



RESEARCH PAPER

Relationship between Self-Esteem and Occupational Stress among Professional Rescuers of Rescue 1122 District Kohat

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ABSTRACT

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Aim of this research was to investigate the association between self-esteem and occupational stress among professional rescuers in Kohat District, Pakistan. All the professional rescuers of operational backgrounds serving in four rescue stations of Kohat District i.e., Kohat city, Lachi, Shakar Dara, and Gumbat constituted the population of this study. Sample include overall 156 operational rescuers selected through a simple random sampling procedure. To collect data from the professional rescuers, two valid and reliable instruments i.e., the Self-esteem scale was developed by Rifai and Tariq (1999), and Occupational Stress Index was developed by Shrivatsava and Singh (1981) were used. The data was collected by visiting four established rescue stations of Kohat District. After completion of data collection, it was properly organized, tabulated before analyses through SPSS. Different descriptive and inferential statistical techniques were applied. Findings of the current study reported strong negative correlation between self-esteem and occupational stress. Furthermore, it was revealed that self-esteem predicts occupational stress negatively. Outcomes of this research recommend that the self-esteem of the professional rescuers may be improved through different trainings.

Introduction

There are a lot of studies on rescue workers due to their risky job duties. They are involved to deal with horrific and stressful duties on a daily basis. Their job description includes responding to medical, fire, and disasters related emergencies. Dealing with these emergencies is included in their routine work. Earlier researches on rescue workers reported the highest level of stress and other psychological correlates (Amin, Khattak, & Khan, 2018; Waseem, Naseer, & Razzak, 2011). Internal job stress and other emergency-related critical conditions deteriorate all life activities of the rescue workers. Defective interpersonal relationships and increased divorce rates are also reported among firefighters (An et al., 2015). Self-esteem is the evolution of oneself. It plays an important role to affect many job outcomes like turnover intention, counterproductive work behavior, employee engagement, and commitment, etc.

Self-esteem is the personal appraisal of someone's value, it includes the approaches of both self-respect and self-acceptance. We can say its someone's overall evaluation (Orth and Robins, 2014). Performance in different aspects of life has been correlated with higher level of self-esteem, including mental health, physical health, academic, educational, and work-related achievement. It also covers relational, personal, and social success (Orth, Robins, and Widaman, 2012). Self-esteem is the entirety of the opinions and feelings of the individual while referring to himself as a separate entity (Rosenberg, 2015). According to Blascovich, Tomaka, Robinson, Shaver, and Wrightsman (1991) Self-esteem is the sense of an individual's worth or value or the degree to which an individual values or recognizes, appreciates, awards, or likes him or herself. In addition, what we think of the self is the self-concept; self-esteem is the self's positive or negative assessments, as in how we feel about it. Self-esteem is how one views oneself or how one looks at oneself. Therefore, Self-esteem is used to describe the overall level of self and self-competence of an individual (Sharma, 2019). Furthermore, there is no overall theory of self-esteem but it has been conceptualized as a buffer, outcome, and motive. Self-esteem is an outcome of the self-verification procedure which may be observed individually and in groups. Authentication of the role characteristics can strengthen the self-esteem of the individual. Self-esteem developed by self-verification bumps the undesirable feelings that arise when the authentication process is problematic. A craving for the creation of self-esteem in a part by self-verification improves the individual and general public because it permits the public to inaugurate, develop and tolerate associations that verify role identities (Cast & Burke, 2002). The accepted significance of self-esteem for people and culture has motivated studies into interactions that can influence and alter self-esteem during life (Luciano and Orth, 2017; Orth, Trzesniewski, and Robins, 2010).

