coping strategies, and view the feasibility of PFA integration is therefore essential for designing culturally relevant and operationally feasible interventions. This study addresses this gap by providing qualitative insights into the experiences of SLAF disaster responders. It contributes context-specific evidence to inform policy, training, and practice within Sri Lanka's military disaster-management framework.

3. Methodology

This study adopted a qualitative descriptive research design to explore the perceptions, experiences, and feasibility of integrating Psychological First Aid (PFA) as a strategy to strengthen psychosocial preparedness within the Sri Lanka Air Force (SLAF) 's disaster-response operations. Qualitative descriptive research aims to provide a comprehensive summary of events in everyday language while remaining close to participants' experiences and meanings. Such designs present findings in a low-inference manner and are particularly useful for exploring practical issues within specific contexts (Sandelowski, 2000).

A qualitative approach was selected to capture the lived experiences, emotional responses, coping practices, and organizational influences associated with disaster response among military personnel. Such approaches are widely recommended in disaster mental-health and military research where contextual sensitivity and experiential depth are essential (Hanwella & de Silva, 2004; Bourdon et al., 2024).

Semi-structured interviews were used as the primary method of data collection, allowing flexibility to explore individual experiences while maintaining consistency across key areas relevant to the study objectives (Kallio et al., 2016).

The study was conducted at the Sri Lanka Air Force Disaster Management Training School (DMTS) located in Digana, Kandy. DMTS serves as the central training institution for SLAF personnel involved in disaster response, including flood relief, search and rescue operations, medical evacuation, and humanitarian assistance.

Data collection coincided with the first official disaster-management training course conducted at the newly relocated facility. Conducting the study within an active training environment enabled exploration of psychological preparedness and training needs in real-time operational contexts, consistent with recommendations for embedded disaster research (Inter-Agency Standing Committee [IASC], 2007).

The study population comprised active Sri Lanka Air Force personnel who were either enrolled in or instructing the disaster-management training course at DMTS. Purposive sampling was employed to recruit participants with direct disaster-response experience, ensuring relevance to the research objectives (Palinkas et al., 2015). A total of 20 participants were included in the study. The sample consisted of commissioned officers, disaster-management instructors, and other ranks, representing a range of service durations and operational responsibilities. Participants were aged between 18 and 45 years, allowing inclusion of both junior and senior perspectives. Sampling continued until thematic saturation was achieved, defined as the point at which no new themes or insights emerged from successive interviews (Guest et al., 2006). Participants were eligible for inclusion if they were active SLAF personnel involved in disaster-response operations or disaster-management training, fluent in Sinhala, and willing to provide written informed consent and participate in a recorded interview. While preference was given to personnel with direct disaster-response experience, a small number of participants were included based on their involvement in disaster-management training and preparedness activities. Personnel from other military branches and SLAF personnel without disaster-response training were excluded to maintain focus on the SLAF's institutional and operational context.

Data were collected over two days in July 2025 during scheduled training activities at DMTS. Semi-structured interviews were conducted in a private setting to ensure confidentiality and participant comfort. Interviews were conducted in Sinhala, based on participant preference, to enhance cultural and linguistic accuracy. Each interview lasted approximately 30–35 minutes and was audio-recorded with participants' informed consent. The semi-structured interview guide was informed by international Psychological First Aid frameworks and relevant military mental-health literature (Brymer et al., 2006; World Health Organization [WHO], 2011). Interview questions explored participants' awareness and understanding of Psychological First Aid, psychological experiences during disaster response, coping strategies and informal support mechanisms, cultural and religious influences on emotional support, perceptions of the adequacy of existing training, and organizational barriers and facilitators related to the integration of Psychological First Aid within SLAF disaster-response operations.

A trauma-informed interviewing approach was adopted throughout the data-collection process to minimize distress and promote psychological safety (Harris & Fallot, 2001). Participants were informed of their right to pause or withdraw at any stage, and grounding strategies were offered when necessary. No participant chose to discontinue participation.

A pilot study was conducted with three SLAF personnel to assess the clarity, sequencing, and contextual appropriateness of the interview guide. Feedback from the pilot resulted in minor revisions to question wording and flow, enhancing cultural sensitivity and feasibility. Pilot interview data were excluded from the final analysis in accordance with qualitative research best practices (Kim, 2011).

Data were analyzed using Braun and Clarke's (2006) six-phase thematic analysis, a widely accepted method for identifying, analyzing, and reporting patterns within qualitative data. Audio recordings were transcribed verbatim and reviewed repeatedly to ensure familiarization with the data.

