

Assessment of Occupational Stress, Support Systems and Coping Strategies among APF Disaster Rescuers

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DOI: <https://doi.org/10.3126/japfcsc.v8i1.77606>

Article History:

Received: 20 January 2025

Accepted: 4 March 2025

Published: 20 April 2025

Keywords:

APF, Nepal, disaster rescuers, occupational stress, stress management, support systems

To cite this article:

Shrestha, Y. M. & Shrestha, R. (2025). Assessment of occupational stress, support systems and coping strategies among APF disaster rescuers. *Journal of APF Command and Staff College*, 8(1), 173-190. <https://doi.org/10.3126/japfcsc.v8i1.77606>

To link to this article:

<https://doi.org/10.3126/japfcsc.v8i1.77606>

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Abstract

Occupational stress is a critical concern for disaster responders due to the high-risk and unpredictable nature of their duties. This study investigates occupational stress, support systems, and coping strategies among Armed Police Force (APF), Nepal disaster rescuers, with a focus on identifying key stressors and proposing interventions. A structured questionnaire was administered to 89 APF personnel selected randomly across multiple disaster response units. Descriptive and inferential statistical analyses were used to assess the impact of demographic factors on various stress related constructs and coping and support systems. Findings indicate that while institutional support and coping strategies effectively mitigate stress, longer service duration and frequent deployments lead to cumulative psychological strain. The study highlights the need for continuous monitoring, structured mental health interventions, and specialized training to address the long-term effects of occupational stress. Beyond traditional stress management programs, the study stresses a need for innovative interventions, such as technology-based solutions.

Introduction

According to Hurrell and Aristeguieta (2006), occupational stress refers to "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker" (p. 382). Occupational stress is one of the most significant problems for employees of various professions around the world (Maksymenko et al., 2021).

Simply Occupational stress reflects a condition of mental, emotional, and physical drain felt when employees perceive capabilities and resources are not enough to meet their current job demands (Akinboye & Adeyemo, 2002). Occupational stress has been identified as one of the leading health problems adversely affecting employees' performance in many organizations in both developed and developing countries (Quick & Henderson, 2016). Occupational stressors exist in every organization, though their degree may vary from one individual and occupation to another respectively (Cooper, 2005). Some stressors are common to all occupations, whereas some are unique to specific occupations (Sharma, 2015).

Security work is the most stressful job, and security officers suffer more burnout and illnesses than other employees do (Russell et al., 2014). Although stress affects all organizations, it affects security forces more because of the critical environment in which they operate, for instance, rigid hierarchy, heightened competition and the ever-present possibility of changes occurring against the individual's wishes (Grant, 2016). Research from around the world has consistently shown that security personnel, including police and military forces, experience higher levels of occupational stress compared to civilian professions (Attridge, 2012). This stress is often linked to the demanding nature of their work, which requires them to be physically fit, mentally resilient, and ready to respond to crises at any given moment. The APF, Nepal, established in 2001, fulfills diverse responsibilities, including maintaining internal security, securing borders, managing riots, and supporting disaster response efforts. APF, Nepal plays an important role to execute the decision made by the government to maintain peace and security being one of the security organizations to implement rule of law (Aryal, 2022). Since the establishment of APF, Nepal it has been involving in the field of disaster management. The Ministry of Home Affairs designated APF, Nepal as the key security entity for disaster management, leading to the establishment of the APF, Nepal Disaster Management Training School in Kurintar, Chitwan in 2011 (Shahi, 2024). In security forces like the APF, Nepal occupational stress is a prevalent issue due to the constant exposure to dangerous situations, long working hours, and the need to maintain high levels of alertness at all times.