Occupational stress may be characterized as physical and emotional negative responses and happens when work responsibilities do not match the employees' skills, capabilities, or needs. Stress at work can lead to bad health and even accidents (Kenny & Cooper, 2003). A primary determinant of job performance is occupational stress. It is a common aspect that exceeds the worker's gender, age, educational level, or hierarchical status and influences a number of aspects of his or her job actions (Tsarouchas, Chrousos, & Darviri, 2021). The process of occupational stress relates to the ways in which workplace stressors can contribute to behavioral, mental, or physiological stress manifestations (strain) and to longer-term health consequences (Landsbergis et al., 2017). Occupational stress is a persistent psychological disorder caused by stressful working environments that affect one's physical and mental wellbeing and personal productivity. Common examples of occupational stress are exhaustion, distraction, anxiety and stress, absenteeism, depression, weakness, hopelessness, extreme frustration, family issues, and physical disorders such as migraines, heart failure, vomiting, indigestion, and low-back discomfort. This is because of several difficult issues (Rostam, 2020).

From time to time, researchers have identified different labor-related factors that could behave as stressors which in turn influences individual's mental, emotional and physical health, including their personal fitness. Several related common causes of work-related stress are the feeling of inequality, the collegial environment, the anxiety about the future of evolution, the relationship with the employer, and also the nature of the job in which the worker is working. Depending on their severity and duration, both these influences will also cause the resulting

adverse influence on participants' social, physical, and emotional health in the workplace. The worker's sustained exposure to stress by reacting to unreasonable job demands probably lead the employee to a state of absence of professional fulfillment and hence burnout (Arnold, Cooper, Robertson, Burnes, & Patterson, 2016; Arnold, Silvester, Cooper, Robertson, & Patterson, 2005; Hollway, 1991).

Material and Methods

Participants

All the professional rescuers of operational backgrounds serving in four rescue stations of Kohat District i.e., Kohat city, Lachi, Shakar Dara, and Gumbat constituted the population of this cross-sectional research study. A total sample of 156 was nominated by using simple random sampling procedure. Therefore, one hundred and fifty-six questionnaires were distributed among professional rescuers of operational backgrounds serving in the aforementioned stations of District Kohat. One hundred and forty-one fully attempted questionnaires were received back and thus the response rate was 90%. A specific criterion for the inclusion of the sample was made before starting data collection. Age ranges from 25 to 35 years. They all were selected from BPS 11 and 12 having operational backgrounds. Only male rescuers were selected (females were not taken as samples due to insufficient numbers). The education level of the samples varies from intermediate, professional diploma including a diploma in health technology and diploma of associate engineer to master degree.

Research Instruments

Self-esteem Scale (1999)

This scale was developed by Fareeda Rifai and Naeem Tariq in 1999. The scale is composed of four subscales. The scale having 5 points likert scale categories from extremely false to extremely true. In this scale, 12 items are scored negatively while the remaining 17 are scored positively. The total scores on the scale range from 0-116. The alpha reliability coefficient of the scale is 0.83. Alpha coefficient for all the subscales ranges from 0.64 to 0.78 (Rifai & Tariq, 1999).

Occupational Stress Index

This was developed by Shrivatsava and Singh in 1981, and it is composed of total 46 items designed on five points Likert scale. It is widely used for evaluating job-related stress. The scale contains twelve subscales. Among the total 46 items, 28 are true keyed rated 1 from strongly disagree to 5 strongly agree while the remaining 18 are false keyed items which are reversely rated. The split-half reliability coefficient is 0.937 while Cronbach's Alpha Coefficient of the scale is 0.90.

Data Collection and Analysis

Data for this research study was collected by visiting four established rescue stations of Kohat District. These rescue stations are located at Kohat city (District headquarter Station), Lachi, Shakar Dara, and Gumbat. Prior permission was taken from the concerned station house in-charges. The aim of the study was discussed with the station in-charges. They were found cooperative. The instructions were given collectively in groups in the presence of shift in-charge and station house in-charge.

The instructions were given in the Urdu language. They were informed to fill all the questionnaires and don't lift any questions un-attempted. The name on the demographic sheet is optional. All the participants are free to ask if they have any queries regarding questionnaires. The rescuers were also free to lift the study any time, or when called for an emergency. After returning the questionnaires, they were checked, and fully attempted questionnaires were retained. Data from the questionnaires were entered into SPSS data sheet and analysis was done by using different statistical techniques.

