MANAGERIAL CHALLENGES FOR SOFTWARE HOUSES RELATED TO WORK, WORKER AND WORKPLACE: STRESS REDUCTION AND SUSTENANCE OF HUMAN CAPITAL

Haque A.U. Oino I. [*]

Abstract: The study aims to assess work, worker and workplace challenges for software houses' management in Canada and Pakistan, specifically exploring stress reduction and sustenance of human capital through social support programme. Study focuses to attain the gender and contrasting management level perspective. The managerial literature from four decades about organisational commitment, occupational stress, and social support at workplace was included to gain qualitative perspective. Total 67 respondents from private IT firms in Karachi and Toronto were interviewed using purposive and convenience sampling technique. It is evident that stress reduction and employee retention are the biggest challenges for IT firms. It has been evaluated that females are less vulnerable to stress as compared to males due to effective use of social support programme. Findings revealed that females received and perceived emotional support better than their counterparts do. Additionally, managerial position employees have lower stress and higher overall commitment as compared to non-managerial positioned workers. In terms of economies, Toronto has lower stress than Karachi workforce. Interestingly, female managers have higher normative and continuance commitment; while, male managers have higher affective commitment. The findings confirmed that overall stress level, causes, and effects vary in terms of gender in both countries. However, in contrast to Canada (developed economy); higher stressors exist in Pakistan (developing economy).

Introduction

There are several types of challenges faced by managements related to work, worker and workplace. However, the managerial literature has hinted towards the occupational stress and retention of human capital as one of the biggest challenges for fast paced businesses (Ashraf, 2017; Haque et al., 2018; Holmes et al., 2013). Occupational stress is exceeding at workplace despite the adaption of modern means and technology (Haque et al., 2016). There are some evidences regarding the

[*] **Adnan ul Haque,** Doctorate of Business Administration, University of Wales Trinity Saint David, United Kingdom, Faculty of Business and Management, DBA, **Isaiah Oino,** PhD, Coventry University, United Kingdom, School of Economics, Finance and Accounting
✉Corresponding author: adnan@sribp.com
✉ac3497@coventry.ac.uk

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

2019
Vol.19 No.1

use of social support programme at work for catering stress (Sackey and Sanda, 2011). The organisations sustain human capital through organisational commitment; therefore, it ensures that the workers are committed towards work and workplace (Sackey and Sanda, 2011). Hence, it is significant to understand the effectiveness of social support in reducing stress and sustaining human capital at workplace. However, there is no conclusive evidence about the variables of interest in comparative mode, specifically considering distinctive types of economies. Interestingly, a number of studies has identified organisational culture, gender discrimination, socio-economic barriers, and unbalanced roles as reasons for no or slow career growth and progress for particular gender, age, and class (Sackey and Sanda, 2011; Moghadam, 2004; Haque and Yamoah, 2014). Moreover, there is a lack of evidence regarding the female progression within business environment in Pakistan (Faizan and Zehra, 2016). Additionally, after recession, Pakistan has experienced high employee turnover in private firms. It also reflected that there is visible inefficiency in sustaining social and intellectual capital in Pakistani organisations.

Human capital holds great importance in administrative and economic environment as it has a significant impact on organizations and institutions of all kinds. Intellectual capital has emerged in the world of economy and trade in the last quarter of the twentieth century. It represents an elite group of employees, who have knowledge, organizational abilities, and can produce new ideas or develop old ideas to seize opportunities. Their mind becomes the most valuable basis in competing forces, which requires investment in innovation, research and development activities (Malkawi, 2015). The development of management in this direction is highly important as it relates to the management of intellectual capital (Marr and Gray, 2012).