Initial codes were generated manually by identifying meaningful segments related to psychological experiences, coping practices, cultural influences, training gaps, and organizational factors. Codes were then grouped into preliminary themes, which were reviewed and refined to ensure internal coherence and alignment with the study objectives. Final themes were clearly defined and named to reflect their conceptual meaning.

Manual analysis supported reflexivity and cultural sensitivity, which are essential when interpreting military and disaster-related narratives (Nowell et al., 2017). Observations made during the training programme were used to support contextual interpretation but

were not treated as separate data sources. Researcher positionality and reflexivity were considered throughout the study. The researcher is a former commissioned military officer and is currently functioning as a civilian researcher with training in psychology and counselling. This background provided valuable insight into military culture, disaster-response environments, and the experiences of uniformed personnel, facilitating contextual understanding during interviews. At the same time, the researcher remained aware that prior military experience could influence assumptions and interpretations.

The researcher held no command, supervisory, or evaluative authority over participants and had no prior personal or professional relationship with them. Given the hierarchical nature of military organizations, particular attention was paid to minimizing potential power dynamics during data collection. Participants were informed that their involvement was entirely voluntary, that their responses would remain confidential, and that participation would not affect their professional roles or standing within the organization. Reflexive notes were maintained throughout the research process to promote critical self-awareness and minimize the influence of researcher bias during data collection, analysis, and interpretation.

Ethical approval for the study was obtained from the Ethics Review Committee of the Open University of Sri Lanka (ERC Ref. No. 119/2025). Institutional permission was granted by the relevant SLAF authorities before data collection. All participants received an information sheet detailing the purpose, procedures, risks, and benefits of the study and provided written informed consent. Confidentiality was ensured through anonymization of transcripts and secure storage of audio files and documents. Ethical principles of autonomy, beneficence, non-maleficence, and justice guided the research process (World Medical Association, 2013). Following each interview, participants were offered brief psychoeducation on Psychological First Aid as an ethical supportive measure. This activity was conducted separately from the research process and did not form part of the study data.

4. Results

The study included 20 Sri Lanka Air Force (SLAF) personnel representing diverse ranks, operational roles, and service experience. Participants were aged 18–45 years, and all had direct involvement in disaster-response activities, including flood relief, search and rescue, medical evacuation, humanitarian assistance, fire incidents, road accidents, the Easter Sunday attacks, and COVID-19 operations. Most participants had direct disaster-response experience. Four participants had not yet been deployed to a disaster operation but were actively involved in disaster-management training. Their perspectives were retained because the study sought to explore both disaster-response experiences and preparedness for Psychological First Aid within the SLAF.

Participants demonstrated varied educational backgrounds and lengths of service, with the majority being non-commissioned officers and many having extensive operational experience. This diversity provided a balanced and relevant context for interpreting the qualitative findings related to Psychological First Aid and psychosocial support within SLAF disaster-response settings. Demographic and service-related characteristics are summarized in Table 1.

Table 1: Demographic Characteristics of Participants

Participant	Age Range	Service Period	Rank	Education Level	Events Participated
P1	26–35	1–5	Commissioned	A/L	Katunayake airport bomb attack
P2	36–45	16+	Non-commissioned	O/L	Road accidents, floods, lightning, fires
P3	36–45	16+	Non-commissioned	O/L	Flood, fire, village-level conflicts
P4	18–25	1–5	Commissioned	A/L	None
P5	36–45	16+	Non-commissioned	O/L	Fire, flood, drought, Easter attack, COVID-19
P6	36–45	16+	Non-commissioned	O/L	Aragalaya, Easter attack, COVID-19
P7	18–25	1–5	Commissioned	Graduate	COVID-19, flood
P8	26–35	11–15	Non-commissioned	O/L	None
P9	26–35	1–5	Non-commissioned	O/L	Flood
P10	36–45	16+	Non-comm.	O/L	Floods (Kalutara, CBO)
P11	36–45	16+	Non-commissioned	O/L	Meethotamulla garbage collapse
P12	36–45	16+	Non-commissioned	O/L	Floods, tree falls, and parapet wall collapse
P13	36–45	16+	Non-commissioned	O/L	Droughts, multiple floods
P14	36–45	16+	Non-commissioned	O/L	Floods (2 major events)
P15	36–45	16+	Non-commissioned	O/L	Floods (4 events)

P16	36–45	16+	Non-commissioned	O/L	Unlimited floods, house fires
P17	18–25	1–5	Commissioned	A/L	None
P18	36–45	16+	Non-commissioned	O/L	Floods, Easter attack
P19	36–45	16+	Non-commissioned	O/L	Easter attack, floods
P20	36–45	6–10	Non-commissioned	O/L	None

Note. Data are based on semi-structured interviews with SLAF trainees at the Disaster Management Training School, Digana.

