

EXAMINING THE IMPACT OF ROLE OVERLOAD AND RESOURCES ON EMPLOYEE ENGAGEMENT AMONG OPERATIONAL EMPLOYEES OF RESCUE-1122: A PARTIAL LEAST SQUARE APPROACH

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Abstract. *The basic purpose of this study is to explore the relationship of role overload (RO) and resources (R) with employee engagement (EE) among the operational employees of Rescue (1122), District Mardan. The role overload and resources have not been studied with the relationship of employee engagement in emergency services (Rescue-1122) in Pakistan. Data was collected from 154 employees using adopted questionnaire. The respondents are Fire Rescuers (FR), Lead fire rescuers (LFR), DERT (Disaster emergency response team) Rescuer, Emergency Medical Technician (EMT) and Divers only of district Mardan. The WarpPLS was used for data analysis and concluded the negative impact of role overload on employee engagement, while positive impact of resources on employee engagement in Rescue-1122, Mardan. Thus, the present study provides help to top brass of the organization during formulation of strategy in order to overcome the problem of role overload which eventually affects employee engagement.*

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1 Introduction

The purpose of the study is to investigate the impact of ‘role overload’ and ‘resources’ on ‘employee engagement’. In recent era, the focus of every organization is on the Employee engagement is the most crucial element of achievement of organization goals. The employee engagement is affected by different factors such as nature of job, qualification, rewards, role overload, available resources and leader’s behavior etc. Practically, the employees of emergency service (Rescue-1122) face the problem stress, role overload and resources availability at work as they are responding to hazardous situation during fire emergency, medical and drowning emergencies etc. on daily basis. This issue, which is becoming worse every day and causes stress and conflicts between work

and personal responsibilities, lowers staff morale, which in turn negatively affect the employee engagement and performance. Therefore, the role overload and available resources play a crucial role in the achievement of organizational goal as it directly affects the engagement level of employees specifically in emergency rescue services.

In the current study, the first concept is role overload, it is a condition in which employees often performed extra and challenging duties with limited resources (Glazer & Beehr, 2005). The second concept of the study is resources which is defined as the things, energies or conditions that enable the individual to achieve the targeted goal of the organization (Schmitt, Den Hartog, & Belschak, 2016; Venz & Sonnentag, 2015). The last concept is employee engagement which is defined as the individual willingness, satisfaction, and involvement to do extra ordinary work for the organization (Muthike, 2016).

2. Literature Review

2.1 Role overload

According to Altaf and Awan (2011) the role overload is an important and challenge issue arise in any organization. Role overload is defined as, the individual perception that the task assigned to him is very hard and challenging to complete within a limited resources and time (Jex, 1998). Moreover, it is a condition illustrated by extended working period, feeling pressure and stress to do overtime duties either paid, restriction on casual leave, limited time and resources for attainment of organizational goals. In addition, overloaded workers frequently find themselves complaining about unfair job responsibilities, continuously involve in hard activities, have not sufficient holidays and breaks, as well as work for irregular hours.

2.2 Resources

Resources are defined as, all those things and instruments which facilitate the employees to achieve the objectives of the organization (Venz & Sonnentag, 2015). The resources are helpful objects that reduces stress and improve engagement level of worker with organization (Ragsdale & Hoover, 2016; Sulea, Fischmann, & Filipescu, 2012). Employees strive to safeguard, acquire, and maintain resources in order to prevent further losses and improve their own engagement level with job (Hobfoll, 1989). Additionally, resources for work include any elements that are social, physical, or organizational that aid in attaining objectives or fostering individual development and growth (Bakker & Demerouti, 2008; Schaufeli & Bakker, 2004).

2.3 Employee engagement

The main theory on which the study is based is Social Exchange Theory. This theory explains the reasons of employee engagement at work. Some employees may be less engaged and some may be more engaged in the organization. Employee engagement defined by Saks (2006), is the degree of employee happiness and involvement in their work. Employee engagement is based on satisfaction and commitment, as well as positive thinking, which boosts employees' vigour, enthusiasm, and commitment to their jobs. In addition, engagement is derived from the employee's attachment with organization and job in terms of enthusiasm to facilitate, be a good player of a team, understanding the big picture and ready to go beyond the requirement of the job (Schaufeli, Salanova, González-Romá, & Bakker, 2002). The core of employee engagement is pride in the company and having a pleasant attitude at work (Kahn, 1990; Xu & Cooper, 2011).