Rescuers frequently encounter significant challenges that can contribute to occupational stress and have detrimental effects on their health and wellbeing as stress represents a significant risk factor for mental disorders (Teleanu et al., 2022). In addition, the chaotic and unpredictable nature of disasters means that rescuers must make quick decisions under pressure, further contributing to their stress levels (Berridge et al., 1997). Studies indicate that repeated exposure to traumatic events heightens the risk of developing Post-Traumatic Stress Disorder (PTSD), anxiety, and depression among rescue workers (Highley-Marchington & Cooper, 1998). Rescuers' well-being is not only crucial for the individuals themselves but also for the effective delivery of emergency services and the overall safety of the community (Faria et al., 2024). For APF, Nepal disaster rescuers, the level of occupational stress is exacerbated by the unpredictability and severity of disaster scenarios. These personnel often have to work in hazardous conditions, such as collapsing buildings, swift water currents, or areas affected by chemical spills. Furthermore, they are exposed to traumatic scenes, such as rescuing injured individuals or recovering bodies, which can take a toll on their mental health over time (Cooper & Sadri, 1991). The combination of physical fatigue, emotional exhaustion, and the pressure to perform under high stakes makes disaster rescue operations particularly stressful for security forces like the APF, Nepal. Understanding and addressing this occupational stress is vital for maintaining the mental and physical well-being of APF personnel and ensuring effective disaster response operations but less quantitative studies are done related to this prominent issue.

Addressing occupational stress, especially in high-risk professions like disaster rescue, has become a priority for many organizations worldwide (Surya et al., 2017). Organizations are now implementing a range of stress management programs to mitigate the effects of occupational stress on their personnel. One widely adopted solution is the Employee Assistance Program (EAP), which provides counseling and support services to employees dealing with stress (Kirk, & Brown, 2003). Studies have indicated that EAP can significantly reduce absenteeism and improve job satisfaction among security and rescue personnel (Attridge, 2012).

In recent years, disaster response agencies have also started incorporating stress resilience training into their programs. These training focuses on preparing personnel mentally and emotionally for the challenges they have face in disaster situations (Brooks et al., 2016). Techniques such as mindfulness, stress inoculation training, and cognitive-behavioral therapy have been used to help rescuers develop coping mechanisms that can reduce the impact of stress during rescue operations (Highley-Marchington & Cooper,

1998). The APF, Nepal could benefit from adopting similar programs to managed occupational stress faced by its disaster rescue personnel.

Technological advances have also provided new tools for managing occupational stress in disaster rescuers (Mao et al., 2018). Wearable technology that monitors physiological indicators of stress, such as heart rate and cortisol levels, can be used to assess stress levels in real time (Hickey et al., 2021). This allows supervisors to intervene early if personnel are showing signs of extreme stress or fatigue (Attridge, 2012). Furthermore, Virtual Reality (VR) simulations are increasingly being used in disaster training programs to expose personnel to high-stress environments in a controlled setting, these simulations help rescuers build psychological resilience before they are deployed to actual disaster sites (Finseth et al., 2025).

Review of Literature

Alghamdi, Hunt, and Thomas (2015) stated that firefighters are exposed to many traumatic events and the psychological costs of this exposure increase the risk of Post-Traumatic Stress disorder (PTSD), depression and anxiety. Their study examined the effectiveness of Narrative Exposure Therapy (NET) as a short-term treatment for reducing PTSD symptoms among Saudi firefighters. A randomized waiting-list control study was conducted with 34 traumatized firefighters, who were randomly allocated to NET or Waiting-list Control (WLC). The NET group received four therapy sessions of 60-90 minutes over a three-week period; those in the WLC condition received the same sessions after a three-week waiting period. Participants in both groups were assessed at baseline, immediately post-intervention, and at 3 and 6 month follow ups. NET led to significant reductions in PTSD symptoms, anxiety and depression compared with WLC. After the WLC group received treatment, it showed the same improvements as the NET group. This occurred immediately post-treatment in both groups but was not sustained at 3 and 6 month follow ups. Coping strategies and social support led to significant changes only in follow up times. NET was effective in reducing PTSD symptoms in traumatized Saudi firefighters. This finding could be helpful in the management of PTSD among people who work as first responders such as firefighters, police officers and emergency medical personal, as well as security officers.