Human capital components must be available together at a certain level. If a component fails to reach this level, it will be sufficient to prevent other components from being productive (Hassanein, 2016). This study contributes to the managerial literature by exploring in multi-dimensional manner including; contrasting gender, management layer, and economies. Moreover, this study offers a new extension by considering DRIVE model of stress, proposed by Mark and Smith (Mark and Smith, 2008). Previously, Haque et al. (2016) argued that stressors affect individuals, organisations, and sectors in varying manner. Thus, it can be said that stressors' impact may vary in contrasting economies (Haque et al., 2016). Additionally, cultural differences exist, but norms and practices overlap in contrasting economies. Hence, personnel and practitioners in the IT sector from both economies would benefit from the knowledge rather than single case study. In other words, this study contributes to the comparative knowledge rather than region-specific knowledge, reflecting higher generalizability in broader context.

Post global economic recession is the parameter, which is used to measure particular sectors contribution towards GDP. Interestingly, the operational patterns and trends in both Pakistan and Canada are similar to larger extend after 2008

recession. The human index of Canada is twice as compared to Pakistan; but IT sector is facing similar type of challenges in recruitment, retention, and sustenance of human capital (Balagam and Fariduddin, 2008; Holmes et al., 2013). Moreover, Holmes et al. (2013) stated "brain drain" in Canada, reflecting a shortage of software developers and engineers. Similarly, Ashraf (2017) revealed that potential talents from Pakistani IT sector are moving to other countries in search of better job opportunities. Hango (2015) found that females constitute total 15.3% of IT workforce in Canada; whereas, Kahn and Byosiere (1990) stated that women only formed 14.7%, irrespective of the management level. These different facts showed that there is a higher similarity in trends, operations, and norms in IT sector of both Pakistan and Canada. Therefore, the study has examined the managerial and non-managerial positioned males and females' varying organisational commitment.

Previously, studies have been conducted to examine the impact of social support in stress management (Jamal, 2016; Thomson et al., 2015; Haque et al., 2017; Hirani, 2017; Wang and Palacios, 2017). However, the role of social support on the human capital retention has not been extensively studied along with stress reduction. It is duly assumed that personal and external source of stressors negatively impact the human capital retention and; therefore, organisational commitment of an employee is affected. The role of social support as a moderator becomes affective to lessen the degree of these stressors and increase the extent of employees' organisational commitment (Manning et al., 2015). Similarly, job stress is found to be a streamline factor imposing an immense impact on the job satisfaction, which consequently leads to affect job retention. However, the role of support becomes extensively arguable due to the negative effects of job stress on job satisfaction and retention (Top et al., 2015). A study conducted by Sykes (2015) revealed that information system managers get lower level of social support as compared to other managers, which increase the extent of job stress and affects their organisational commitment. Based on the problems discussed above, this study has aimed to conduct a comparative analysis by undertaking IT managers of Pakistan and Canada to assess the role of social support in stress reduction and human capital retention.

The study holds significance since it provides adequate knowledge regarding the condition of the IT software of Pakistan and Canada. Mostly studies are aimed at conducting studies on developed countries, rather than developing countries. Apart from it, very few researchers have conducted study to evaluate the occupational stress among working Pakistanis and Canadians. Moreover, very few literatures are present addressing the issues related to the managerial and non-managerial positions between both genders. Thus, the study has included such factors and has extensively discussed the influence of social support on the employees of the relevant sector. The study will prove to be beneficial, specifically for Pakistan, due to its current market conditions and the lack of social support being offered to the employees. In the context of Canada, often long working-hours result in the creation of occupational stress; therefore, by evaluating the impact of social

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

2019
Vol.19 No.1

support program on employees in Canadian software houses, its implications in other sectors can also be evaluated.

The study is significant for policymakers and academicians to assess the role of social support program in stress management specifically in the selected context. The rationale for assessing the role of social support program is its causal relationship in two different dimensions. Firstly, it assists as an intervention between stress reaction and stressful event. Secondly, its appropriate support can be intervening between the onset of the pathological consequence and the stress experience to reduce or eliminate the reaction of stress. By using social support program, clinicians and health care professionals can change the negative association between job performance and social stressor. Thus, this study aims to investigate the role of social support in stress reduction and human capital retention at middle and operational level in the IT sectors of the Pakistan and the Canada.

