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Adnan ul Haque and John Aston and Eugene Kozlovski

University of Wales Trinity Saint David, Scientific Research Institute
of Behavioural Psychology

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Do causes and consequences of stress affect genders differently at operational level? Comparison of the IT sectors in the UK and Pakistan

Adnan ul Haque¹

John Aston²

Eugene Kozlovski³

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Abstract

The aim is examining the variation in causes and consequences of stress among contrasting gender in I.T sector of Karachi (Pakistan) and London (UK). The potential impact of stressors on the organisational commitment of employees are examined through self-constructed 'stress model'. Through snowball and purposive sampling techniques, total 419 respondents (205 from Karachi and 214 from London) were targeted to attain quantitative perspective through on-line matrix based semi-structured survey questionnaire. Results showed that there is significant difference in causes of stress among contrasting gender. Moreover, male workers experience higher stress than females at operational level. Further, London workforce experience lower stress than Karachi workforce due to social support programme at workplace. There is significant variation in causes of stress as findings showed personal factors are leading stressors for females while organisational and environmental factors causes stress for males. Job demand, leadership, and economic uncertainty are negatively affecting male's organisational commitment while family problems and personality clashes are affecting female's organisational commitment in contrasting economies. The consequences of stress are similar for both types of employees however, males showed cognitive symptoms while females are more effectively using personal resources to over their stress and exhibit behavioural symptoms. Females have higher affective and normative commitment while males demonstrate normative commitment. Pakistan workforce demonstrated high level of stress than UK workforce.

Keywords: Occupational stress, causes of stress, consequences of stress, organisational commitment, contrasting economies, social support

1. Introduction

Stress is common phenomenon at workplace but it means different for different people (Stranks, 2005). It is pleasant for some while unpleasant for others (ibid). It is viewed as "influencer behind body's natural equilibrium" (ibid). In organisational settings, it is evident to large extent (Kumasey, et al., 2014). Organisational efficiency is largely on stake due to stress, particularly in era of globalization (Schabracq & Cooper, 2000). Hence, it is being interest of scholars of organisational behavior and management sciences discipline.

The aim of the research is to examine the variation in the organisational commitment, causes and consequences of stress in terms of gender among employees at I.T sectors' operational level in contrasting economies.

Variables of interest are examined under comparative analysis approach in contrasting economies while managerial literature at hand is limited to specific geographic regions.

¹University of Wales Trinity Saint David, London, United Kingdom, adnan@sribp.com

² john.aston@brunel.ac.uk

³ eugene.kozlovski@gmail.com

Moreover, previous studies focused on single dimension while this study overcome by using DRIVE model in complex business environment to explore multi-dimensions in contrasting economies of interest. Moreover, the study undertakes unique approach by exploring organisational commitment through DRIVE model.

2. Literature review

Researchers are keenly interested in employees' work-related stress because it affects their attitude, efficiency, and performance (Kumasey et al., 2014). The flow of swift operations is negatively affected by occupational stress (Mark & Smith, 2011) whereas Ofoegbu & Nwadiani (2006) argued productivity and performance reduces due to stress experienced by employees. Stranks (2005) argued that causes and effects vary for individuals. 'Personal', 'organisational', and 'environmental' identified stressors from the work of Stranks is included in this study.

From interactional theories, specifically 'Person-Environment' and 'Demands-Control' models are examined in study. The main theme of interactional theories of stress is that when person interacts with environment, stress incurs however, two main drawbacks are that it considers the environment is stable and stress is treated as external attribute (Mark & Smith, 2008). The following studies have confirmed that multi-stressors operate in constantly dynamic environment (Lazarus, 1991; Mark & Smith, 2008). On the other hand, transactional theories argued that when person and environment interacts, stress transacts emerging internally and multiplying its impact within the dynamic environment (Mark & Smith, 2008). The significant components from contrasting schools to thought are undertaken by Mark & Smith (2008) to form updated stress model; namely DRIVE Model (Demands, Resources, and Individual Effects). However, DRIVE model is yet to be tested in complex business environment model where industries are experiencing high level of complexities, connectedness, and context. Moreover, the potential impact of stress on organisational commitment (OC) is explored through this model.

