

## **The Impact of Stressors on Organizational Commitment of Managerial and Non-Managerial Personnel in Contrasting Economies: Evidences from Canada and Pakistan**

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### **ABSTRACT**

This paper examines a potential impact of varying stressors on the organisational commitment of employees at middle and operational levels in Pakistan and Canada's IT sectors. For this research, we adopted a mixed two-stage research method, which included an initial qualitative study with open-ended questionnaires, resulting in the development of hypotheses, followed by the quantitative analysis aimed at testing these outcomes for statistical significance. Overall, 77 recorded Skype interviews with representatives of 13 organisations were conducted. Findings revealed that middle-level employees are less vulnerable than operational level employees in both countries; however, stressors significantly affect the organisational commitment of non-managerial employees in a negative way in Pakistan, and more so than those in Canada. Stressors are constructive for managerial employees in enhancing their affective commitment (AC), while they negatively affect non-managerial employees' continuance commitment (CC). Organisational stressors have a considerable positive impact on male managers' normative commitment (NC), while female employees' continuance commitment remains normal at both levels. Additionally, organisational factors highly affect the organisational commitment of managerial employees in a positive way, while personal factors affect non-managerial employees' organisational commitment negatively. In contrast to Canada, Pakistan has a higher degree of stress. However, the consequences of stress are similar in both countries.

*Keywords: organisational factors; personal factors; organisational commitment; managerial employees; non-managerial employees; gender*

## I. INTRODUCTION

Occupational stress has increased in recent times despite various technological advancements and HR policies for reducing work-related pressure. Both well-being and health are negatively affected by stress (Stranks, 2005). Although social support is a common phenomenon in developed economies, it is still less evident in developing countries (Sackey and Sanda, 2011). Still, the role it offers in reducing stress and increasing organisational commitment is not very visible. Furthermore, from literature at hand, different types of stressors are identified, but there is still no conclusive evidence regarding the impact of distinctive stressors on employees working at distinctive levels of management in organisational settings.

Additionally, there is no conclusive evidence relating to a comparative study to measure the types of stressors affecting the organisational commitment in contrasting economies. Since human capital is a key for organisational growth and success (Sackey and Sanda, 2011), it is effective to measure the impact of personal stressors, organisational stressors, and environmental stressors on the sustainability of human capital. Additionally, the human capital at both middle and operational levels is vital for the organisation. Empirical research has confirmed that age, class, and gender have been significantly affected in adverse ways by unbalanced roles, organisational culture, socio-cultural barriers, and gender discrimination (Moghadam, 2004; Sanda and Sackey, 2010; Haque and Yamoah, 2014). Thus, we further extend our research by investigating the variation among employees at distinctive layers of management to explain the role of different stressors on levels of organisational commitment.

The rationale for comparative analysis is based on the inclusion criterion. We intend to explore the relationship between variables of interest in two contrasting (developed versus developing) economies in order to assess and evaluate if there exist any variation in both distinctive economies. For this purpose, we opted for one developed and one developing country. In addition, since the impact of stressors vary from person to person, organisation to organisation, and sector to sector, one could argue that in the context of contrasting economies, it might vary to a certain extent (Haque *et al.*, 2016; Haque, Faizan, and Cockrill, 2017). Exploring the stressors in one particular type of economy would have limited the knowledge to countries with that particular type of economic development, whereas a comparison of contrasting economies would offer a superior knowledge by finding the impact of variables in more depth and increase the generalisation aspect in broader sense (Goodrick, 2014; Haque and Aston, 2016; Gustafsson, 2017). In other words, the knowledge will be enhanced in a cross-cultural context rather than region-specific context. Moreover, whilst there are cultural differences, there is also an overlap of practices and norms existing in contrasting economies. Therefore, the IT sector practitioners and personnel operating in both types of economies rather than a particular type of economy could ideally use the knowledge gained from this study. In other words, the generalisation of findings will enhance the knowledge in a broader context by using comparative analysis. Thus, it will contribute to comparative knowledge in contrast to region-specific knowledge.

We extended our parameters by looking into economies experiencing growth in terms of contribution towards GDP after the 2008 global economic recession. Pakistan and Canada are two contrasting economies where we found certain similar trends and patterns of operations. Pakistan has a low human index while Canada's is twice as high,

but both are experiencing serious and pervasive recruitment challenges in the IT sector (Balagam and Farriduddin, 2008; Holmes, 2013).