Literature Review

Human capital interacts as a supportive mass of structural capital, which is characterized by change and continuity. The more interaction, the more it has a positive effect on the realized value of knowledge capital (Edvinsson and Malone, 1997). The knowledge capital is divided into two parts; intangible goods and intangible competencies. It can also be divided into four sections (Seetharaman et al., 2002) including; human capital, regulatory capital, market Capitalization, and innovative capital.

Rastogi (2000) mentioned the use of social support in fast-paced industries, which is a common practice for sustaining human capital in organisations. Moreover, various studies identified supportive networks, creativity and innovation, competitiveness, and autonomy as vital features for the formation of human capital (Rastogi, 2000; Kulvisaechana and Stiles, 2003). The aforementioned features enable organisations in the formation of human capital and utilisation of intellectual skills to maximum potential (Kulvisaechana and Stiles, 2003). Enhancing the quality of human capital is essential as one of the primary sources of productivity growth is technological readiness and innovation, which in turn require a well-organized and skilled workforce (ILO, 2006). In the context of international competition, production is no longer based on traditional production elements to keep pace with progress and growth; rather it is enhanced by knowledge. Today, workers in the establishment are a group of assets and have different ideas for innovations (Mahboob and Abdul, 2016; Kovács, 2012).

Genders' Preferences at Workplace

Haque et al. (2017) indicated that the preferences of males and females differ in the organisational settings. Interestingly, females exhibit higher preference for routine tasks, while males at workplace prefer creativity and innovation (Cubillo and Brown, 2003). Moreover, the preference for leadership styles also differs among contrasting gender (Haque et al., 2017). Female managers have higher preference

**2019
Vol.19 No.1**

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

for participative management; whereas, male managers prefer autocratic style of leadership (Sackey and Sanda, 2011; Haque et al., 2017). In other words, males like leading, directing, task-orientation; while, females like consulting and people-orientation (Haque and Yamoah, 2014; Tannen, 1990; Merchant, 2012). Kanter (1977) argued that both male and female managers at workplace demonstrated similar type of characteristics due to job role demand. Schalkwyk (2000) stated that there is a visible change in the operating patterns as there are significant changes in the role of males and females due to different factors. Such factors include variation in the patterns and trends of the industry, cultural changes, women empowerment conceptualization, and exceeding women empowerment. Interestingly, aforementioned factors have brought drastic changes in legal procedures and work regulations, workforce demand expansion, and modified workplace environment.

Social Support and Sustenance of Human Capital

Sackey and Sanda (2011) stated that social support at workplace is in the shape of physical, emotional, and technical support, received by employee from the colleagues, peers, and supervisors. The level and type of social support at organisational setting determines the employees' job satisfaction, performance, and occupational stress (Haque et al., 2016; House, 1983; Hurlbert, 1991; Park et al., 2004; Kumasey et al., 2014; McGuire, 2007). Schwarzer and Leppin (1991) argued that social support at workplace enables workers to gain health and wellbeing (Haque et al., 2016). Sackey and Sanda (2011) found that females in contrast to their counterpart perceive and receive social support better at managerial and operational level. Studies have also confirmed that adaptive response of employees are commonly evident among managers to deal with various types of stressors due to usage, perceived, and received social support at workplace (Sackey and Sanda, 2011; Brannon and Feist, 1992).

Social Support and Occupational Stress Reduction

Kumasey et al. (2014) indicated that the employees' performance tends to increase due to decrease in occupational stress. Sackey and Sanda (App.A) showed that not only human capital such as social, intellectual, and organisational capital are retained by organisations through social support at workplace, but also the environmental stress is significantly reduced. Kumasey et al. (2014) compared the variation of stress among the contrasting genders working under same roof and found that females have higher vulnerability for experiencing stress than their counterparts. Sackey and Sanda (2011) reflected that all levels of management experience stress, and it does affect the efficiency of the work, workers, and workplace to some extent. Interestingly, gender was not specified by Sackey and Sanda (2011); but it concluded that stress is an existing reality, prevailing in the organisational setting. Moreover, studies have confirmed that employees under stress often demonstrated physiological reactions; depression, anxiety, wellbeing

disturbance, and health deterioration (Sackey and Sanda, 2011; Kahn and Byosiere, 1990). Nevertheless, there is no general agreement because some employees may show higher psychological, emotional, or physical reactions (Haque et al., 2016).