Organisational commitment (OC) is psychological pact between workers and workplace by demonstrating positive intent (Haque & Yamoah, 2014). Affective commitment (AC), normative commitment (NC), and continuance commitment (CC) are dimensions of OC (ibid). AC is employees' actual involvement; NC is employees' dedication and obligation while CC is intent of staying with the same organisation (ibid). In this study, potential impact of occupational stress is examined on all these antecedents. In I.T industry, AC and NC are highly evident among female workers (ibid). Conversely, the study of Tan & Lau (2012) found males have high AC whereas Haque & Yamoah (2014) and Mathieu & Zajac (1990) found high level of CC among females at operational level. At operational level, male experience low stress while female experience high stress at operational level (Kumasey et al., 2014). Hemdi (2009) argued that both males and females demonstrate AC at operational level. Interestingly, the study of Kumasey et al., (2014) argued that NC is more evident among employees due to existence of personal resources and effective support programme. The study of Schwarzer & Leppin (1991) found job-related stress is reduced by effective adoption of personal resources.

Stranks (2005) argued that personal stressors include; personality, family and financial problem while political, economic, and technological uncertainty are external stressors. Leadership, interpersonal demands, job demand, organisational structure, lifecycle of organisation, and task demands are organisational stressors (ibid). Personal resources reduce stress for female workers at operational level because of ability to perceive and receive job-related support (Sackey and Sanda, 2011). Furthermore, high level of depression and anxiety is evident among male workforce (ibid). However, there is no literature at hand suggesting specific type of stressors affecting most the efficiency and commitment of employees at non-managerial level. Nevertheless, personal resources used by males to deal with personal strains are mainly based on "adaptive response" (Brannon & Feist, 1992; Sackey & Sanda, 2011). Furthermore, females at operational level constructively use social support while males only perceive its effectiveness (Sackey and Sanda, 2008). Moreover, organisational culture and social support are reasons behind male workers' effectiveness at

operational level (Kets de Vries et al., 2009). In developing economies, moral support is more visible among employees at all level (Haque & Yamoah, 2014). Males are less stressed in comparison to females due to environmental and organisational factors (Fairbrother & Warn, 2003). Organisational commitment and high personal affiliation are result of social support. In addition to that, the studies of Sackey & Sanda, (2011) and Haque and Yamoah, (2014) found that moral support is consistently received by employees at operational level. Stressors effecting the employees' commitment and efficiency are evident in various studies including; Ekundayo, 2014; Sanda & Sackey, 2011; and Mark & Smith, 2008.

Additionally, Cicei (2012) and Stranks (2005) found that personal factors affect the performance and causes frequent stress among employees at operational level. Females are most often experiencing stress due to organisational factors in comparison to males (Fairbrother and Warn, 2003; Kumasey et al., 2014). Additionally, operational level employees are most affected by organisational factors (Kumasey et al., 2014). Moreover, Stranks (2005) strongly argued that industries facing rapid changes have higher chances of workers being affected by organisational factors. The level of stress among male workers is higher due to environmental factors (Ceici, 2012; and Kumasey et al., 2014). Furthermore, environmental factors are causing higher stress among non-managerial positioned employees in comparison to managerial positioned employees (Stranks, 2005).

2.1. Hypotheses

Ho_a: The causes and consequences of stress are not significantly different for male and female employees working at operational level of I.T sectors in contrasting economies.

Ho_b: There is no significant relationship between occupational stress and organisational commitment among employees working at operational level of I.T sectors.

3. Methodology

In contrasting economies, variables of interest are explored through semi-structured self-constructed 6 Point Likert Scale to attain quantitative aspect. The sample size consists of male and female employees working at operational level of private I.T firms. This cross-sectional study carried out between April 2016 to October 2016 (including pilot surveys). Totals 419 participants (205 from Karachi and 214 from London) through networking and connections were approached by using convenience, purposive and snowball sampling technique. In order to uncover the trends in I.T sector, positivist philosophy and deductive approach was undertaken to test hypotheses. Total 173 out of 510 organisations reflecting approximately 35% response rate participated. Questionnaire contained 30 items including; personal strains, personal resources, perceived and received support, types of stressors, organisational commitment, and role of occupational therapist. IBM SPSS 23.0 used for quantitative analysis and funnel approach via MS Excel to find variation in responses of contrasting gender. Shapiro-Wilk test was run to check normality of data distribution and obtained sig value=0.881 indicates that there is strong evidence against null hypothesis thus data is normally distributed. Moreover, Cornbach's alpha value =0.771 showed internal consistency among items of questionnaire. Since data is distributed normally, therefore parametric test is undertaken to test hypotheses. We used independent t-test and Pearson's correlation for this study. For the purpose of participant's reliability and credibility, we crosschecked demographic variables with the HR department of 50% of the organisations. The confirmation from HR enabled us to proceed with the data. Lastly, confidentiality and integrity of respondents were maintained throughout research.