Results and Discussion

Descriptive Analysis of Self-Esteem among Professional Rescuers

Table 1 denotes descriptive statistics of the self-esteem of professional rescuers. The results revealed that overall, the self-esteem of professional rescuers was found satisfactory and the overall mean score was rated as 2.89 with a standard deviation of 0.38. The most rated subdomain of self-esteem was Academic competence ($M = 2.91$, $SD = 0.54$) followed by self-acceptance ($M = 2.90$, $SD = 0.90$). The other subdomains of self-esteem were rated as social & physical self-acceptance ($M = 2.89$, $SD = 0.43$) and self-competence ($M = 2.84$, $SD = 0.56$). The mean scores show that the self-esteem of professional rescuers is satisfactory but still needs further improvement.

Table 1
Descriptive Statistics of the Self-Esteem among Professional Rescuers

Variables	Min	Max	Mean \pm SD	SE	Skewness		Kurtosis	
					Statistic	SE	Statistic	SE
OSE	1.75	3.72	2.89 \pm 0.38	0.032	-0.016	0.204	0.046	0.406
SA	2.00	3.71	2.90 \pm 0.42	0.036	-0.189	0.204	-0.735	0.406
SC	1.17	4.00	2.84 \pm 0.56	0.047	-0.348	0.204	-0.243	0.406
SPSA	1.71	3.71	2.89 \pm 0.43	0.037	-0.285	0.204	0.093	0.406
AC	1.80	4.00	2.91 \pm 0.54	0.046	-0.052	0.204	-0.891	0.406

Key: OSE: Overall Self-Esteem, SA: Self-Acceptance, SC: Self-Competence, SPSA: Social and Physical Self-Acceptance, AC: Academic Competence

Descriptive Analysis of Occupational Stress among Professional Rescuers

Table 2 portrays different descriptive of occupational stress among professional rescuers. The outcomes revealed that overall, professional rescuers were found stressed and the overall mean score was rated as 3.20 with a standard deviation of 0.49. The results regarding subdomains show that unprofitability was found the widely rated subscale of occupational stress ($M=3.68$, $SD=0.91$) followed by unreasonable group and political pressure ($X=3.65$, $SD=0.72$). The other subscales of occupational stress were rated as role overload ($M=3.58$, $SD=0.67$), role conflict ($X=3.56$, $SD=0.83$), strenuous working condition ($M=3.55$, $SD=0.82$), and under participation ($M=3.51$, $SD=0.85$). The results clearly indicates that professional rescuers were occupationally stressed with these subdomains of occupational stress. Conversely, it was found that professional rescuers were found least occupationally stressed with respect to responsibility for persons ($M=2.99$, $SD=1.01$), intrinsic impoverishment ($M=2.90$, $SD=0.69$), role ambiguity ($M=2.80$, $SD=0.73$), peer group

relations ($M=2.77$, $SD=0.77$), low status ($M=2.74$, $SD=0.77$), and powerlessness ($M=2.70$, $SD=0.72$)

Table 2
Descriptive Statistics of the Occupational Stress among Professional Rescuers

Variables	Min	Max	Mean ± SD	SE	Skewness		Kurtosis	
					Statistic	SE	Statistic	SE
OOS	1.91	4.31	3.20±0.49	0.041	-0.296	0.204	-0.015	0.406
ROL	2.00	5.00	3.58±0.67	0.056	-0.269	0.204	0.004	0.406
RA	1.00	4.50	2.80±0.73	0.062	0.005	0.204	-0.513	0.406
RC	1.40	5.00	3.56±0.83	0.070	-0.457	0.204	-0.254	0.406
UGPP	1.75	5.00	3.65±0.72	0.060	-0.259	0.204	-0.115	0.406
RP	1.00	5.00	2.99±1.01	0.085	-0.200	0.204	-0.966	0.406
UP	1.50	5.00	3.51±0.85	0.071	-0.416	0.204	-0.155	0.406
P	1.00	5.00	2.70±0.72	0.060	0.181	0.204	-0.083	0.406
PGR	1.00	4.50	2.77±0.77	0.065	-0.065	0.204	-0.582	0.406
II	1.00	4.50	2.90±0.69	0.058	-0.242	0.204	-0.001	0.406
LS	1.00	5.00	2.74±0.77	0.065	0.243	0.204	-0.322	0.406
SWC	1.25	5.00	3.55±0.82	0.069	-0.439	0.204	-0.219	0.406
U	1.50	5.00	3.68±0.91	0.077	-0.336	0.204	-0.699	0.406