Social support reduces the stress by improving the health, performance, and wellbeing of the workers at workplace (Haque et al., 2016; Sanda and Sackey, 2010). Considering the level of the management, Sackey and Sanda (2008) found that the female employees at operational level use social support because of their perception and reception of the existing stress management programme. In addition to that, operational and middle level female workers find stress management programmes and social support highly effective and constructive (Haque et al., 2016; Sanda and Sackey, 2011; Parry and Shapiro, 1986).

Organisational Commitment

Haque and Yamaoh (2014) have defined the organisational commitment as a psychological bond between the workers and their respective workplaces. Interestingly, there is a vast literature that has agreed upon three distinctive dimensions of organisational commitment namely; affective commitment (AC), normative commitment (NC), and continuance commitment (CC) (Haque et al., 2016; Haque and Yamaoh, 2014; Faizan and Zehra, 2016; Mowday et al., 1979; Allen and Meyer, 2000). However, Haque and Yamaoh (App.C) also found a new dimension 'situational commitment' (SC), arising and varying in different situations.

Another study conducted by Manal (2015) identified the degree of practice among the leaders of the Higher Colleges towards the requirements of human capital management and management of capital beneficiaries. The results of the study concluded that the practice of human capital management came from the point of view of the faculty members of the colleges of higher education. The results validated the hypotheses that training of human resources is an investment in knowledge capital. Moreover, there is an urgent requirement for training, develop and enhance the skills.

Interestingly, Haque and Yamaoh (2014) found that females at operational level have higher affective commitment due to organisational support. Haque et al. (2016) found the role of social support in relation to stress reduction and increased organisational commitment, but the aforementioned studies are quantitative in nature; hence no conclusive evidence from the qualitative perspective is present at hand. Interestingly, Sackey and Sanda (2011) found that higher devotion and commitment is evident among the female employees receiving social support at organisation. Therefore, researchers have considered DRIVE (Demand-Resource-Individual Effect) stress model proposed by Mark and Smith (2008) as an attempt to increase the generalizability factor through offering qualitative perspective. The study also considered "perceived job satisfaction" as an essential component for investigating the relationship between occupational stress and organisational commitment, while exploring the role "social support" at workplace.

The concept of organisational commitment is well-established among employees at managerial and non-managerial positions. However, it is associated to the certain behavioural aspects that are visible during the execution of specific projects or tasks (Schalk and Van Dijk, 2005). Male employees possess higher organisational commitment whereas female employees possess higher normative and continuance commitment at managerial positions (Haque and Aston, 2016). Furthermore, recent studies showed that due to personal emotional connection with the organisation, the managers receive higher level of emotional support whereas non-managers received higher level of moral support (Haque et al., 2016; Sackey and Sanda, 2011; Faizan and Zehra, 2016). The higher affective commitment among operational level employees. Haque et al. (2016) argued that higher level of emotional and moral support at the organisation leads to demonstrate higher level of organisational commitment of the employees.
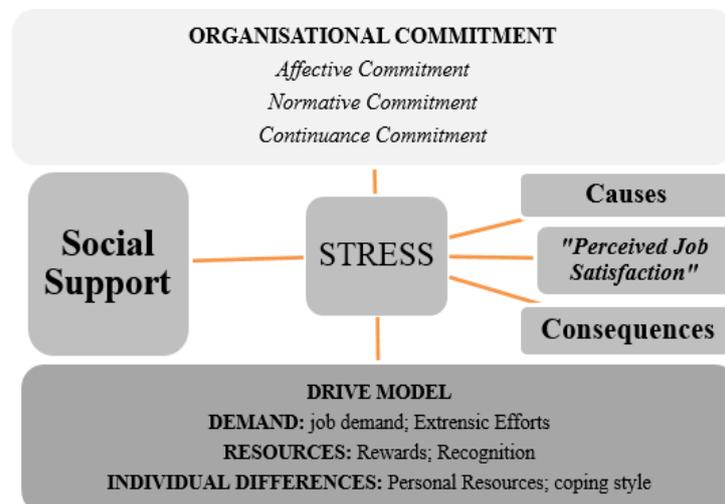
Research Framework and Hypotheses

