

Investigating Stress and Employee Performance in Traffic Police

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Abstract. Stress is an important contributor in the overall performance of the employees, having both positive as well as negative effects. High stress creates low performance in the employees where as low to moderate stress enhances the performances. The law enforcement agencies are considered to be highly stressful organizations around the world. They are under tremendous pressure from the governments as well as from the general public to perform their best. The present study is conducted on the traffic police wardens. The results indicate that the presence of stress among the traffic wardens have a positive effect on their performance. When coping mechanisms acting as moderator is introduced the effects of stress reduces considerably. The study also suggests future directions as well as recommendations.

Keywords: Stress, Police, Coping Mechanism, Employee performance

1. Introduction

The concept of stress at workplace is not a new one and lot of studies have been conducted on the area. The concept of stress at workplace was first in 1936 by Hans Selye. His main focus was on the biological aspects of stress which he termed as eustress (positive stress) and distress (negative stress). Later studies focused on physiological and psychological aspects of stress on employees and its management. Oxford dictionary terms stress as an emotional state of an individual resulting from external environment putting too much demand on that individual. It is also considered as a response that results from demographic differences among individuals (DeFrank and Ivancevich, 1998)

Stress has been found as a major contributor to the dysfunctional behaviour employees' exhibit. In today's ever competitive business environment organizations focus more on the quality of work. This helps them to survive but at the same time puts tremendous amount of strain on their workforce, which is already under pressure to produce quality work. This is true for service oriented sectors because of their people orientation and to some extent for manufacturing sectors as well. The manufacturing sector with its mechanical production outlays feel less stressed as compared to their counterparts in the service sector. The employees have to remain ever vigilant to new trends and procedures adopted by the market. Public sector organizations being welfare oriented have to deal with the services provided to the society in general and their employees need not only be people oriented but have to keep the quality of service in focus for the smooth functioning of the society. Thus, extra pressure is put on the public sector employees, being the trustees of public trust.

The employees whether working in private sector or in public sector feel stressed out mainly because of limited resources they have at their disposal. Also today's organizational work environment is high performance environment in which each member of the organization is expected to put in extra effort for the success of the organization. This pressurized environment not only creates physiological but also psychological effects in the employees which are ultimately manifested in the family disturbances and loss of concentration at work place. Stress can also be caused by the poor structure of the job design, poor management and unsatisfactory working conditions, resulting in employees' loss of control over their jobs coupled with little support from within the departments or organizations (Leka, Griffiths and Cox 2003). With the increase in stress levels, employee's productivity is decreased. Productivity is also decreased when employee's personal life is overlapped with the working environment.

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Police is considered as one of the most stressful organization because of its operational nature. Police department being a service provider and a public sector organization have to fulfill all the expectations of the public. Being employees of the law enforcement department, policemen face many stressors like kill or be killed in the line of duty, resisting arrest, watching their coworkers die during a police combat with criminals etc. McCarty et al. (2007) found that the organizational stress have the same affect on both male and female police officers, which means that there is no gender differences. With the increased time constraints to solve crimes, huge workloads, long working hours, physical hard work and increasing job demands are all stressors of workplace for a police employee. With the changing workplace demands and the hostile external environment in which police employees work, create insecurities in their minds. This increases the stress levels, thus, decreasing the individual's performance and productivity (DeFrank and Ivancevich 1998; Leka, Griffiths and Cox 2003).

2. Methods and Procedures

The present study investigated the effect of stress on employee performance. Cross sectional data of traffic police department employees had been taken to find out the effect. The Traffic Police Department was established in 2006 under the Police Ordinance of 2002 and is currently operational in the district of Rawalpindi only. The sample consisted of 281 respondents consisting of Traffic Police Wardens (TW) selected through convenient sampling.

Survey technique using self-administered questionnaire was used to capture the perceptions of the respondents regarding stress and its effect on individual's performance. 5-point Likert scale was used where 5 indicated strong agreement and 1 corresponded to strong disagreement. The instrument was divided into two main sections. Section I consisted of items related to the variables of the study and section II highlighted the demographical elements. The Independent variable of the study was measured through three dimensions namely workload, job demand and work environment.

The independent variable of stress consisted of 33 items distributed as workload (7 items) adapted from Bot et al. (2004) and Embrey et al. (2006); Job Demand consisted of 8 items adapted from JDQ developed by Team Technology; and Work Environment was measured through 18 items adapted from the study of McCusker et al (2005). Moderating variable of coping mechanism was measured through 10 items adapted from the studies of McCarty et al. (2007) and Gershon (2000). The dependent variable of employee performance consisted of 7 items taken from the Lucas County Employee Performance Review.