Ragesh et al. (2017) stated that occupational stress among Indian police personnel is a critical concern due to their exposure to high-risk situations, irregular work schedules, and intense job demands. The study highlights that operational stress results from policing tasks, while organizational stress stems from poor management, bureaucratic inefficiencies, and inadequate resources. Younger officers, lower-ranking personnel, and female police officers

report higher stress levels, with common health consequences including hypertension, diabetes, anxiety, and depression. Substance abuse is frequently observed as a coping mechanism, indicating a need for better mental health support within law enforcement. To mitigate stress, structured interventions such as periodic health checkups, mental health counseling, and improved working conditions are necessary for enhancing officers' overall well-being and job efficiency.

Keerthirathne, Rathnayake, and Abeywardena (2020) investigated the relationship between occupational stress and blood pressure among police officers in the Kandy region of Sri Lanka. Their study found that higher levels of occupational stress were significantly associated with increased systolic and diastolic blood pressure, particularly among female and lower-rank officers. Police officers in Kandy regional area are suffering from moderate occupational stress level. There was a mild significant relationship in between occupational stress and blood pressure in this sample. As recommendation, necessary action should be implemented to reduce stress level and to introduce positive coping styles to improve mental health and physical health of highly stressful police officers. Assessing the mental and physical health condition of police officers should be done periodically to maintain the quality of health of the employees.

Galanis, Fragkou, and Katsoulas (2021) stated that stress is common among police personnel leading to several negative consequences. They did a systematic literature review to identify risk factors for stress among police officers. Stress risk factors were summarized in the following categories: demographic characteristics; job characteristics; lifestyle factors; negative coping strategies and negative personality traits. They identified stress risk factors is the first step to create and adopt the appropriate interventions to decrease stress among police personnel. The early identification of police officers at higher risk and the appropriate screening for mental health disorders is crucial to prevent disease and promote quality of life.

Ganachari (2021) mentioned that police personnel experience high levels of occupational stress due to the nature of their job, which includes long working hours, exposure to traumatic events, and public safety responsibilities. This stress is categorized into operational stress, stemming from direct job duties, and organizational stress, which arises from workplace bureaucracy, staff shortages, and leadership issues. Studies show that younger officers, lower-ranking personnel, and female police officers face higher levels of stress due to direct engagement in law enforcement and societal role expectations. Stress-related health issues such as hypertension, anxiety, depression, and substance abuse

are commonly reported among police personnel. Addressing these challenges requires effective interventions such as psychological counseling, stress management training, and organizational reforms to enhance well-being and job performance.

Bhattarai et al. (2021) conducted a qualitative study to explore the occupational challenges faced by urban firefighters in Kathmandu Valley, Nepal. Through in-depth interviews with 15 active firefighters and station in-charges, the study identified several stress-inducing factors, including family separations, cumbersome Personal Protective Equipment (PPE), insufficient personnel, inadequate income, and a lack of health support programs at their stations. Additional stressors reported were frequent false alarms and unmanaged urban traffic, which hinder timely responses to emergencies. The study also highlighted the absence of standard operating guidelines and programs addressing physical fitness and mental well-being, essential components for the firefighting profession. These findings underscore the urgent need for concerned authorities must prioritize the needs of urban fire station and firefighters to timely respond increasing fire accident risks and establish occupational well-being among firefighters.

Khattak, Amin, and Mustafa (2022) explored the relationship between self-esteem and occupational stress among professional rescuers in Pakistan. Their findings indicated a strong negative correlation between self-esteem and occupational stress, suggesting that enhancing self-esteem through training programs could mitigate stress levels.