Table 2 presents a summary of the themes identified through thematic analysis of the interview data. Five overarching themes emerged, reflecting participants’ awareness and understanding of Psychological First Aid, experiential learning through disaster exposure, cultural and religious influences on emotional support, organizational barriers to psychosocial care, and recommendations for integrating Psychological First Aid into SLAF disaster-management practices. These themes capture the core patterns across participants’ experiences and form the basis for the detailed thematic descriptions that follow.

These themes collectively illustrate the participants’ psychosocial perspectives, cultural sensitivities, and professional realities in responding to disaster events. The following subsections discuss each theme in detail, with verbatim excerpts from participants' interviews included to preserve authenticity and reflect their diverse voices.

Table 2: Alignment of Themes With Research Objectives

Theme	Description of Theme Focus	Objectives Addressed
Theme 1: Awareness and Understanding of PFA	Examines participants’ basic awareness, intuitive interpretations, and misconceptions regarding Psychological First Aid.	Objective 1: Explore SLAF personnel’s views on the role and purpose of PFA in disaster operations.

Theme 2: Experiential Learning Through Disaster Exposure	Highlights how responders learn psychological skills informally through real missions, peer guidance, and repeated exposure.	Objective 2: Examine personnel's understanding of the psychological and social needs of victims and responders during crises.
Theme 3: Cultural and Religious Influences	Demonstrates how cultural norms, compassion, communication style, and religious rituals shape emotional support.	Objective 3: Assess cultural considerations influencing the practice of PFA within SLAF disaster contexts.
Theme 4: Barriers and Challenges to Implementing PFA	Identifies operational, emotional, organizational, and cultural obstacles to providing PFA.	Objective 4: Identify practical and organizational barriers to integrating PFA in SLAF operations.
Theme 5: Recommendations for Effective Integration of PFA	Presents participants' suggestions for training, guidelines, debriefing, and culturally grounded approaches.	Objective 5: Develop strategies for incorporating PFA into SLAF's disaster-management framework.
Additional Emerging Insights (New Findings)	Unanticipated findings include time-pressure constraints, hidden emotional burden among responders, and the influence of religious rituals on operational actions.	Supports all objectives by revealing deeper experiences and highlighting gaps not captured in existing literature.

The analysis identified five key themes describing how Sri Lanka Air Force (SLAF) personnel perceive and provide psychological support during disaster response. Overall, participants demonstrated limited formal awareness of Psychological First Aid (PFA), with most support practices being intuitive and experience-based rather than grounded in structured training. While responders routinely engaged in calming, reassuring, and supportive interactions with distressed individuals, the majority reported no formal PFA training, and some confused PFA with physical first aid.

Participants primarily developed psychological awareness and coping skills through repeated disaster exposure and peer learning, particularly from senior officers, rather than

through formal instruction. Although this experiential learning increased confidence and emotional control, the lack of structured psychological debriefing contributed to accumulated emotional strain, including sleep disturbances and persistent distress.

Cultural and religious values strongly influenced emotional-support practices. Compassionate communication, respectful presence, familiar Sinhala expressions, and religious practices such as prayer or chanting were commonly used to comfort affected civilians. These culturally embedded approaches were perceived as effective in calming victims and fostering trust, reflecting natural alignment with PFA principles.

Significant organizational and operational barriers to PFA implementation were identified, including limited psychosocial training, heavy workload, time pressure during missions, physical exhaustion, and stigma surrounding mental health. Urgent operational demands often restricted opportunities to address emotional needs, resulting in a hidden psychological burden among responders.

Despite these challenges, participants expressed strong readiness for integrating PFA into SLAF disaster-management systems. Recommended strategies included structured PFA training, post-mission psychological debriefing, simple operational guidelines, culturally sensitive support methods, and access to trained mental-health personnel. Overall, the findings highlight both existing strengths and unmet psychosocial needs within SLAF disaster response, providing a foundation for the discussion and implications presented in the following section.

5. Discussion and Conclusion

This study explored the feasibility of integrating Psychological First Aid (PFA) into disaster-response operations of the Sri Lanka Air Force (SLAF) by examining personnel's experiences, perceptions, and contextual realities. The findings indicate that while SLAF responders routinely provide basic emotional support during disaster operations, their understanding of PFA is largely intuitive and shaped by personal experience rather than formal training. This highlights a clear gap between existing practices and structured psychosocial frameworks recommended in disaster mental-health literature.