A pilot study consisted of 30 respondents included in the study's sample size was conducted to find out the reliability of the questionnaire. The Cronbach alpha reliability result showed that the questionnaire was reliable for further statistical analysis as the reliability of all variables was found to fall within 0.607 – 0.904.

The data was analyzed through correlation and regression statistical tests and the moderating effect was checked through Baron and Kenny (1986) method. Regression assumptions like homogeneity of variance, data normality, Multicollinearity were also met before proceeding with the statistical analysis.

Results and Interpretation

The study employed correlation and regression statistical techniques. Correlation was performed to check whether the independent variables had any Multicollinearity or not and also to find out the significant relationships with the dependent variables. Results shown in Table 1 reveal that all of the independent variables of job demand, work environment, work load are significantly related to each other that is $p < 0.01$. The results also show that two of the dimensions of independent variable of stress (job demand and workload) have significant relation with the dependent variable of employee performance, whereas, work environment was found to have an insignificant relationship with employee performance.

Table 1 Correlation Matrix of Stress Dimensions and Employee Performance

Variable	Job Demand	Work Environment	Workload	Employee Performance
Job Demand	1			
Work Environment	.021	1		
Workload	.403(**)	-.388(**)	1	
Employee Performance	.376(**)	.107	.277(**)	1

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

To further investigate the impact of stress on performance regression was applied. Table 2 highlights the results of regression for stress as a combined variable and its individual dimensions taken as independent variables. The results of regression showed that stress as an independent variable (model 1) had a significant positive effect on performance. Similarly, the individual dimensions of stress (model 2) namely job demand, work environment and workload all were found to have significant positive influences on performance, with job demand having the greatest influence amongst the three dimensions ($\beta = 0.235$).

Table 2 Summary of Regression for Stress-Employee Performance

Model	R	R ²	Adjusted R ²	F	Sig.	β	t	Sig.	Tolerance	VIF
1	0.430(a)	0.185	0.182	63.332	0.000					
Intercept						1.856	7.968	0.000		
Stress						0.504	7.958	0.000		
2	0.437(a)	0.191	0.182	21.791	0.000					
Intercept						1.827	7.666	0.000		
JD						0.235	4.533	0.000	0.801	1.249
WE						0.135	3.254	0.001	0.812	1.232
WL						0.132	3.704	0.000	0.681	1.469

a Predictors: Stress

a Predictors: Job Demand, Work Environment, Work load

b Dependent Variable: Employee Performance

The study also investigated the coping mechanism as a moderator between stress and performance. To check the moderating role Baron and Kenny (1986) method for moderation testing was employed. The results of the test show that when coping mechanisms are in place, stress is considerably reduced which should enhance the performance of the employees (Table 3).

Table 3 Test of Moderation for St-CM-EP Model

Description	R	R ²	Adjusted R ²	F-Stats	Sig	Beta	t-Statistics	Sig.
Dependent Variable: Employee Performance								
	0.430	0.185	0.182	63.332	0.000			
Intercept						1.856	7.968	0.000
Stress						0.504	7.958	0.000
Dependent Variable: Employee Performance								
	0.154	0.024	0.020	6.784	0.010			
Intercept						3.394	28.213	0.000
CM*St						0.028	2.065	0.010

3. Discussion and Conclusion

The results of the study are in contrary to the results of many studies that empirically show stress negatively affects employee's performance (Kazmi et al, 2008; Bashir & Ramay, 2010). However, there are studies that do take into account the positive effect of stress on performance. These studies highlight that low to moderate levels of stress is good for the performance which actually is enhanced in the presence of such stress (Lepine, et al. 2005; Subbulaxmi, 2002). In line with these studies it is inferred that the stress, traffic police wardens' face enhances the performance levels mainly because of the structured working environment of the organization. Coping mechanisms whenever used have shown to reduce the effects of stress (Malek et

al, 2010; Schonfeld, 1990). The results of the study do indicate that the coping mechanisms reduce stress considerably and are in-line with the results of previous studies.

Traffic police department is a high pressured and stressful department to work in. Employees are constantly under pressure to perform in the face of adverse conditions like political pressure, public pressure and performance oriented management system. In these circumstances, the support of top management becomes essential to support the frontline officers against the political or public pressure for smooth functioning of the organization. The support can come in the form of providing better working conditions as well as giving work related autonomy so that these officers can perform at their best and take decisions as and when required. Future researchers can look into various stressors like work-life balance, peer support, working hours etc for their impact on performance. Further to traffic police department various other law enforcement agencies can also be targeted for the effects of stress.

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