Adhikari (2022) identified multiple psychological and organizational factors contributing to occupational stress among Nepali employees. A study involving 963 participants found that job satisfaction, life satisfaction, and personality traits significantly influenced work-related stress. Neuroticism was a common predictor of stress among healthcare, education, and security personnel, while extraversion was associated with reduced stress in medical professionals. Teachers experienced work stress due to openness, whereas security personnel reported high stress levels due to poor management and lack of psychological support. The findings suggest that enhancing job and life satisfaction can help mitigate work-related stress. Organizational interventions, such as mental health programs and supportive work environments, are crucial in addressing occupational stress in high-risk professions.

Gwachha (2023) examined the impact of perceived occupational stress on the well-being of Nepal Police officials. Utilizing a structured questionnaire, data were collected from various ranks within the Kathmandu Valley police force. The analysis, which included descriptive statistics, correlation, and hierarchical regression, revealed a

significant negative effect of occupational stress on individual well-being. These findings underscore the necessity for organizations, management, and employees to prioritize stress management strategies to enhance both personal well-being and organizational efficiency.

Yadav et al. (2023) explored on work and environment-related stressors among traffic police officers in Kathmandu Valley, Nepal. Through face-to-face interviews with 15 officers, the study identified five primary themes: workload, work-life balance, basic amenities, work environment and occupational health problems, and potential solutions. The majority of participants reported significant stress due to heavy workloads and hazardous working conditions, adversely affecting their job performance and mental well-being. The study emphasizes the need for improved working conditions to alleviate both physical and mental burdens on traffic police officers. It calls for policymakers, organizational leaders, and stakeholders to prioritize occupational health and safety, as well as mental well-being, for these essential public safety personnel.

Shrestha (2024) examined occupational stress and job satisfaction among traffic police personnel in Kathmandu Valley. Utilizing a descriptive survey design, the study sampled 150 traffic police officers through purposive and convenience sampling methods. Data analysis, conducted using Janovi version 2.3.28, revealed that most respondents experience moderate to high levels of occupational stress and average job satisfaction. The study found no significant impact of relationship status on occupational stress or job satisfaction, nor a significant correlation between the two variables.

Saheem, Ayub, and Mubeen (2024) found that rescue workers, including firefighters, paramedics, and emergency responders, face high levels of occupational stress due to traumatic events, long hours, and critical decision-making pressures. Their study examined the relationship between occupational stress, social support, and quality of life among rescue workers. The findings showed that occupational stress was positively associated with burnout and secondary traumatic stress. Social support played a crucial role in reducing the negative effects of occupational stress and improving quality of life. Compassion satisfaction was positively linked to social support, while burnout and secondary traumatic stress were negatively related. The study emphasized the need for strong social support systems to enhance the well-being of rescue workers.

Faria et al. (2024) stated that occupational stress affects various professions, including emergency professionals such as paramedics/pre-hospital emergency technicians, firefighters, nurses, and police officers. All these workers face demanding, unpredictable, and potentially traumatic events, being exposed to high stress levels. Understanding the

organizational factors contributing to occupational stress and its consequences on health is crucial for developing effective interventions, using evidence-based strategies that mitigate stress and promote well-being. Through a systematic review, their study aims to identify the contributions and consequences of organizational factors in the occupational stress of rescue professionals, having identified 32 relevant studies using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol. Results revealed the impact of culture and the lack of organizational support, as well leadership issues, poor communication, high workload, exposure to critical incidents/violence, and insufficient human/material resources. These factors often interacted with and compounded one another, intensifying stress, and other psychological indicators, such as burnout. Most of the participants reported high levels of stress and/or psychological distress, underscoring the importance of fostering healthy working environments. Such environments are crucial for protecting the mental and physical health of these professionals, enabling them to perform their duties effectively.