Additionally, Canada is experiencing “brain drain” due to a growing shortage of software engineers and computer developers (Holmes, 2013). Similarly, Pakistan's potential talents from the IT field are leaving their country to seek job opportunities in the Middle East, Europe, and other places (Ashraf and Caldwell, 2017). Interestingly, from the above studies, we found that one out of 10 IT firms are able to meet the current IT needs in both countries. These countries are distinct in terms of their economies, but their respective IT sectors contain similar features. In addition, we found that although there is a difference in the economic growth and development, the role and job opportunities of females are significantly lower in both countries compared to males. Interestingly, in Canada, women account for 15.3 percent of the IT workforce (Hango, 2015), while in Pakistan, 14.7 percent of the total of IT workforce are women, irrespective of the layers of management (Khan, 2015).

These different facts indicate that both countries have many similar trends and features in IT sector. Therefore, it will be interesting to compare these distinctive economies sharing similar characteristics in the IT industry, and measure if there is any variation of the organisational commitment of managerial and non-managerial employees. Thus, this paper aims to investigate the impact of varying stressors on the organisational commitment of managerial and non-managerial employees of the IT sector in the aforementioned two contrasting economies.

## II. LITERATURE REVIEW

In a fast-paced business environment, social support programmes are commonly used for sustaining human capital (Rastogi, 2000). Human capital is a result of innovation, creativity, supportive network, competitiveness, and autonomy (Rastogi, 2000; Kulvisaechana and Stiles, 2003). Thus, it is essential from the organisation's perspective to ensure intellectual capital attained at both operational and middle levels where stress is evident in job responsibilities. At work, supervisors, peers, and colleagues attain social support (Sackey and Sanda, 2011; Nair, Aston, and Kozlovski, 2017). It helps the employees in overcoming stress and in strengthening their organisational commitment (McGuire, 2007; Sackey and Sanda, 2011; Haque, Aston, and Kozlovski, 2016). Numerous studies identified that the level of support affects job satisfaction, performance, and work-related stress (House, 1981; Hurlbert, 1991; Park *et al.*, 2004; Sackey and Sanda, 2011; Kumasey *et al.*, 2014). However, there is no conclusive evidence on how effective the support is for employees working at different levels of management in contrasting economies. Furthermore, Sackey and Sanda (2011), Haque and Aston (2016), and Haque *et al.* (2016) confirm that female employees use social support more effectively to overcome stress in contrast to males operating at middle and lower levels.

Employees' performance tends to increase due to a system of stress reduction in the workplace (Kumasey *et al.*, 2014). Conversely, Sackey and Sanda (2011) argued that environmental stressors reduce when social support is present in the workplace. However, the studies of Sackey and Sanda, (2011) and Kumasey *et al.* (2014) used (structured survey questionnaire) quantitative methods to examine the role of stressors, social support, and sustenance of human capital. Therefore, we used a different approach

to gain qualitative aspect by exploring the phenomenon of variables of interest. Stressors at the operational level affect males less than females (Kumasey *et al.*, 2014). On the other hand, Sackey and Sanda (2011) found that all types of stressors affect employees equally at different levels of management. Moreover, physiological reactions, including depression, anxiety, well-being disturbance, and health deterioration, are often the result of stress (Kahn and Byosiere, 1990; Sackey and Sanda, 2011). Additionally, operational level female workers use social support more effectively than middle level female workers (Sackey and Sanda, 2008). Further, stressors affect males more adversely than females on both operational and middle levels (Parry and Shapiro, 1986; Sackey and Sanda, 2011).

Organisational commitment is the psychological connection between employees and their organisations (Haque and Yamoah, 2014; Haque and Aston; 2016; Haque *et al.*, 2016). Literature confirms affective commitment, normative commitment, and continuance commitment as three distinctive antecedents of organisational commitment (Mowday *et al.*, 1979; Allen and Meyer, 2000). “Affective commitment is emotional attachment of employees towards organisation as he/she likes to be affiliated with same the organisation by considering organisational problems as his/her own problems” (Allen and Meyer, 2000; Haque and Yamoah, 2014). “Obligatory beliefs and feelings to be loyal towards his/her own organisation among employees is known as normative commitment” (Haque and Yamoah, 2014). Lastly, “the willingness and desire of individual to stay with the same organisation is regarded as continuance commitment” (*ibid*).