Figure 1. Self-constructed framework based on Mark and Smith (2008) DRIVE Model

Hypothesis 1: There is no relationship between gender and social support programme.
Hypothesis 2: There is no relationship between designation and social support programme.
Hypothesis 3: There is no significant difference between organisational commitment of Male and Female employees.
Hypothesis 4: There is no significant difference between organisational commitment of Managerial and Non-managerial employees.

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

2019
Vol.19 No.1

Research Methodology

The study has considered mixed methods by first using in-depth qualitative methods to examine the relationship between human capital and occupational stress through social support in distinctive economies and later test the hypotheses to express the relationship in numeric. Miles and Huberman (1984) explained in-depth qualitative research as "*it provides the holistic explanation of a fresh occurrence to evaluate unforeseen features through comparative analysis*".

In this cross-sectional study, researchers combined purposive, networking, and convenience sampling techniques to select the targeted audience (middle and operational level employees) from Canada and Pakistan. Often in social science researches, the researchers combine different sampling technique to investigate certain set of properties. The researchers considered the biases, as non-probability sampling techniques are not ideal for analysing the statistical significance (Wijnhoven et al., 2015). Nevertheless, a proper safeguard against the biases can increase the accuracy in the data collection procedure (Wijnhoven et al., 2015; De Munnik et al., 2009). In quantitative methods, the non-probability sampling techniques are used due to various reason including; high non-response rate, limited access to participants, or other factors complicating randomization (Wijnhoven et al., 2015). In order to minimize the biases, researchers opted for stratification technique by ensuring major groups of respondents are fairly represented in this study. Thus, researchers ran Shapiro-Wilk test for ensuring the collected data from the normally distributed population (Field, 2013). The study found ($P=.0843 > 0.05$), reflecting that the p-value is greater than alpha value; thus, the study cannot reject the null hypothesis stating data is normally distributed. Aligned with the outcome of Shapiro-Wilk test, the non-probability sampling technique does not distort the statistical analysis of this study (Louangrath, 2013).

The study recruited 67 participants (35 from 5 Canadian software organisations and 32 from Pakistani 8 software firms), who were interviewed via Skype. Total 41 organisations were targeted, but only 13 participated, reflecting 31.7% response rate. Interestingly, Morse (2000) explained that interviews with over 30 respondents could be sufficient in determining point-of-saturation while Creswell (2013) argued that in comparative analysis, the range of 30-50 interviews are effective in reaching saturation point.

The Human Resource Departments were approached by formally introducing the purpose of the research via email. The email also contained the details about the interview days and timing, recording, and the confidentiality of the participants. After formal consent, these organisations were included. HR officers arranged Skype sessions with the participants on the willingness and convenience of the participants. Most of the interviews ranged between 3 and 5 minutes. Moreover, researchers used funnel approach by starting with general questions, followed by attitudinal and behavioural questions. Through four pilot study themes were refined. For the verbatim transcription, 'Listen N Write' software was used.

The study adopted Microsoft Excel 2013 for coding and proportional analysis to transform the verbatim data into meaningful and manageable sections.

Results and Discussion

The sample is fairly balanced in terms of gender. 52% of the respondents from Toronto and 48% from Karachi were male. Majority of the participants had (1-to-5) years' work experience in IT sector's different departments; such as, office administration, HR, customer care, marketing, creative designing, finance, and content writing.