Gurung, Karki, and Khadka (2024) stated that rapid economic development and organizational changes in Nepal have contributed to increased occupational stress among employees across various sectors, adversely affecting mental and physical health, reducing productivity, and increasing turnover. Their research involved a systematic review of peer-reviewed literature published between 2015 and 2024 identified key workplace stressors, including excessive workloads, organizational culture, and socio-cultural expectations. Common stress management strategies, such as physical exercise, mindfulness practices, and supportive organizational environments, have been documented; however, their effectiveness is often hindered by organizational constraints and inadequate support systems. Research highlights the urgent need for organizations in Nepal to integrate comprehensive stress management strategies into workplace policies by fostering a positive work culture, providing adequate resources, and implementing evidence-based interventions.

While extensive research exists on occupational stress in different fields, there is a gap in studies specifically focusing on occupational stress on rescuer of APF, Nepal. This study aims to address this gap by investigating the occupational stress on rescuer of APF, Nepal.

Research Methodology

The study is based on primary data collected from the APF staff trained and involved in Disaster Management (DM) and rescue operations. The inclusion criteria of respondents

were that they must have at least one time involved in rescue operation. The proportion of APF staff who have taken rescue and disaster management training is 0.074, as total number of staff of APF is 37054 and those taking DM training is 2770 (K.C., 2022), using formula of Cochran (1977) with 95% confidence interval (CI) and margin of error 0.06, the minimum size to be sampled is 73, hence total sample collected were 89. APF, Nepal Disaster Management Training School, Kurintar (55), Disaster Management Base Adamghat, Dhading (17) and APF, Nepal No.20 Battalion H.Q (Disaster Rescue) Kathmandu, Sinamangal (17) were the field study where number in braces indicate respondents selected from 3 areas proportional to total staffs in respective places.

A stratified random sampling technique was used to ensure representation from different APF units engaged in disaster response. The selected sample size balanced representation and feasibility. Data was collected through printed questionnaires physically distributed to respondents. The structured questionnaire covered demographic details, occupational stress factors such as workload, emotional strain, resource availability, leadership support, and stress management. Enumerators, apart from one researcher, were trained to ensure consistency in administering the questionnaire and understanding the survey process. Developed with reference to Cohen and Williamson (1988) and Cooper and Marshall (1976), it maintained validity and reliability, featuring Likert scale items (1-Strongly Disagree to 5-Strongly Agree) and open-ended questions for qualitative insights. While demographic details were contextualized, the remaining sections remained unchanged. The questionnaire was translated into Nepali for ease of administration.

The selection process started with a random spin-pen method, followed by systematic sampling without replacement. The sampling interval varied by site, ensuring proportional representation based on the total number of disaster management staff at each location. The mean was used to calculate aggregate scores for each section, and descriptive statistics were applied to analyze these averages. The impact of demographic variables on stress-related scores was assessed using an independent sample t-test, with significance values presented in the corresponding tables.

Findings and Discussion

The majority of respondents were male (91%), most of the respondents have education certificate of + 2 (56.2%), constable (62.9%) was the modal Rank of the respondents as shown in table 1.

Table 1*Demographic Information of Respondents.*

Gender		
Details	Frequency	Percent
Male	81	91.0
Female	8	9.0
Education		
SEE/SLC	30	33.7
12/Certificate Level	50	56.2
Bachelor	5	5.6
Master	4	4.5
Rank		
Constable	56	62.9
Assistant Head Constable (AHC)	11	12.4
Head Constable (HC)	9	10.1
Senior Head Constable (SHC)	1	1.1
Assistant Sub Inspector (ASI)	5	5.6
Sub Inspector (SI)	1	1.1
Inspector	4	4.5
Deputy Superintendent (DSP)	2	2.2

Source: Field survey (2025)

Average age of respondents was 30 years, for 8 female respondents, it was 26 years, slight below than male (30.6 years). On average, male respondents are found to have served 10.28 years, high than 6.13 years for female. Same trend observed on years of experiences on disaster rescue operations. Males have 4 years of more experience than average female's 2.63 years of experiences.