Operational level employees demonstrate high normative commitment due to social support while middle level employees demonstrate high affective commitment due to emotional attachment with the organisation (Sackey and Sanda, 2011; Haque and Yamoah, 2014). Conversely, non-managerial level employees show higher affective commitment than managerial level employees (Hemdi, 2009). Stranks argued that personal factors, including personality, family, and financial problems, affect employees at all levels. However, there is no evidence that personal stressors affect employees working in different levels of management in contrasting economies. Additionally, the environmental factors, including political uncertainty, economic uncertainty, and technological uncertainty, are adversely affecting the working efficiency of employees (Stranks, 2005). Moreover, organisational factors including, job demand, leadership, life cycle, interpersonal relationship, and task demands, cause stress for employees (Stranks, 2005). However, there is no conclusive evidence regarding the varying stressors affecting the commitment of employees at middle and operational levels.

### III. RESEARCH METHODOLOGY

“In-depth mixed research offers holistic explanation through comparative analysis in order to evaluate unforeseen features about fresh occurrence” (cited from Miles and Huberman, 1994). We applied the purposive sampling technique to this cross-sectional study to select managerial and non-managerial position employees from Pakistan and Canada. A total of 77 employees (35 from Canada and 42 from Pakistan) working in 5 Canadian and 8 Pakistani software firms were interviewed through semi-structured interview questions. To investigate specific aspects or set of properties, researchers in the social science often use purposive sampling (Louangrath, 2013). We explicitly acknowledge that purposive sampling is not ideal for the analysis of statistical

significance as it can per se be prone to bias and as such, compromise the research validity (Wijnhoven, Ehrenhard, and Kuhn, 2015). However, the accuracy of the application of this data collection technique in inferential statistics has been shown tolerable subject to proper safeguards against bias (de Munnik, Dupuis, and Illing, 2009; Wijnhoven *et al.*, 2015). Purposive and convenient sampling methods have been deployed in quantitative research when probability sampling proved impractical or costly due to the limited access to informants, high non-response rates or other factors complicating randomisation (Wijnhoven *et al.*, 2015). To minimise bias, we used stratification to fairly represent all the major groups of respondents, and we furthermore ran the Shapiro-Wilk test to ensure that the data collected is from a normally distributed population (Sekaran, 2003; Field, 2009). Since p-value is greater than alpha value, the null hypothesis stating that the data is normally distributed cannot be rejected ( $p=.084 > 0.05$ ). In accordance with the outcome of the Wilk-Shapiro test, the population in question is normally distributed, and hence, the purposive sampling will not distort the statistical significance analysis carried out in this paper (Louangrath, 2013).

The detailed analysis of 77 interviews reflected that the investigation process had reached a "saturation point". In other words, interviews were included until the continuous repetition of answers began and no new information was being obtained. Morse (2000) argued that a range of over 30 participants is sufficient in determining such a saturation point, whereas Creswell (2013) suggests 30-50 interviews enable researchers in reaching the saturation point for comparative analysis. Since this study has 77 participants, which is sufficient to draw a conclusion. Furthermore, after reaching 77 interviews, we found no new information was incurring thus it indicated that we reached saturation point in this study. Therefore, we drew the conclusion from the data at hand. Through emails, formal approval attained from Human Resources of targeted organisations for participation in this study. The emails explained the research purpose and details of interviews, including approximate time, recording, and confidentiality.

A total of 41 organisations were approached; however, only 13 were approved, indicating a 31.7 percent response rate. Human Resources departments arranged interview sessions via Skype based on participants' convenience and willingness. Most of the interviews ranged between 3 and 5 minutes. We used the funnel approach in interviews by starting with general questions, followed by attitudinal and behavioural questions about variables of interest. Themes were refined due to the results of our four pilot interviews. We used 'Listen N Write' software for verbatim transcription. Thematic network analysis framework proposed by Attride-Stirling (2001) was used for systematic data analysis. Coding and proportion done through Microsoft Excel 2013 integrated package to ensure verbatim data was split into manageable and meaningful sections (Attride-Stirling, 2001).

#### IV. QUALITATIVE ANALYSIS

The data analysis revealed that our sample was relatively balanced in terms of gender and level of management. Overall, 52 percent from Canada and 48 percent from Pakistan are males. The average working experience of our sample is one to three years. Marketing, office administration, HR, customer care services, finance, content-writing, and IT support employees formed our sample size. The findings revealed that male workers at the operational level have higher depression and anxiety in both countries.

