



EMOTIONAL INTELLIGENCE AS A MODERATOR ON THE STRESS- PERFORMANCE RELATIONSHIP

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INTRODUCTION

Work-related stress is one of the major causes of occupational ill-health which leads to severe physiological and physical issues. It also leads to poor performance and human errors, an increase in accidents, increased sickness, absence, and high staff turnover. Occupational Stress (OS) is a significant issue that costs more than 15.4 million working days, an estimated cost of \$ 5.2 billion to industry, individuals, and to governments (HSE, 2019). Data on work-related stress are available to varying extents in countries and regions. The fourth European Working Conditions Survey (EWCS, 2007) expressed that around 40 million people were affected by OS in the European Union. The first Central American Survey on Working Conditions and Health (2012) revealed that 12%-16% suffer from stress in America. The Australian Stress and Wellbeing Survey (2014) in the Asia-Pacific region reported 17% of people were suffering from stress. In Japan, the Survey on the Prevention of Industrial accidents realized that 32.4% of workers were suffering from strong anxiety, worry, and stress. The Korean Working Conditions Survey of the Republic of Korea (2006) found that 18.4% of male and 15.1% of female workers are affected by OS. Likewise, OS has been found significantly related to job demands and working hours (ILO, 2016). If an individual is unable to cope with the workload, there is greater tendency for him/her to feel uncomfortable with other employees. consequently, his or her job is likely to be stressful. On contrary, when an individual feels competent, stimulated, and supported by the staff, he or she is likely to experience the change rather than stress (Ekienabor, 2016). Thus, it is evident that OS is creating a negative effect on employee performance.

Literature states that work overload and time pressure as key determinants of OS. Time pressure is becoming a main issue at the workplace in most of the developing countries. A negative relationship between time pressure, role ambiguity, and Employee Performance (EP) is reported (Murali, Basit, & Hussan, 2017). However, work overload and lack of motivation report mixed effects on EP (Moore et al., 2012). Currently, every employee seem to face work overload issues irrespective of their industries they belong to. Service-oriented flexibilities and customization pressurized the employees despite the shorter processing time available for them. The thinner lead time associated with lean processes generates mental stress which results in lower interest toward task fulfilment (Murali, Basit, & Hussan, 2017). Increased workload, long working hours, reduced staff and constant changes at work negatively affect both employees and employers (Sharma & Sharma, 2014; Goodweni, 2004). These people then fail to maintain a healthy work-life balance. There exists an inverted U shape relationship between work overload and EP (Johari, Ridzoan, & Zarefar 2019). Bruggen (2015) too proved that the EP started to drop after a certain point of the line where he concluded that the performance would be optimum under a moderate level of workload. Many studies revealed a negative relationship between work overload and EP (Yan & Xie, 2016; Shah et al., 2011; Yang et al., 2014). Furthermore, time pressure was found to negatively affect EP (Broberg, Tagesson, Argento, Gyllengahm, & Mårtensson, 2016; Abuaddous, Hanefah, & Laili, 2015).

There is no single level of stress that is optimal for all people. Positive stress adds anticipation and excitement to life, and people all thrive under a certain amount of stress. The self-goal is not to eliminate stress, but to learn how to manage it and how to use it to help them.



Therefore, it is very important for both individuals and organizations to manage the stress to its optimal level (Robbins & Judge, 2015). Environmental factors, organizational factors, and personal factors have been considered as potential sources of stress, and all these factors are associated with OS too (Robins, Judge, & Vohra, 2019). Ekienabor (2016) and Gaumail (2003) stated that OS may be responsible for organizational outcomes such as lack of commitment and motivation, lower performance, dissatisfaction, and an increase in absenteeism and turnover.