Status of Workload and Operational stress (WO), Emotional and Psychological Stress (EP), Support and Resources Score (SR), Coping Strategy Score (CS) and Overall Impact of Occupational Stress (OIO) have been assessed which is shown in table 2. The Questionnaire with Likert type of Questions were worded such that High value of WO, EP, OIO indicating high level of Stress among respondents. Similarly, High value of SR and CS indicates they will be less vulnerable to impact of Stress if have any.

For above all constructs, 3 is neutral value. Having an average score more than 3 for WO, EP and OIO relate to participant having higher level of Stress and vice versa.

Similarly, having an average value more than 3 for SR and CS good things lessening Stress among respondents.

Table 2

Status of Constructs with 95% Confidence Interval

		95% Confidence Interval		
Constructs	Mean	Lower	Upper	p-value
Workload and Operational Stress Score	2.93	2.79	3.07	0.32
Emotional and Psychological Stress	2.84	2.65	3.03	0.09
Support and Resources	3.70	3.54	3.84	0.00
Coping Strategies	4.02	3.88	4.15	0.00
Overall Impact of Occupational Stress	2.59	2.39	2.80	0.00

Note: Confidence Interval (CI) was produced using bootstrapping with resampling 10000 times.

Source: Field survey (2025)

Average scores for workload and operational, emotional and psychological were below 3, indicating respondents on average experiencing less than neutral value 3. Same pattern unraveled for overall impact of occupational stress which can be taken as there is no serious stress level among the staff of APF, Nepal involved in rescue and disaster management under survey. When compared these average values with neutral values, however, showed significant for overall impact of occupational stress only at 5% level of significance as shown in table 2.

Both support and resources and coping strategies average scores are above 3 (p-value=0.000 for both) inferring respondents perceived they are getting more than neutral value support and resources and they have good strategies for coping with stress level.

(Morren et al., 2005) collecting data from firefighters found that (8.5 to 47.9% of the respondent required psychological counselling. Similar result is reported by (Huizink et al., 2006) in which respondent as police officers involved in Hurricane Katrina of 2005, 14% of rescuers needed psychological support.

Impact of Major Demographic Variables on Five Constructs

Five demographic covariates gender, education, age, years of service in disaster rescue and number of rescue operations involved have been undertaken to assess their impact on stress, support and resources and coping strategy related constructs.

No significant influence of gender seen on all five constructs though the higher mean difference observed for overall impact of occupational stress as shown in table 3. Coping strategy score for both male and female is conspicuously higher among all others.

Table 3

Average of Constructs under Study Across Gender of Respondents

Gender of Respondent	Male	Female	p-value
Workload and Operational Stress Score	2.91	3.06	0.53
Emotional and Psychological Stress	2.83	2.96	0.66
Support and Resources	3.70	3.65	0.83
Overall Impact of Occupational Stress	2.55	3.08	0.12
Coping Strategies	4.02	4	0.91

Source: Field survey (2025)

Similar non-significant results obtained for covariate education. Stark difference on average score of support and resources reported across respondents with +2 and master level. Emotional and psychological stress among all level of education remain almost similar shown in table 4.

Table 4

Average of Constructs under Study Across Education of Respondents

EDUCATION	SEE/ SLC	12/ Certificate Level	Bachelor	Master	Total	p-value
Workload and Operational Stress Score	2.99	2.90	2.75	2.94	2.92	0.87
Emotional and Psychological Stress	2.86	2.87	2.63	2.63	2.84	0.91
Support and Resources	3.63	3.80	3.80	3.06	3.71	0.20
Overall Impact of Occupational Stress	2.56	2.56	3.20	2.67	2.60	0.53
Coping Strategies	4.03	3.99	4.20	4.13	4.02	0.90

Source: Field survey (2025)

The age of respondents, workload and operational stress score is higher for age less than 25 inferring this age group feel higher level of stress than other age groups. Interestingly, it is noticed that respondent of age more than 40 have higher levels emotional and psychological stress despite same age group has higher coping strategies scores. But this statement is corroborated by the fact that this 40+ age group perceived least support and resources scores, indicating despite feeling to have good coping strategy, they are vulnerable to emotional and psychological stress arguably due to they expect more support and resources. Regarding support and resources scores, it is in negative correlation with age, i.e. increased age have less scores on this construct. The detail is shown in table 5.