However, the common stressors for the Pakistan workforce include job demand, leadership, interpersonal relations, economic uncertainty, technological uncertainty, family, and financial problems. Conversely, the Canada workforce is often stressed due to personality issues, interpersonal roles, task demand, leadership, organisational structure, and role demand. This could be due to the age of workers and work experience as Pakistan has a young workforce, while Canada has much more experienced workers. It is evident that occupational stressors affect organisational efficiency negatively. However, employees at the operational level likely have high chances of health deterioration, anxiety, and depression. Interestingly, overall 90 percent of the managerial level employees confirmed that they find stress constructive for working efficiently as it motivates them.<sup>1,2,3</sup> In addition, organisational stressors positively affect the majority of the managerial position employees (68 percent) more often. Furthermore, males are less vulnerable to stress than females in both countries, but the level of efficiency under stress drops fractionally in Pakistan.

Additionally, adverse impacts of stressors are evident for the non-managerial level employees.<sup>4,5,6</sup> Interestingly, all types of stressors (personal, organisational, and environmental stressors) negatively affect the level of efficiency and performance of non-managerial level employees. Moreover, motivation and accuracy in work are disruptive by showing behavioural and physiological symptoms, such as frustration, depression, absenteeism, muscle pain, headaches, and aches.<sup>7,8,9,10</sup> Interestingly, in both countries, all types of stressors are evident at the operational level, and they hinder employees' organisational commitment by exhibiting physiological and behavioural symptoms. Furthermore, the accuracy of executing tasks is reduced by 20 percent on average for operational level employees under stress in both countries. However, the comparison in terms of economies revealed that managerial level employees in Canada are more adaptive under stress while Pakistan workers are reactive. On the other hand, operational level employees are vulnerable to stress, but coping ability is higher among Canadian workers than Pakistani workers due to effective social support programmes. This study examined the variation among stressors for employees at contrasting levels and the potential impact on their organisational commitment and symptoms exhibited by them when facing stress in an organisational setting. Therefore, 23 percent of the Canadian workforce dislikes long working hours, while 21 percent of the Pakistani workforce dislikes excessive control. In Canada, workers at the operational level disliked long working hours and confirmed that it is due to organisational stressors (job demand, leadership, organisational structure). However, in Pakistan, that excessive control was also linked with organisational politics caused by personality clashes, while environmental factors, such as technological uncertainty, increase control of management over employees in all matters. Thus, the present findings have a striking difference to the work of Lim and Teo (1996).

#### **A. Social Support Inside Organisations**

The majority of respondents (55 percent) from Canada and Pakistan working at the managerial level agreed that support enables them to perform well and deal with organisational stressors. Conversely, the operational level employees agreed that they do perceive social support reduces stress, but indicated that they did not receive any social support to deal with all three unique types of stressors. Interestingly, the combined

sample showed females scored higher than males at managerial positions (63:37), while social support is less evident at the operational level for Pakistani workers in contrast to Canada (31% against 69%). In relation to stressors, it is evident that Canada's managerial level employees have found social support effective for dealing with organisational stressors, mainly leadership, the life cycle of the organisation, interpersonal relationships, and task demands. Conversely, non-managerial employees found social support effective in dealing with personality, task demands, and interpersonal relationships. On the other hand, the Pakistani managerial workforce confirmed that organisational stressors, mainly task demand and role demand, were dealt with by social support, while non-managerial level employees found social support ineffective in dealing with any type of stressors. Interestingly, the social support further divided into emotional and moral support to explore the phenomenon in more depth.

Results showed that all types of stressors negatively affect the working efficiency of non-managerial employees, and that despite social support in Pakistan, neither emotional nor moral support positively influences their overall organisational commitment. However, Canada's workforce at the operational level benefits from social support programmes. Moral support especially motivates them to exhibit a high level of performance. Interestingly, managerial level employees in both countries receive a high level of emotional and moral support that enables them to deal with all types of stressors. Additionally, personal stressors, such as family and financial stressors, among males are addressed to some extent by moral support in the workplace, while the personality stressor is dealt with among females through emotional, as well as moral support, at the operational level in both countries. Furthermore, environmental stressors such as technological uncertainty affect females, while political and economic uncertainty creates stress for males at the operational level. Moreover, moral and emotional support does not help employees in overcoming these stressors.