Ceylon Electricity Board (CEB) as the the dominant electricity supplier of Sri Lanka, have designated their Technical Officers (TO) as Electrical Superintendents, Civil Superintendents, and Mechanical Superintendents. They are positioned as the supervisory level executives in the organizational hierarchy. They are usually technically qualified diplomatic or internally promoted experienced skilled personnel. They are assigned for generation, transmission, distribution, and projects branches throughout the country according to the requirement. However, it has been noticed that the performance of TOs is not up to the expected level in the recent past (Goonathilleke, Priyashantha, & Munasinghe (2018). The Key Performance Indicators (KPIs) have indicated that setting new connections and rectifying consumer issues take longer time duration than before. Further, customer complaints about the low quality of supply, delay in rectifying breakdown, negligence, high rate of fatal accidents, etc. provide evidence that the services supplied by CEB are not up to the expected level. All of these alerts in literature are usually attributable to the issues in EP.

EP is defined as the work behaviors associated with organizational goals that are measurable, observable, and scorable within the individual's control (Khuong & Yen, 2016). EP is the path toward the realization of organizational goals. EP is a high-order construct with a dynamic network of relationships with numerous factors (Purnama, 2017). OS is one such factor that is found to be affecting negatively on EP (Murali, Basit, & Hussan, 2017; Moore et al., 2012). On the other hand, EI is referred to the capability of an individual to manage and control their own emotions and ability to control the emotions of others as well (Mayer & Salovey, 1997). Additionally, EI is reported to be reducing the different behaviours of employees at work (Radha & Shree, 2017). Employees who have higher EI can handle emotions and feelings without losing their temper. As a result, they can develop favourable working relationships with others and are tolerant when facing emotional labour or emotional pressure, and can effectively manage the odd feelings and emotions. Further, employees high in EI tend to be more committed to the organization, which is positively affecting their performances (Shafiq & Rana, 2016). EI is a very valuable predictor of team processes and outcomes too (Wang (2015). It enhances the connection among team members and can exchange important information/expert knowledge and know-how within the team members. This type of information elaboration within the team leads to better performance. When reviewing the role of EI in controlling the negative outcomes at work, it can be reasonably assumed that the EI could be effectively used to mitigate the negative effect of OS on EP. However, the EI power along the relationship between OS and EP is rarely addressed. Hence, the present study was mainly aimed at filling the lacuna of literature by investigating the moderating effect of EI on the relationship between OS and EP. Specifically, this study tested the moderating effect of EI on the relationship between OS and EP in the context of the Sri Lankan utility sector. Accordingly, the study answered the following questions.

- Does work overload and time pressure singly affect EP?
- Does occupational stress affect the employee performance of technical officers in the Sri Lankan utility sector?
- Does EI moderate the association between OS and EP in the utility sector of Sri Lanka?

METHODOLOGY

The aim of the study is to test the causality of assumed relationships. Thus, an explanatory research of the deductive tradition is performed (Kurniawan, Sularso, & Titisari, 2018). It involved testing of hypotheses developed based on the existing literature (Sekaran, 2003).



A cross-sectional, quantitative analysis of the research problem is performed. The study was designed in a way that is totally free from any interference with the interests of researchers (Sekaran, 2003). The problem statement focuses on how OS is affecting EP where the ideal unit of analysis would be individual employees. Work overload and time pressure were the independent variables while EP and EI represented dependent and moderating variables respectively. Dimensions of EP were task, adaptive, and contextual performance (Dubinsky & Mattson, 1979). Work overload and time pressure were the dimension of OS (Parker & Decotiis (1983) whereas personal and social competency measured EI (Schutte, et al., (1998). All variables were assessed using standardized instruments in which greater reliability is reported (EP- Yozgat, Yutkoru, & Bilginogl, 2013; Wang & Netemeyer, 2004; Pradahan & Jena, 2017; OS - Parker & Decotiis, 1983; Kissi, Asare, Agyekum, & Agyeman, 2019; Leung, Chan, & Yu, 2009; EI – “The Self Report Emotional Intelligence Test”, Schutte, et al., 1998; Law, Wong, & Song, 2004). Accordingly, Cronbach Alpha coefficients of all the variables were found acceptable (> 0.7) (Kock & Lynn, 2012; Wushe & Shenje, 2019; Hair, 2005). Pilot study results ensured the face validity of the instruments. Further, inter-item correlation within all constructs found significant and $0.3 <$, providing the evidence of acceptable convergent validity. HTMT values of all the constructs were closer to 1, thus concluded the prevalence of discriminant validity (Hair et al., 2010). The self-administrated questionnaire was composed of two parts and 45 items in which the 5-point Likert scale ranked the responses. The population for the study was the TOs of CEB as of 1st November 2020 (N = 1398). Sample size has been determined based on Morgan’s recommendation (Sekaran, 2003) and consisted of the 141 TOs of CEB based in the Western Province of Sri Lanka. Sample items was selected from the pool of TOs at CEB based on the lottery method using a list of employee numbers as the sampling frame. Data analysis aided the univariate, bivariate and multivariate techniques wherein hypotheses testing was rectified by the results of multiple regression analysis. Testing of assumptions, validity, and reliability were achieved with the aid of Microsoft excel, SPSS, and SmartPLS software.