2.4 Role overload and employee engagement

Ali and Farooqi (2014) concluded from his research study that role overload has negative significant impact on employee engagement. He also stated that if employees do extra work on daily basis, then his engagement level decline gradually which eventually affect the performance. Similarly, some of the research study revealed that role overload has significant and negative relationship with employee engagement and performance (Astuti & Palupiningdyah, 2018; Haq, Alam, Mulk, & Rafiq, 2020; Jalagat, 2017).

2.5 Resources and employee engagement

Various studies have concluded the positive significant impact of resources on employee engagement such as autonomy, social support, support of supervisor and learning opportunities (Bakker & Demerouti, 2008; Schaufeli et al., 2002). Similarly, Haider, Ahmad, Farooq, Rasheed, and Parveen (2014), indicated that the resources of a firm develop a creative environment for employees to fulfill their job, resolutely boost satisfaction, loyalty and employee engagement.

2.6 Development of hypotheses

The following hypotheses have been developed in light of the above literature.

- H1: There is negative impact of role overload on employee engagement in Rescue-1122.
- H2: There is positive impact of resources on employee engagement in Rescue-1122.

2.7 Conceptual Framework

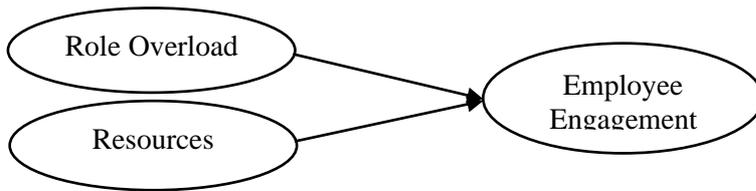


Figure 1 Conceptual Model of the study

3. Methodology

The methodology part of the present study covers the following parts;

3.1 Population

The present study population is the operational category of employees including LFR, FR, EMT, DERT rescuers, diver supervisor and divers only of Rescue-1122 of Mardan. The total size of the targeted population is 257.

3.2 Sample Size

The sample size for the present study is 154 which was calculated through Krejcie and Morgan (1970) formula. The simple random sampling technique is used in the study for selection of the desired sample size. So, one hundred and fifty four (154) participants selected randomly from a pool of two hundred and fifty seven operational category of employees.

3.3 Variables

The variables of the study were Role Overload (RO), Resources (R) and Employee Engagement (EE). Role overload and resources were the independent whereas employee engagement was the dependent variables of the study.

3.4 Data collection and instrument

The adopted questionnaires were sent to the operational staff members in district Mardan who were chosen at random as part of the data collection process. In the present study, three different questionnaires were used for role overload, resources and employee engagement which was adopted from Pareek (1983), Temkin-Greener, Zheng, Katz, Zhao, and Mukamel (2009) and Schaufeli and Bakker (2003) respectively. Both the role overload and resources have five (5) questions whereas, employee engagement has 9 questions. Total 154 questionnaires were distributed, out of which 142 received back which are completed from all aspects. The collected data was recorded through 5-point Likert Scale and later on for detail analysis Warp PLS was used.

4. Data Analysis

The Warp PLS was used for analysis of the data.

4.1 Demographics

It is shown from the demographics analysis that 90% participants are male while 10% are female, in which, 29% are FR, 22% are LFR, 9% are DERT rescuer, 28% are EMT, 3% are diver supervisors and 9% are Divers.

4.2 Reliability analysis

The reliability assessment of the scale has been determined by composite, Dijkstra PLSc, Cronbach alpha, factor reliability and True composite reliability. For the present study the table 1, shows the values of these reliability assessments. As shown from the table all the value are in acceptable range, as its greater than threshold value (0.70) (Canatay, Emegwa, Lybolt, & Loch, 2022; Ibrahim, Shiratuddin, & Wong, 2015).

Table 1 *Reliability Analysis*

	RO	R	EE
Composite reliability,	0.918	0.915	0.918
Cronbach's alpha,	0.888	0.896	0.888
Dijkstra's PLSc reliability,	0.889	0.906	0.889
True composite reliability,	0.918	0.915	0.918
Factor reliability,	0.918	0.915	0.918

RO= Role overload, R= Resource, EE= Employee Engagement

4.3 Discriminant validity

The Hetrotrait-Monotrait Ratio (HTMT) value is calculated for checking the discriminant validity. The critical point for HTMT is 0.9 which is written as HTMT_{0.90}.The HTMT values for the present study is shown in table 2, all constructs HTMT value is less than the critical point. So, this validates that the constructs have good discriminant validity (Hair, Hollingsworth, Randolph, & Chong, 2017).