At the managerial level, employees are using moral and emotional support effectively in both countries to overcome all types of stressors. However, females addressed organisational factors, such as interpersonal relationships, leadership, task demands, role demands, and life cycle of the organisation, in contrast to males at managerial positions in both countries (68 percent against 32 percent respectively). To some extent, the findings support the work of Sacky and Sanda (2011) who revealed that social support helps employees in dealing with stress. Additionally, there are new findings from the present study that conclude that social support works differently with types of stressors on contrasting levels of management in both countries.

## **B. Creativity and Innovation**

Additionally, creativity and innovation of employees at both levels are affected by personal, organisational, and environmental factors in Pakistan and Canada.<sup>11,12,13</sup> Moreover, at the operational level stressors in both countries more likely affect employees' innovation and creativity. Additionally, behavioural, as well as physiological symptoms, are exhibited by employees at both levels of management when their creativity and innovation are affected adversely by different types of stressors.<sup>14,15,16</sup> Importantly, male managers are less innovative and creative than female managers in both countries. Similarly, males are less creative and innovative than females at the operational level. Hence, our findings support Kanter's (1977) argument. There is no

conclusive evidence found regarding specific types of symptoms shown by contrasting genders at distinctive layers of management in different countries.

The fact that male managers are people-oriented, while female managers are keen to lead and direct in Pakistan, confirms that our findings contradict Tannen's (1990) study. Moreover, in contrast to Pakistan, Canadian workers at both levels have higher creativity and innovation by demonstrating professionalism and competitiveness (58 percent against 42 percent). Thus, our findings support the previous work of Rastogi (2000). Crucially, this study confirmed that low employee turnover exhibits managers and non-managers having the competitiveness and adequate training and thus confirms the past work of Kulvisaechna and Stiles (2003) and Rastogi (2000).

### **C. Job Loyalty**

Interestingly, the findings showed that stressors affect the job loyalty of employees at distinctive layers of management in both Pakistan and Canada. The results revealed that the majority (65 percent) of the total sample confirmed that despite having personal and organisational stressors, they value and demonstrate loyalty towards their jobs.<sup>17,18</sup> However, the in-depth funnel approach revealed that stressors affect job loyalty adversely at the operational level in contrast to the middle level (54 percent against 46 percent). Moreover, females demonstrate higher job loyalty towards the organisations in both Pakistan and Canada at the managerial level. Overall, managerial position employees (61 percent) in Canada showed job loyalty, while in Pakistan it was higher (80 percent). Interestingly, non-managerial level employees in both countries' IT sector have relatively low job loyalty, reflecting low continuance commitment. In addition, operational level employees' job loyalty is less evident in Pakistan in contrast to Canada (68 percent against 32 percent). This could be due to the organisational support programmes, personal stressors, better job opportunities, and other environmental factors.

### **D. Organisational Commitment**

The results showed that stressors vary for managerial and non-managerial employees in the two economies. Interestingly, there is evidence that the role of social support is effective in dealing with all types of stressors for both layers of management. However, social support is more constructive for employees in Canada than in Pakistan, in particular for females (65 percent against 35 percent). Thus, it is evident that social support programmes are vital to sustaining human capital in the IT sector of the two economies. Furthermore, combined samples reflect that personal factors influence the affective commitment of employees adversely. In addition, at the operational level, personal stressors more often affect males' affective commitment than it is for female employees, especially financial and family problems as leading stressors (52 percent against 48 percent).

Overall, Canada's workforce scored higher affective commitment in contrast to Pakistan's workforce (55 percent against 45 percent). Thus, to some extent, this study supports the work of Haque and Yamoah (2014) while it contradicts the previous findings of Kumasay *et al.* (2014). Moreover, the physiological and behavioural consequences among males are highly visible in contrast to females at the operational level. Furthermore, organisational stressors, mainly task demands, interpersonal relationships,

life cycle of the organisation, and leadership styles, affect the normative commitment of males positively in contrast to females at the middle level in the two economies (57 percent against 43 percent). Interestingly, organisational stressors significantly affect continuance commitment of females at both levels of management in the two economies. However, the overall stressors are constructive for managerial level employees, while they negatively influence the commitment and performance of employees at the operational level in the contrasting economies.

## V. HYPOTHESES

After exploring the phenomenon in-depth, we opted to evaluate it with the statistical significance in order to ensure findings generalisation and transferability to assist organisations to develop a policy better dealing with stressors. Thus, we developed our hypotheses by following Sekaran and Bougie's (2012) approach, "hypothetico-inductive-deductive" model. As per this method, once the relationship was evident in the qualitative perspective, we have run the statistical test to gain statistical significance about causes and consequences of stressors on organisational commitment in terms of gender, level of management, and economies of interest.