Participants' reliance on experiential learning during repeated disaster deployments reflects resilience-building processes consistent with perspectives from Resilience Theory, where coping skills and emotional regulation develop through exposure to adversity (Bonanno, 2004). However, the absence of structured psychological debriefing and formal guidance resulted in accumulated emotional strain among responders, including unresolved distress and intrusive memories. These findings align with

international disaster mental-health principles that emphasize reflection, peer support, and early psychosocial intervention to protect responder well-being.

Cultural and religious values played a central role in shaping emotional-support practices. Compassionate communication, respectful presence, and accommodation of religious practices, such as pirith chanting, were widely perceived as effective in calming affected civilians. A novel contribution of this study is the observation that cultural and religious rituals sometimes influenced operational decision-making, with responders briefly adapting actions to respect victims' spiritual needs. This finding underscores the importance of culturally responsive PFA models and extends existing literature by demonstrating how cultural practices are embedded within real-time disaster operations in Sri Lanka.

Despite recognizing psychological needs, SLAF personnel faced significant organizational and operational barriers to PFA implementation. Heavy workload, time pressure, physical exhaustion, limited training, lack of psychological officers, and stigma surrounding mental health restricted consistent psychosocial support. These constraints often forced responders to prioritize urgent physical tasks over emotional care, creating a hidden psychological burden. Such findings are consistent with research in high-pressure emergency settings where psychological care is frequently subordinated to operational demands.

Importantly, participants expressed strong readiness and openness to integrating PFA into SLAF disaster-management systems. Suggested strategies included structured PFA training, culturally adapted guidelines, routine post-mission debriefing, and access to trained mental-health personnel during deployments. These recommendations align with international best practices and implementation frameworks that emphasize leadership support, contextual adaptation, and sustained institutional commitment (Fixsen et al., 2005).

While the findings support the feasibility of integrating Psychological First Aid (PFA) within SLAF disaster-response operations, several limitations should be acknowledged. First, the study was conducted within a single military institution and may not fully represent the experiences of personnel across other branches of the Sri Lankan armed forces. Second, the findings were based on participants' self-reported experiences and perceptions, which may be influenced by recall bias and organizational culture. Furthermore, the study explored perceived readiness and feasibility rather than evaluating the effectiveness of implemented PFA interventions. Future research should assess the outcomes of structured PFA training programmes and examine their impact on responder well-being, operational performance, and organizational resilience.

Despite these limitations, the study provides important insights into psychosocial preparedness within the Sri Lanka Air Force. The findings indicate that personnel frequently encounter emotionally demanding situations during disaster-response operations and often rely on informal coping mechanisms and peer support in the absence of structured psychosocial systems. Cultural and religious values were found to play a significant role in shaping emotional-support practices, highlighting the importance of culturally responsive approaches to Psychological First Aid.

Overall, the study, which is the first evidence-based insight into PFA within the SLAF context, demonstrates that integrating Psychological First Aid into SLAF disaster-management systems is both relevant and feasible. It highlights existing strengths such as compassion, cultural sensitivity, and resilience while identifying unmet psychosocial needs and systemic gaps. Strengthening structured training, post-mission debriefing processes, access to mental-health support, and leadership engagement may enhance responder well-being and operational effectiveness. The development of a culturally adapted PFA framework for military disaster responders has the potential to strengthen psychosocial preparedness, institutional resilience, and national disaster-response capacity in Sri Lanka.

References

- A-PAD Sri Lanka. (2023). *Psychological first aid: Guide for rescue personnel as first responders*. Asia-Pacific Alliance for Disaster Management – Sri Lanka. <https://apad.lk/wp-content/uploads/2023/10/A-PAD-Sri-Lanka-PFA-Guide.pdf>
- Asia Foundation. (2020). *Mental health and psychosocial support for first responders: What works and what does not*. The Asia Foundation.
- Beaglehole, B., Mulder, R. T., Frampton, C. M., Boden, J. M., Newton-Howes, G., & Bell, C. J. (2018). Psychological distress and psychiatric disorder after natural disasters: Systematic review and meta-analysis. *The British Journal of Psychiatry*, 213(6), 716–722. <https://doi.org/10.1192/bjp.2018.210>
- Bisson, J. I., Tavakoly, B., Witteveen, A. B., Ajdukovic, D., Jehel, L., Johansen, V. J., & Olf, M. (2010). TENTS guidelines: Development of post-disaster psychosocial care guidelines. *The British Journal of Psychiatry*, 196(1), 69–74. <https://doi.org/10.1192/bjp.bp.109.066266>
- Bonanno, G. A. (2004). Loss, trauma, and human resilience. *American Psychologist*, 59(1), 20–28.
- Bourdon, M., et al. (2024). Military mental health interventions in the French Military Health Service. *International Journal of Disaster Risk Reduction*, 97, 103587.