Keys: OOS: Overall Occupational Stress, ROL: Role Overload, RA: Role Ambiguity, RC: Role Conflict, UGPP: Unreasonable Group and Political Pressure, RP: Responsibility for Persons, UP: Under Participation, P: Powerlessness, PGR: Peer Group Relation, II: Intrinsic Improvishment, LS: Low Status, SWC: Strenuous Working Conditions, U: Unprofitability

Inferential Analysis

Pearson's Product-Moment Correlation Analysis

Hypothesis 1

There is no statically significant connection between self-esteem and occupational stress among professional rescuers.

To test this hypothesis, Pearson's product-moment correlation was performed between self-esteem and occupational stress. Table 3, shows an overall, strong negative correlation ($r = -0.817^{**}$, $p < 0.01$) between self-esteem and occupational stress was found. It means that professional rescuers with high self-esteem will have the least occupational stress and vice versa. Furthermore, the table 3 shows moderate negative correlation between all the dimensions of self-esteem and occupational stress i.e., self-acceptance ($r = -0.626$, $p < 0.01$), self-competence ($r = -0.666$, $p < 0.01$), social & physical self-acceptance ($r = -0.563$, $p < 0.01$), and academic competence ($r = -0.672$, $p < 0.01$). Thus, the null hypothesis "there is no statically significant relationship between self-esteem and occupational stress among professional rescuers" was rejected.

Table 3
Pearson Correlation Analysis between Self-Esteem and Occupational Stress

Variables	SA	SC	SPSA	AC	OSE	OOS
SA	1.00					
SC	0.429**	1.00				
SPSA	0.354**	0.593**	1.00			

AC	0.508**	0.524**	0.377**	1.00		
OSE	0.716**	0.842**	0.735**	0.796**	1.00	
OOS	-0.626**	-0.666**	-0.563**	-0.672**	-0.817**	1.00

** . Correlation is significant at the 0.01 level (2-tailed);

Correlation Strength: $r \geq 0.70$ = Strong; $0.30 \leq r \leq 0.69$ = Moderate; $0.01 \leq r \leq 0.29$ = Weak

Key: SA: Self-Acceptance, SC: Self-Competence, SPSA: Social and Physical Self-Acceptance, AC: Academic Competence, OSE: Overall Self-Esteem, OOS: Overall Occupational Stress

Multiple Linear Regression Analysis

Hypothesis 2

Self-esteem has no statistically significant influence in predicting occupational stress among professional rescuers.

Multiple regression analysis checked the influence of each subscale of self-esteem in predicting occupational stress. Table 4 indicates that the model is statistically significant ($p=0.000$) as the value of ANOVA was found to be 70.26 which is greater than the table value. Furthermore, the value of R square is 0.67 which shows that 67% of the variance in occupational stress is significantly represented by the independent variables in the model. The results of regression analysis revealed that all the subscales of self-esteem were found substantial predictors and have a significant negative effect on occupational stress i.e., self-acceptance ($\beta = -0.284$), self-competence ($\beta = -0.269$), social & physical self-acceptance ($\beta = -0.183$), and academic competence ($\beta = -0.317$). Hence, the null hypothesis "Self-esteem has no statistically significant contribution in predicting occupational stress among professional rescuers" was rejected. It undoubtedly shows that self-esteem predicts occupational stress and has a negative impact on occupational stress.