In the gender perspective, Sacky and Sanda (2011) found that females use social support more efficiently in the workplace and therefore are less vulnerable to stressors in contrast to males. Moreover, this study also found females less stressed in contrast to males (68 percent against 32 percent). Additionally, it is evident that varying stressors affect males and females' organisational commitment in a distinctive manner. As evident, females have higher affective and continuance commitment in contrast to males. Females scored higher than males in terms of organisational commitment (57 percent against 43 percent). Furthermore, in this study, we found that personal stressors affect females often, while organisational stressors affect males. The study of Haque and Aston (2016) also confirmed this variation.

H1 formulation logically results from the above argument. For the sake of conciseness, only alternative hypotheses are stated here while the significance analysis includes the rejection of null hypotheses. Hence, we developed an alternative hypothesis:

*Hypothesis 1: The distinctive stressors affect the organisational commitment of males and females differently.*

In this study, we found a higher variation in the consequences of stressors. There were mix responses from both males and females about the type of effects on their organisational commitment. All types of consequences, such as behavioural, cognitive, emotional, and physical symptoms, were evident in this study but no majority proportion was obtained to distinguish one from the others. In addition, Haque and Aston (2016) and Haque et al. (2016) also had found no visible evidence to distinguish the variation in the types of stress effects in terms of gender.

H2 formulation logically results from the above discussion. We developed an alternative hypothesis, and significance analysis includes the rejection of the null hypothesis.

*Hypothesis 2: The consequences of stress are different for male and female employees.*

In the present study, we found variation in the organisational commitment of managerial and non-managerial employees. Interestingly, 90 percent of managers find stressors constructive, while less than 30 percent of operational level employees find it useful. Moreover, organisational stressors affect managerial level employees' efficiency, while non-managerial employees' efficiency is negatively affected due to personal stressors. In addition, the study of Haque and Aston (2016) argued that managers have higher stress in contrast to non-managers. Interestingly, Kumasey *et al.* (2014) and Haque *et al.* (2016) found that managers have higher organisational commitment than non-managers, while Haque, Aston, and Kozlovski (2016) also found that female managers use social support more effectively in comparison to male managers and therefore have higher organisational commitment.

H3 formulation logically results from the above argument and discussion. We developed an alternative hypothesis, and significance analysis includes the rejection of the null hypothesis.

*Hypothesis 3: The distinctive stressors affect the organisational commitment of managers and non-managers differently.*

Moreover, in terms of levels of management, we found variation in the effects of stress, but there is no conclusive evidence about the prominent type of effects of stressors prevailing at a particular level of management. Interestingly, mixed responses incurred from both layers of management about behavioural, cognitive, emotional, and physical symptoms exhibited by employees under stress. On the other hand, no conclusive evidence was found about the specific type of stress consequences experienced by employees working at particular levels of management by Haque and Aston (2016) and Haque *et al.* (2016).

H4 formulation logically results from the above argument and discussion. We developed an alternative hypothesis, and significance analysis includes the rejection of the null hypothesis.

*Hypothesis 4: The consequences of stress are different for managerial and non-managerial employees.*

From the discussion, we found that common stressors for the Pakistani workforce and the Canadian workforce varied. In addition, the Canadian workforce uses it more efficiently in comparison to the Pakistani workforce. Additionally, we found that in both countries over 50 percent agreed that social support is effective in dealing with stressors; however, 63 percent of female managers use it more constructively in comparison to male managers. On the other hand, the study of Haque and Aston (2016) argued that a developed country's workforce is less vulnerable to stress in contrast to a developing country's workforce. Interestingly, Haque and Aston (2016) maintained that a developed country's workforce has higher organisational commitment and lower stress in contrast to a developing country's workforce. Additionally, Haque, Aston, and Kozlovski (2016) found that a developed country's workforce uses social support more effectively in comparison to a developing economy's workforce and therefore has a higher organisational commitment.

H5 formulation logically results from the above argument and discussion. We developed an alternative hypothesis, and significance analysis includes the rejection of the null hypothesis.

*Hypothesis 5: The distinctive stressors affect the organisational commitment of Pakistan and Canada's workforces differently.*

In the present study, there is no conclusive evidence regarding the consequences of results differing for employees in certain types of economy. There is variation evident in the consequences of stress in both Pakistan and the Canada. Furthermore, Haque and Aston (2016) did not find any significant variation in the types of consequences of stress in contrasting economies. Hence, there is no conclusive evidence from the literature or in the present study about consequences of stress.