Present findings showed that male individuals, working at operational level in Karachi and Toronto, experience higher stress, leading to cause anxiety and depression. However, the disliked feature in Karachi is "excessive control"; while in Toronto is "long working hours". The reason for this variation is likely due to the age bracket and experience. Majority of the participants are young, with 1-to-3 years' experience (81%); while in Toronto, majority had 4 years or above experience (48%). Furthermore, females preferred "creativity and innovation"; while males preferred "leading and directing". Thus, present findings have striking difference with the work of Cubillo and Brown (2003) and Sanda and Sackey (2010). Some of the attributes identified by Schalkwyk (2000) are confirmed namely; change in time, shifts in the pattern of industry, cultural change in an organisational setting empowering women and the emergence of female role dominance. The comparison of two samples showed that overall males are more vulnerable to stress as compared to females in the organisational settings. Hence, the findings of this study are contrary to Kumasey et al. (2014) and support the findings of Haque and Aston (2016) and Haque et al. (2016).

Occupational Stress and Efficiency

The responses noted the impact of occupational stress and how it influences the efficiency negatively. Some of the negative impact of stress, noted by responded, included anxiety and frustration, health, motivation and accuracy. Interestingly, 100% of the respondents from both samples noted that occupational stress de-motivates them and increases anxiety and frustration. In addition, the respondents from the two sides of continuum noted that occupational stress reduces the accuracy by 20 percent. Moreover, working efficiency of operational level employees is adversely affected more in comparison to middle level employees. Additionally, Karachi workforce's working efficiency is more significantly affected by stress in comparison to Toronto workforce. The effect of stress on Karachi workforce is high as only 5% stated that stress has no major effect; while remaining 95% of anxiety, frustration, depression, losing concentration, health deterioration, and disappointment are resulting from it. 21% of Karachi workforce noted 'excessive control'; whereas, 23% of Toronto workforce considered 'long hours' as most disliked feature linked with the job. The overall disliked feature was

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

2019
Vol.19 No.1

'excessive control' (18 percent), followed by pressure (14%) and long hours (14%) respectively.

Creativity and Innovation

The results from both samples indicated that female employees are more creative and innovative than male. The findings are similar to Kanter (1977) and Haque et al. (2017). Conversely, this study has difference with Tannen (1990), which stated that males are keener to lead and direct others by reflecting task-oriented attribute. On the other hand, creativity and innovation (23%), followed by competitiveness (17%) are preferred by Toronto workforce (App. A, B and C). Therefore, this study is aligned with the findings of Rastogi (2000) and Haque et al. (2017) that "innovation and creativity" and "competitiveness" are human capital that enables organisation to perform better by ensuring employees to use their intellectual skills. However, the overall stand out feature from combined sample is "competitiveness" (18%); thus, confirming the empirical study of Kulvisaechana and Stiles (2003) and Rastogi (2000) that employees viewing their job as competitive will have low turnover intentions.

There is a defect in the role of human capital to achieve the added value of Saudi universities. The study is likely to propose a set of measures to activate the role of human capital in achieving the added value. The impact of human capital enhances competitive capabilities of students that results in enhancement of organization competitiveness. The results showed a significant impact of human capital on enhancing the competitiveness among the software houses in Pakistan and Canada. The structural capital is high, followed by the human capital and the relational capital.

The components of human capital are not tangible and invisible, which makes it difficult to display, describe, and categorize them. Knowledge management is also supported through the investment of human capital and the provision of flexible and fast access information resources and knowledge markets on the Internet. Electronic business systems also contribute to knowledge management activities, especially activities to attract, share, store, disseminate, and create new knowledge (Hamoud et al., 2016).