4. Results

Descriptive statistic revealed that in present study, males formed majority (51%) lying between 29-40 age bracket, having graduate degree (49.7%), and 3-5 years experience (29%) on par are working at operational level in the I.T sector. However, young females are more active in Pakistan's I.T sector with postgraduate degree.

Table 1:

		Levene's Test for Equality of Variances		T	df	Sig. (2-tailed)	Mean Difference
		F	Sig.				
Affective Commitment	Equal variances assumed	.232	.630	2.52	823	.012	.19819
Normative Commitment	Equal variances assumed	4.14	.042	2.33	823	.020	.18651
Continuance Commitment	Equal variances assumed	.069	.793	2.32	823	.020	.18708
Personal Strain	Equal variances assumed	.004	.950	-.028	823	.001	-.00228
Personal Resources	Equal variances assumed	16.61	.000	4.73	823	.000	.34995
Occupational Role	Equal variances assumed	6.30	.012	.673	823	.001	.05201
Occupational Therapist Role	Equal variances assumed	4.06	.044	1.55	823	.121	.14837

Since, Levene's Test for Equality of Variances reflected, higher value than 0.05 thus only equal variance assumed is included to read findings. Test results confirmed that male and female AC ($p=0.012 < 0.05$), NC ($p=0.02 < 0.05$), and CC ($p=0.02 < 0.05$) are statistically significantly different. Interestingly, females at operational level use personal resources effectively than male employees ($p=0.000 < 0.05$) indicating there is statistically significant difference in the usage of resources by contrasting genders in both; developing and developed economies ($p=0.021 < 0.05$). Moreover, males and females experience stress differently due to their occupational role ($p=0.000 < 0.05$). Additionally, there is statistical significant difference between the causes of stress for males and females ($p=0.000 < 0.05$).

Moreover, through Pearson's correlation, a weak linear relationship of occupational therapist' role is being identified with occupational role and personal resource consumption. Further, job role has moderate positive linear relationship with all antecedents of OC; namely AC (0.923), NC (0.878) and CC (0.821). Additionally, the correlation coefficient is not significantly different from zero between AC and job role ($p=0.008 > 0.01$) while significantly different from zero for CC ($p=0.000 < 0.01$) and NC ($p=0.000 < 0.01$). Nevertheless, personal resources consumption for both gender have moderate linear relationship with AC (0.593), NC (0.612) and CC (0.517) thus indicating that over 50% variations in these antecedents are mainly the pattern of personal resources usage. Furthermore, correlation coefficient is not significantly different from zero between personal resources and AC ($p=0.008 > 0.01$) while highly significantly different from zero for CC ($p=0.000 < 0.01$) and NC ($p=0.000 < 0.01$). Lastly, the correlation coefficient is not significantly different from zero between personal

strain and AC ($p=0.554 > 0.01$), NC ($p=0.943 > 0.01$) and CC ($p=0.817 > 0.01$).

5. Findings and Discussions

The statistical test confirmed that, male and female organisational commitment (AC, NC, and CC) differs to some extent. The funnel approach revealed that London's male workforce has high AC than Karachi's workforce (47% against 39%). Interestingly, females at operational level exhibit higher AC in both, Karachi and London (approximately over 50%). Interestingly, occupational stress affects AC significantly due to organisational stressors. Hence, present findings contradict previous work of Haque and Yamoah (2014) that males demonstrate higher AC. Further, Hemdi (2009) work is opposed by present study as we found that AC is high (69%) among operational level employees. Additionally, role of occupational therapist is more useful considered by London workforce in comparison to Karachi workforce (52% against 37%). Furthermore, majority of London workforce receive moral support (64%) while Karachi workforce gains moral support (58%). However, overall London workforce in comparison to Karachi workforce more actively receives social support.

High NC is evident among male workers in comparison to female workforce, irrespective of age bracket and years of experience. In terms of economies, London's workforce exhibit high level of NC in comparison to Karachi workforce (51% against 36%). In terms of gender ratio, Karachi male-to-female ratio demonstrating NC is (59% against 41%) at operational level while in Karachi (63% against 37%). Hence, findings oppose the previous work of Haque and Yamoah (2014) that cultural-oriented females demonstrate higher level of NC. Additionally, the work of Hemdi (2009) is also opposed because despite no presence of occupation therapist still high level of NC is evident in Karachi. Overall, NC is evident among contrasting economies (63%). Moreover, females in contrast to males (79% against 21%) more prominently exhibit CC. However, females and male equally at operational level in Karachi demonstrated CC (50%) while females in comparison to males showed higher CC in London (66% against 34%). Further, London scores higher CC than Karachi (69% against 31%). Interestingly, CC is least evident among employees at operational level (51%) in comparison to AC and NC (69% and 63%).