H6 formulation logically results from the above discussion. We developed an alternative hypothesis, and significance analysis includes the rejection of the null hypothesis.

*Hypothesis 6: The consequences of stress are different for employees in Pakistan and Canada.*

The above six hypotheses are split into two parts; H1-H4 is consolidated data by considering gender perspective and management layers, while H5-H6 is dealing with the above comparison in terms of economies.

From Table 1, we found that in regards to H1, there is statistically significant difference in the distinctive stressors affecting the organisational commitment of contrasting gender. Since P Value is less  $\alpha$  value, we reject null *Hypothesis 1*. The derived value is very highly significant. The evidence shows that females are less vulnerable to stress due to social support in the workplace. Females tend to be multi-tasking, which could be a reason for their ability to deal with various stressors at the same time. Interestingly, the results of H2 showed P Value is greater than  $\alpha$  value [ $P > \alpha$ ], thus, we do not reject null *Hypothesis 2*. In other words, the derived value is not significant, hence, there is no statistical difference in the consequences of stress experienced by contrasting genders. However, the in-depth analysis revealed that females are less vulnerable to stress, thus, they face fewer consequences in contrast to males. Again, this could be due to social support effectiveness as females have received social support better than males and therefore the consequences are lower. However, there is not a significant difference because both genders demonstrate behavioural and physiological symptoms.

The result of H3 reflects that value is highly significant. Since it is less than  $\alpha$  value, we reject null *Hypothesis 3*. In other words, managers and non-managers' organisational commitment is affected distinctively by varying stressors. Importantly,

**Table 1**  
t-test results for hypotheses

Hypothesis	Differentiator	Gender	N	Mean	Variance	Df	t Stat	P(T<=t) two-tail	t Critical two-tail	Decision
<b>H1:</b> The distinctive stressors do not affect the organisational commitment of males and females differently	<b>Gender</b>	Male	43	0.5553	0.2496	73	-0.23	0.0001	1.7813	Reject
		Female	34	0.5992	0.2376					
<b>H2:</b> The consequences of stress are not different for males and female employees.	<b>Gender</b>	Male	43	0.5168	0.2525	73	2.07	0.8013	1.9124	Do not Reject
		Female	34	0.3127	0.2148					
<b>H3:</b> The distinctive stressors do not affect differently the organisational commitment of Managers and Non-Managers.	<b>Management layer</b>	Middle Level	20	0.5123	0.2516	30	1.81	0.0113	2.0434	Reject
		Operational	57	0.2655	0.1619					
<b>H4:</b> The consequences of stress are not different for Managerial and Non-managerial employees.	<b>Management layer</b>	Middle Level	20	0.6921	0.2160	30	2.37	0.0696	2.0343	Do not Reject
		Operational	57	0.2612	0.2177					
<b>H5:</b> The distinctive stressors do not affect differently the organisational commitment of Pakistan and Canada workforces	<b>Type of Economy</b>	Pakistan	43	0.5689	0.2535	75	1.93	0.0009	1.7813	Reject
		Canada	34	0.4722	0.2102					
<b>H6:</b> The consequences of stress are not different for employees in Pakistan and Canada.	<b>Type of Economy</b>	Pakistan	43	0.5945	0.2734	75	2.82	0.0922	2.0343	Do not Reject
		Canada	34	0.3887	0.2201					

the in-depth analysis showed that organisational stressors are more constructive for managers, while personal stressors negatively influence non-managers in both countries. On the other hand, we tested the variation in the consequences of stress for managerial and non-managerial position employees. Since P Value is greater than  $\alpha$  value [ $P > \alpha$ ] there is no significant relationship. Hence, we do not reject null *Hypothesis 4*. Our earlier findings are supported by statistical tests that show consequences do not vary for managers and non-managers in the IT sector of the two countries.