RESULTS AND DISCUSSION

The demographic profile of the respondents shows that majority of TOs falling into 30-40 years range of age (73%), are males (81%), are married (89%), are having diplomas as the highest educational qualification, and are experienced less than 10 years (73%). Additionally, the authors looked at the distance from home to workplace as it might be a strain on the OS. It was observed that a significant portion of respondents needed to travel more than 40 km daily to reach the workplace.

The data turned out to be having acceptable reliability and validity properties as confirmed by the common measure of reliability and validity as stated in the methodology section of this article. Table 1 shows the significant associations among the study variables.

Table 1. Correlation Analysis

Variable	Time Pressure (TP)	Work Overload (WO)	Occupational Stress (OS)	Emotional Intelligence (EI)
Employee Performance (EP)	-.747**	-.607**	-.725**	.505**

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

All the variables share significant correlations with other variables, out of which the relationship between TP and EP is found the strongest. Importantly, the TP and the WO are negatively related to the EP, implying the potential damage to the performance of employees who are over pressured and overloaded. Next, the authors performed a multiple regression analysis to develop a predictive model based on the significant relationships.



Table 2. Regression Analysis

Model	Unstandardized Coefficients		Beta	T	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1 (Constant)	5.413	.106		50.887	.000		
WO	-.089	.053	-.135	-1.661	.099	.473	2.116
TP	-.470	.059	-.649	-7.959	.000	.473	2.116

a. Dependent Variable: EP

When testing for multivariate assumptions, namely normality (Kolmogorov-Smirnov Test value = .18 > 0.05), linearity (ANOVA coefficient for between groups variance = 0.527 > 0.05), homoscedasticity (Levene’s test = 0.08 > 0.05), multicollinearity (Table 2), and auto correlation (Durbin- Watson value = 1.812 ≈ 2, See Table 3), confirms the suitability of the data for a multiple regression analysis. The regression model is significant at the 95% confidence level and possesses power of 56% to affect the variability of the EP (adjusted R² = 0.560). The results showed us that the time pressure, one of the two components of OS, is a significant influencer towards EP while the other, work overload, is not. It implies that the work overload in the present context is not a source of OS. The study assumed EI to moderate the relationship between OS and EP. Changes of coefficient of determination are compared between direct and indirect models to ascertain the moderating effect. It was observed that the EI can strengthen the relationship between OS and EP (Table 3). The negative effect of OS over EP can be neutralized with the positive effect of EI. Thus, the power of the mode gets improved once the interaction term (OS x EI) is introduced to the second model (R² Change = 0.195, p = 0.00 < 0.05).