Thus, our findings showed that all antecedents of OC (AC, NC, & CC) are comparatively low in Karachi than London. Since, we found that males have high NC while females have high AC and CC thus present findings have striking difference with the work of Haque and Yamoah (2014); Tan and Lau (2012); and Mathieu and Zajac (1990). Moreover, situational commitment is evident among employees at operational level while organisational commitment increases due to social support at workplace. Our findings showed that higher emotional attachment with the organisation enables workers to do well at workplace and social support reduces occupational stress of employees, irrespective of gender. Females deal more effectively with stress in contrast to males do. Furthermore, Karachi's workforce is more vulnerable to stress in comparison to London workforce because of improper use of personal resources. Additionally, study differs from Kumasey et al., (2014) findings because we found females exhibit low stress. Schwarzer and Leppin (1991) findings are confirmed by our study that effective performance is exhibit by employees who are actively gaining workplace support and personal resources. Moreover, females at operational level are more effective in overcoming their stress due to ability to perceive, receive, and use of personal resources. Additionally, males exhibit "adaptive response" when encounter stress at workplace. Thus, we support the previous findings of Sackey and Sanda (2011). Interestingly, there is statistical significant difference between occupational role causing stress for males and females ($P=0.000 < 0.05$). Haque & Yamoah (2014) and Sackey & Sanda (2011) findings are confirmed by our study as striking resemblance are found that organisational support among operational level increases due to moral support.

Our analysis showed that personal factors are more significant for females in comparison to males (57.8% against 42.2%, $p < 0.05$) confirming results are statistically significant. Further, males-to-females ration in Pakistan and UK reflects personal factors causing stress (31.9% against 68.1%) indicating that females are more stressed by personality and family constraints while financial problem stresses males. Hence, our findings oppose work of Fairbrother &

Warn (2003) because in contrast to their findings females due to environmental and organisational factors experience high stress while we found personal factors as leading stressors. Conversely, our findings support the studies of Stranks (2005) and Cicei (2012) that personal factors cause high stress at operational level. Moreover, organisational factors cause more stress to male workers than female workers (59.6% against 39.4%, $P < 0.05$) reflecting results are significantly different. Additionally, organisational factors causes high stress work male workforce in UK in contrast to Pakistani workforce (81.3% against 19.7%, $p < 0.05$) while organisational commitment of females in both economies are affected to some extent by organisational factors. Both, male and females are vulnerable to stress and demonstrate behavioural, cognitive, and physiological symptoms in Pakistan and UK (58% against 48%, $P < 0.05$) reflecting results are statistically significant. However, through funnel approach, we found that organisational factors (job demand and leadership), and environmental factor (economic uncertainty) is stressor for males while interpersonal demands (organisational factor) and environmental factor (technological uncertainty) causes stress for female affecting negatively their organisational commitment.

Additionally, there is no statistically significant difference between consequences faced by males and females in both Pakistan and UK (65.3% against 34.6%, $p > 0.05$) however; males demonstrate physiological symptoms while females often exhibit behavioural symptoms. This new finding contributes to fast-faced I.T industry.

6. Conclusion

It is confirmed that causes vary for males and females in both countries. Potential impact of stress is high on the organisational commitment of males in contrast to females. Additionally, organisational commitment and employees' performance of Pakistani workforce is affected more by stress than UK workforce due to low social support at workplace and role of occupational therapist. For females, personal factors (personality, family, and financial problems) are common stressors while organisational factors (leadership, role demand, and organisational structure) cause high stress to males. Males show high physiological symptoms while females demonstrate high behavioural symptoms. Social support at workplace is reason for high organisational commitment among females in contrast to male employees.

Males exhibit high stress due to inadequate use of personal resources and low social support. Pakistani workforce has higher stress than UK workforce does do. Females have high AC and CC while males have high NC. Overall, UK workforce scored high AC, NC, and CC than Pakistani workforce. Furthermore, CC is least evident at operational level in both countries' I.T sector. Organisational commitment increases due to high level of support at workplace and low occupational stress. Effective usage of personal resources, availability of emotional and moral support, and dominant role of occupational therapist are reason for high organisational commitment among UK's workforce. Hence, it is evident that causes stress vary for contrasting genders significantly while consequences vary to limited extent. Additionally, it is confirm that there exist a relationship between occupational stress and organisational commitment of employees working at operational level in contrasting economies.

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