Table 4
Linear Regression Analysis

		Occupational Stress (Dependent Variable)							
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R Square	F	Sig.
		B	Std. Error	β					
Independent Variables	Constant	6.266	0.201		31.16	0.00*	0.67	70.26	0.00
	SA	-0.331	0.068	-0.284	-4.85	0.00*			
	SC	-0.235	0.059	-0.269	-4.02	0.00*			
	SPSA	-0.206	0.069	-0.183	-2.98	0.00*			
	AC	-0.288	0.056	-0.317	-5.13	0.00*			

* Significant Predictors

DV: Occupational Stress

IV: SA: Self-Acceptance, SC: Self-Competence, SPSA: Social and Physical Self-Acceptance, AC: Academic Competence.

Discussion

Purpose of this research study was to check the association between self-esteem and occupational stress among professional rescuers in Kohat District. Currently, we can find a huge number of researches on the relationship of self-esteem, stress, and related variables. Leary and Boumester (2000) reported significant impacts of self-esteem on different life constructs and work-related outcomes including engagement, commitment, occupational stress, and job satisfaction, etc. The same results are reported by Judge and Bono (2001). According to them there is a positive association among self-esteem, job satisfaction and job performance. Results of the current research established a strong significant negative correlation between self-esteem and occupational stress among operational professional rescuers. Additionally, a moderate negative correlation was also reported between the subdomains of self-esteem and occupational stress. It means that a professional rescuer who has strong qualities of self-acceptance, self-competence, social & physical self-acceptance, and academic competence will be more satisfied in their workplace. The study also revealed that self-esteem predicts occupational stress negatively among professional rescuers. All the subdomains of self-esteem were found significant negative predictors of occupational stress. Research by Kanayo (2016) reported that role ambiguity, role conflict and role overload are the most important factors, which affect job performance negatively. The same parallel results were found from the current study. The outcomes revealed that overall, professional rescuers were found stressed and the overall mean score was rated as 3.20 with a standard deviation of 0.49. The emergency services are found the most stressful among all services, they are prone to develop different psychological correlates due to their risky job nature. The previous researchers on emergency rescue services reported a significant difference between occupational stress, engagement, and commitment, while the current research reported a significant negative correlation between self-esteem and occupational stress (Amin, Khattak, & Khan, 2018). High self-esteem individuals are found to be active, hardworking, competent, and academically outstanding. Results and conclusion of this current research study confirmed the objectives of the study. Rescuers with high-level self-esteem were found less stressed in their work while those rescuers having a low level of self-esteem were found highly stressed in their work.

Research findings suggest that more challenging work is triggered by unreasonable demands and pressures that do not conform to health professionals' experience and expertise and over which other colleagues have little choice or power or help (Luthans, 2002). Occupational stress has been related to hormonal, circulatory, and immunological body variations, which leads to psychological and physiological conditions like neurosis, psychosis, repeated bacterial and viral infections, and gastric issues like ulcerations (Bosma et al., 1997; Deakin & Graeff, 1991). Moreover, chronic job stress also seems to be directly linked to the brain's decline in serotonin levels. Frequent behavioral reactions (drug misuse, alcoholism, abuse of tobacco), emotional reactions (aggressive behavior, cynicism, restlessness, sleeping disturbances, loneliness, disturbed interpersonal relationships, work fatigue, family and interpersonal relationship problems), and cognitive reactions (Antoniou, 1999; Maslach, Jackson, & Leiter, 1996).

Conclusions

Results and findings revealed that, there is negative relation between self-esteem and occupational stress. The professional rescuers having high level of self-esteem will be less occupationally stressed and vice versa. Self-esteem predicts occupational stress and it has negative impacts on occupational stress. Therefore, the study suggests that Rescue high ops, policymakers and planners should devise effective strategies for stress reduction in order to ensure high self-esteem of the professional rescuers. It may be possible through professional trainings and special rules and practices of recruitment. Psychological services can also play better role.

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