Table 3. Moderation Analysis

Model	R	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson	
					F	Sig. F Change			
1	.725 ^a	.525	.43100	.525	153.660	.000			
2	.849 ^b	.720	.33203	.195	96.215	.000	1	138	1.812

a. Predictors: (Constant), OS b. Predictors: (Constant), OS, OSEI c. Dependent Variable: EP



The results revealed that the TP is a significant influencer while WO is not significantly affecting EP. This finding is consistent with Murali, Basit, & Hussan (2017), Johari, Ridzoan, & Zarefar, (2019), and Wushe & Shenje (2019). On the contrary, a positive correlation between WO and EP has been reported by Brugen (2015), Yan & Xie, (2016), and Jalagat (2017). The inconsistencies might have caused by the context-specific factors and or the methodological differences. TP was found negatively correlated with EP. This has been supported by Murali, Basit, & Hussan (2017), Jayasinghe & Mendis (2017), and buaddous, Hanefah, & Laili (2015). OS is found to be negatively correlated with EP (Daniel, 2019; Wushe & Shenje, 2019; Goonathilleke,

Priyashantha, & Munasinghe, 2018; Ramli, 2018; Celine, 2018; Senaratne, 2017; Murali, 2017; Jayasinghe & Mendis, 2017; Awadh, Gichinga, & Ahmed, 2015; Yeboah-Kordee, Amponsah-Tawiah, Adu, & Ashie, 2018). Yet, as per Tennakoon and Wanninayake (2020), a positive relationship between OS and EP was examined by Johari, Ridzoan, & Zarefar (2019), Cohen (1980), Hatton, Brown, Caine and Emerson (1995) and Kahn and Long (1988). Moreover, no effect of OS on EP was reported by Blau (1981), Matteson Ivancovich and Smith (1984), Orpen and Welch (1989), Hassan, Azmat, Sarwar, Adil, and Gillani (2020) and Johari, Ridzoan and Zarefar (2019). EI is having a moderating effect on the relationship between OS and EP (Sharma & Sharma, 2014; Radha & Shree, 2017; Munir & Azam, 2017; Purnama, 2017; Venkateswararao & Rajesh, 2016; Wang, 2015).

CONCLUSIONS AND RECOMMENDATION

The study concludes a strong negative relationship between EP and OS among the TOs of the Sri Lankan utility sector. However, no relationship between EP and WO was found. It was concluded that the EI can reduce the adverse effect of OS on EP by moderating the relationship between OS and EP. Managerial implications of the outcomes stressed the use a proper mechanism to manage OS. It is recommended to arrange EI boosting training and development programs that focus on relevant skills, up-date knowledge, and good moral principles & values. Role of mentors in stimulating EI capacities of employees is also regarded critical for controlling the adverse effect of OS on EP. Testing the effect of other possible variables inducing under different methodological approaches are recommended for future researchers.

REFERENCES

- Ekienabor, E. (2016). Impact of Job Stress on Employees' Productivity and Commitment. *International Journal for Research in Business, Management and Accounting*, 2(5), 124-133.
- HSE. (2019). Tackling work-related stress using the Management Standards approach. UK: The Stationery Office.
- ILO. (2016). Workplace Stress - A Collective Challenge. Geneva: International Labour Office.
- Kurniawan, R., Sularso, R., & Titisari, P. (2018). The effect of Work Conflict and Job Stress on Employees Performance with Organizational Commitment as Intervening Variable. *Jurnal Manajemen dan Kewirausahaan*, 6(1), 1-8.
- Murali, S. B., Basit, A., & Hussan, Z. (2017). Impact of Job stress on Employee performance. *International Journal of Accounting and Business Management*, 5(2), 13-33.
- Robbins, S. P., & Judge, T. A. (2015). *Organizational Behaviour*. USA: Perason Publications Inc.
- Robins, S., Judge, T., & Vohra, N. (2019). *Organizational Behaviour (18th edition)*. USA: Pearson.



- Sekaran, U. (2003). *Research Methods for Business: A skill building approach*. USA: John Willey and Sons Inc.
- Shafiq, M., & Rana, R. (2016). Relationship of Emotional Intelligence to Organizational Commitment of College Teachers in Pakistan. *Eurasian Journal of Educational Research*, 16(62), 1-14.
- Vashist, R., Singh, K., & Sharma, S. (2018). Emotional Intelligence and its relationship Conflict Management and Occupational Stress: A Meta Analysis. *Pacific Business Review International*, 11(4), 30-38.