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Brymer, M., Jacobs, A., Layne, C., Pynoos, R., Ruzek, J., Steinberg, A., & Watson, P. (2006). *Psychological first aid: Field operations guide* (2nd ed.). National Child Traumatic Stress Network & National Center for PTSD.
- Dayabandara, M., Hanwella, R., & de Silva, V. (2021). Mental health of Sri Lankan military personnel: Emerging evidence and implications. *Sri Lanka Journal of Psychiatry*, 12(2), 3–9.
- Dieltjens, T., Moonens, I., Van Praet, K., De Buck, E., & Vandekerckhove, P. (2014). Psychological first aid: Lack of evidence to develop guidelines. *International Journal of Nursing Studies*, 51(7), 1081–1088.
- Evans, S., Papakonstantinou, G., & Rose, S. (2021). Mental health and wellbeing in UK military personnel. *BMJ Military Health*, 167(2), 97–104.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. National Implementation Research Network.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods*, 18(1), 59–82.
- Hanwella, R., de Silva, V., & Jayasekera, N. (2004). Psychiatric morbidity among Sri Lanka Air Force recruits. *Sri Lanka Journal of Psychiatry*, 1(1), 15–20.
- Harris, M., & Fallot, R. (2001). *Using trauma theory to design service systems*. Jossey-Bass.
- Hobfoll, S. E., Watson, P., Bell, C. C., Bryant, R. A., Brymer, M. J., Friedman, M. J., Friedman, M., Gersons, B. P. R., de Jong, J. T. V. M., Layne, C. M., Maguen, S., Neria, Y., Norwood, A. E., Pynoos, R. S., Reissman, D., Ruzek, J. I., Shalev, A. Y., Solomon, Z., Steinberg, A. M., & Ursano, R. J. (2007). Five essential elements of immediate and mid-term mass trauma intervention: Empirical evidence. *Psychiatry*, 70(4), 283–315. <https://doi.org/10.1521/psyc.2007.70.4.283>
- Inter-Agency Standing Committee. (2007). *Guidelines on mental health and psychosocial support in emergency settings*.
- Islam, M. M., Rahman, M., & Islam, M. (2021). Mental health among military personnel in South Asia. *Asian Journal of Psychiatry*, 57, 102110.
- Kallio, H., Pietilä, A.-M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72(12), 2954–2965.
- Kim, Y. (2011). The pilot study in qualitative inquiry. *Qualitative Social Research*, 12(3).
- Kumar, M. S., Raju, P., & Venkatesan, S. (2021). Psychological impact of disasters. *Frontiers in Psychiatry*, 12, 620834.
- Monaragala, R. M. M. (2019). Mental-health issues in the military. *Sri Lanka Journal of Psychiatry*, 10(1), 3–7.

- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet trustworthiness criteria. *International Journal of Qualitative Methods*, 16, 1–13.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Perera, H., Suveendran, T., & Mariestella, A. (2004). Psychiatric disorders in Sri Lanka Air Force personnel. *Military Medicine*, 169(5), 396–399.
- Rajkumar, R. P., & Krishnan, R. (2023). Post-traumatic stress and resilience in South Asia. *Asian Journal of Psychiatry*, 79, 103133.
- Sandelowski, M. (2000). Whatever happened to qualitative description? *Research in Nursing & Health*, 23(4), 334–340.
- Shalev, A., et al. (2024). The Six Cs model of early trauma intervention. *European Journal of Psychotraumatology*, 15(1).
- Somasundaram, D., & Sivayokan, S. (2013). Rebuilding community resilience in Sri Lanka. *International Journal of Mental Health Systems*, 7(3), 1–15.
- Sri Lanka Air Force. (2024). *Official website*. <https://www.airforce.lk>
- United Nations Office for Disaster Risk Reduction. (2022). *Global assessment report on disaster risk reduction 2022*.
- Warbung, B., Kusuma, K., Wahyudi, B., & Widodo, P. (2024). Opportunities and challenges in implementing PFA. *International Journal of Humanities, Education and Social Sciences*, 4(1), 1–15.
- World Health Organization. (2011). *Psychological first aid: Guide for field workers*. WHO.
- World Medical Association. (2013). *Declaration of Helsinki: Ethical principles for medical research involving human subjects*.