In regards to types of economies, we found that varying stressors in the two countries extremely significantly affect the organisational commitment of a workforce. Since derived P Value is less than  $\alpha$  value, we reject null *Hypothesis 5*. In other words, there is a high statistical difference in the organisational commitment of the two contrasting countries' workforces due to varying stressors. The in-depth analysis revealed that different types of stressors affect the Pakistani workforce's organisational commitment more than that of the Canada's workforce. This could be due to the organisational life cycle, organisational structure, and organisational leadership because in our analysis we found that personal and organisational stressors were higher in newly formed organisations. Furthermore, we tested the variation in the consequences of stress in contrasting economies, and the results showed that the derived value is not significant, therefore, we do not reject null *Hypothesis 6*. In other words, there is no statistical difference in the consequences of stress experienced by contrasting economies. Nevertheless, through the thorough analysis we confirmed that although there is no difference in the consequences of stress in the two contrasting countries, the degree of stress is higher in Pakistan (developing economy) with respect to that in Canada (developed economy).

## VI. CONCLUSION

All types of stressors affect the workforce in both types of economies, but organisational stressors are more evident for managerial level employees, while all types of stressors influence operational level employees. Organisational stressors are positively affecting the organisational commitment of employees in managerial positions. Moreover, females are highly vulnerable to stress in contrast to their counterparts. Noticeably, the efficiency and performance of employees in Pakistan are likely to decline due to stress, whereas in Canada social support programmes help employees to deal with various types of stressors. Operational level employees' performance, organisational commitment, and efficiency decrease due to stress, leading to physiological and behavioural consequences.

Managerial level employees are more adaptive and use social support programmes constructively in contrast to non-managerial employees in both countries. In addition, females use social support more effectively in dealing with stress compared to males in managerial positions. Moreover, the emotional and moral support in the workplace is effective in addressing all types of stressors. However, managerial position employees demonstrate both types of support while non-managerial level employees are less efficient in dealing with stress due to inadequate emotional support from management. Stressors significantly and negatively affect the creativity and innovation of operational level employees in contrast to those of middle level employees. Both managerial and non-managerial employees exhibit behavioural and physiological symptoms such as a disturbed eating habit, disturbed sleep, depression, nausea, memory problem, irritability,

and using alcohol or cigarettes to relax under stress in Pakistan and Canada. Interestingly, females are more innovative and creative in contrast to males at both the operational and middle levels of the organisation.

Personal factors influence negatively the affective commitment of employees; however, males' affective commitment is higher in contrast to their counterparts at the operational level. Additionally, Canada's workforce demonstrates higher affective commitment in comparison to Pakistan. Males' affective commitment with respect to that in females' is highly affected by the physiological and behavioural consequences at the operational level. Additionally, organisational stressors affect male employees' normative commitment in contrast to females in a positive manner. Moreover, the organisational stressors significantly affect females' continuance commitment in managerial and non-managerial positions in both countries in a positive way.

From the results, it is evident that stressors vary for managerial and non-managerial position employees. All types of stressors positively affect the performance, efficiency, and organisational commitment of managerial level employees while they have adverse effects on non-managerial positions in contrasting economies. However, the consequences do not vary for managers and non-managers in contrasting economies. Furthermore, there is no evidence of variation in the consequences of stress in terms of gender in either country.

Finally, the types of stressors affecting the Pakistani workforce and the Canadian workforce differ, as we found that for Canadian workers, the main stressors are those organisational, while personal stressors most often affect Pakistani workers. Stress negatively affects the organisational commitment of the Pakistani workforce compared to that of the Canadian workforce. Nevertheless, there is not much difference in the consequences of stress in both countries.

#### ENDNOTES

1. "Stress brings the best out of me."
2. "Using my own imagination more is due to stress."
3. "A little stress is a motivator for me to increase my efficiency."
4. "I think too much and it is not good so I try to calm myself by sharing my problems with my friends."
5. "When I am stress I cannot concentrate."
6. "I think I even make mistakes in things I do daily when I feel pressure."
7. "I feel frustrated when I am stressed."
8. "A lot of headache."
9. "There is muscle pain and continuous headache."
10. "It is extremely terrible, it gets on my nerve. I lose my temper but only sometimes."
11. "I cannot express my creativity due to my domestic issues."
12. "My supervisor controls too much so I find it difficult to be as creative as I would have like to."
13. "You can only be creative or innovation when you are provided right type of equipment"
14. "My head badly pounds when I am unable to be expressive."
15. "I eat more when I am restricted to specific themes. I feel disappointed."

16. "My temples and neck usually feel pain when I am asked to use same old methods again and again."
17. "Well stress is there but it does not divert me from my work."
18. "Sometimes my family issues are too serious but in professional environment, you learn to deal with them. You don't simply quit."

\* The Interview questionnaire is available from the authors.

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