Table 2 *Discriminant Validity (HTMT 0.9)*

	RO	R	EE
RO			
R	0.812		
EE	0.752	0.682	

RO= Role overload, R= Resource, EE= Employee Engagement

4.4 Convergent validity

Two methods, Average Variance Extracted (AVE) and indicator reliability are used to find the convergent validity of the scale; however, the former method is used in the present study. Its threshold value is 0.5 and table 3, clearly shows that the AVE values for all constructs are greater than the threshold value which means that the scale has good convergent validity (Hair Jr, Sarstedt, Hopkins, & Kuppelwieser, 2014).

Table 3 *Convergent Validity (AVE)*

	RO	R	EE
RO	0.841		
R	0.812	0.805	
EE	0.761	0.753	0.739

RO= Role overload, R= Resource, EE= Employee Engagement

Table 4 *Fit Indices with P and Critical Value*

Indices	Value	P-Value	Critical Value
Average path coefficient (APC)	0.412	<0.001	
Standardized root mean squared residual (SRMR)	0.083		acceptable if ≤ 0.1
R-squared (RS)	0.644	<0.001	
Adjusted R-squared (ARS)	0.642	<0.001	
Average block VIF (AVIF)	3.097		acceptable if ≤ 5
Average full collinearity VIF	3.132		acceptable if ≤ 5
Tenenhaus GoF (GoF)	0.621		small = 0.1, medium = 0.25, large = 0.36

4.6 Testing of hypotheses

In the present study, the two independent variables (Role overload and Resources) and one dependent variable (Employee engagement) are used. The result of path coefficients for both independent and dependent variables are presented in table 5. The beta coefficient for H1 & H2 are -0.49 and 0.34 while p-value is <0.01 (for both) respectively, so it shows that the role overload has negative significant impact on employee engagement, whereas resources have positive significant impact on employee engagement.

Table 5 *Path Coefficients*

	Independent	Dependent	Coefficients	P Value	Result
H1	RO	EE	-0.49	<0.01	Supported
H2	R		0.34	<0.01	Supported

RO= Role overload, R= Resource, EE= Employee Engagement

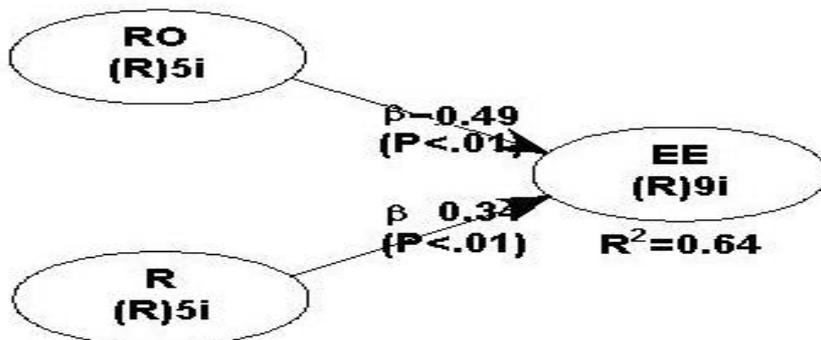


Figure 2 Model of the Study

5. Discussion and Conclusion

In the present study, it was hypothesized (H1) that there is a negative impact of role overload on employee engagement. The value of beta coefficient and p-value for H1 is 0.49 and <0.01 respectively which clearly confirmed that role overload strongly affects employee engagement of Rescue-1122 employees. These results are in line with the few previous results of the research study (Crawford, LePine, & Rich, 2010; Kim, Lee, & Park, 2018; Ugwu & Onyishi, 2020; Zhang, Xu, Li, & Xu, 2022). In the second hypothesis (H2), it was assumed that there is a positive impact of resources on employee engagement. The value of coefficient and p-value is 0.34 and <0.01 which shows that the resources have positive significant impact on employee engagement. These findings are supported by the previous result of research (Albrecht, Breidahl, & Marty, 2018; Hanif, Naqvi, & Hussain, 2015; Schaufeli & Bakker, 2004).

In the context of Rescue-1122, role overload and resources availability are important elements which play a crucial role in enhancement of employee engagement. Most of the operational employees of the said organization experienced high pressure due to over burden of work responsibility (role overload) and lack of resources which ultimately negatively affect their engagement with job.

In light of the results of the present study, it is concluded that the organization understands the need of their employees and provides enough resources to them during responding of any emergency. In addition, top brass of the organization also has put keen interest on the job responsibility of each employee during distribution of work load among them to overcome the issue of role overload.

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