Table 5

Average of Constructs under Study Across Age Interval of Respondents

Age Interval of Respondents	Less than 25	25-30	30-35	35-40	More than 40	p-value
Workload and Operational Stress Score	3.01	2.92	2.94	2.83	2.75	0.92
Emotional and Psychological Stress	2.98	2.72	2.67	2.97	3.58	0.35
Support and Resources	3.93	3.81	3.56	3.48	3.31	0.16
Overall Impact of Occupational Stress	2.88	2.42	2.41	2.78	2.58	0.36
Coping Strategies	4.07	3.98	4.10	3.87	4.25	0.78

Source: Field survey (2025)

Years of service in disaster rescue should play stern role in stress level of rescuer. While producing mean across years of service in disaster and rescue, it has been observed that workload and operational and emotional and psychological stress level are higher for service periods of less than 5 and ten and above as compared to respondents' group 5-10 years. Similar results found for construct overall impact of occupational stress, strenuously less for service period 5-10 years. Mean comparison though cannot ascertain differences are significant for all constructs except it's for support and resources at 5% level. As shown in table SR for less than 5 and 10 + is higher than one for 5-10 years of service in disaster rescue.

Table 6*Average of Constructs under Study Across Years of Service in Disaster Rescue.*

Years of Service in Disaster Rescue	Less than 5	5 to Less than 10	10 and Above	p-value
Workload and Operational Stress Score	2.93	2.98	2.83	0.74
Emotional and Psychological Stress	2.87	2.82	2.83	0.98
Support and Resources	3.91	3.63	3.42	0.03
Overall Impact of Occupational Stress	2.71	2.46	2.57	0.57
Coping Strategies	4.06	3.98	4.00	0.87

Source: Field survey (2025)

The number of operations on which respondents have involved would have been one prominent variable to influence level of stress. The number of times involved was categorized in to 3 groups Up to Ten, 10-20 and More than 20. Support and resources scores tend to decrease with the number of rescues involved. Similarly, coping strategies score decreased with number of times of rescue. There is no discernible and significant pattern observed regarding WO and EP that can be related with number of times of rescue as shown in table 7.

Table 7*Average of Constructs across Number of Times Involved in Disaster Rescue*

Number of Disaster Operation Involved	Up to 10	More than 10 to 20	More than 20	p-Value
Workload and Operational Stress Score	3.04	2.65	2.79	0.10
Emotional and Psychological Stress	2.86	2.88	2.78	0.92
Support and Resources	3.83	3.69	3.36	0.04
Overall Impact of Occupational Stress	2.73	2.36	2.40	0.25
Coping Strategies	4.09	3.92	3.90	0.46

Source: Field survey (2025)

Conclusion

This study examined occupational stress, support systems, and coping strategies among disaster rescuers in the APF, Nepal aiming to understand the factors influencing stress levels and resilience. Findings indicate that while workload and emotional stress are generally manageable, longer service duration and frequent deployments significantly contribute to psychological strain. The rescuers perceive lacking coping strategy when they are involved to more operations, further concurring in the case of support and resources sufficiency indicating necessity of ponderings on these issues. Thus, research highlights the importance of institutional support, psychological counseling, and resilience training in mitigating stress and enhancing the well-being of APF personnel engaged in disaster response.

The study provides practical implications for stress management programs, emphasizing the need for continuous monitoring, structured mental health interventions, and specialized training to address the long-term effects of occupational stress. Integrating technology-driven interventions, such as wearable stress monitors and virtual reality-based resilience training, can provide real-time stress management and preparedness support for APF personnel.

Author Introduction

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