Social Support at Workplace

The respondents were asked about their awareness level to understand "perceived" and "received" social support at workplace. The results showed that majority (55%) of respondents at Karachi and Toronto have awareness about it. From both samples, females (59%) at non-managerial post received more social support; while managerial female (74%) perceived more but comparing to males at managerial level female score low in receiving social support (Male = 69%, Female = 59%). However, Karachi male workforce (48%) perceived social support to be effective in reducing stress; while compared with (45%) of female, who noted that social support is effectively received. On the other hand, majority (64%)

of Toronto females thought social support was effective. The findings also revealed that majority (23%) of the sample did nothing to overcome stress. However, the comparative analysis revealed that females (24 percent) use more often social support (App. D, E and F) followed by self-meditation (App. G) (21%); whereas, majority (28%) of males did nothing. Furthermore, males do smoke (App. H), eat (App. I), sleep (App. J), take break (App. K), and move around (App. L) to overcome stress.

Majority of the participants (34%) at Toronto workforce accredited to "emotional support"; while among Karachi workforce, majority (33%) of participants stated, "moral support". Furthermore, majority (45%) of male Karachi workers stated receiving moral support; whereas, majority of female workers (45 percent) stated emotional support. Similar findings are evident among Toronto workforce as majority of male respondents (48%) received moral support; while majority of female workers (50%) suggested emotional support. However, emotional support among Toronto male workforce is 24% indicating high social support evident in Canada. Interestingly, 80% in Toronto received moral, emotional or both types of support. On the other hand, emotional support is significantly low (9%) among Karachi workforce. Despite that, overall support in terms of emotional and moral among Karachi is significantly high (79%). Thus, the findings supported by previous work of Haque and Aston (2016) and Haque et al., (2016).

Organisational Commitment

In this study, three antecedents of organisational commitment; AC, NC and CC are included in this study. The total sample indicates that 48% of participants have higher affective commitment and concern for organisational problems. However, 34% view it as "unnecessary burden", followed by 10% yielding that organisational problems are only their concern. Moreover, majority (65%) of employees in managerial positions and 42% of non-managerial positions have concern for organisations. However, 37% of non-managerial; while, 25% at managerial position viewed organisational problems as an unnecessary burden, reflecting a low affective commitment. From a gender perspective, overall affective commitment is higher among males in comparison to female workforce.

Comparative case studies revealed that affective commitment among Karachi workforce is low (45%); while Toronto workforce scored more (51%). Interestingly, concern for the organisation is significantly lower among Pakistani workforce (40%) attributed it as "unnecessary burden"; whereas, only 26% in Canadian workforce showed such intentions for their respective organisations. Thus, present study supports to limited extent the work of Haque et al. (2016). Therefore, knowledge capital is the product of the interaction of the components together; where, human capital positively affects structural capital as it provides the source of innovation and modernization strategy. Moreover, the construction of structural capital is the result of human creativity (Martinez-Torres, 2006).

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

2019
Vol.19 No.1

Job Loyalty

The findings reflected that the majority (65%) considers job loyalty as a significant attribute (App. M and N). Moreover, female workers (71%) while male workers (63%) perceived job loyalty as a significant factor. In addition to that, 80% at managerial position while 61% of non-managerial position consider job loyalty as a significant factor.

After exploring research phenomenon through qualitative findings, the abduction technique is adopted to develop the hypotheses and express the relationship in numeric. Hence, the use of social support in terms of gender as well as management level is tested through two-sample t-test.

Table 1. T-Test, Two-Sample Assuming Unequal Variances

	Male	*Female*
Mean	0.558139535	0.588235294
Variance	0.252491694	0.249554367
Observations	33	34
Hypothesized Mean Difference	0	
Df	71	
t Stat	-0.261833608	
P(T<=t) one-tail	0.397103925	
t Critical one-tail	1.666599659	
P(T<=t) two-tail	0.000784995	
t Critical two-tail	1.993943341	

Since P value 0.00 is less α value 0.05 thus null hypothesis is rejected (Table 1). This indicates that there is a difference between genders in terms of social support. Thus, the findings are consistent with work of Haque and Aston (2016), Haque et al., (2016) and Sackey and Sanda (2011). As indicated female employees are more likely to seek social support that their male counterparts. This is could be attributed to process of going through maternity, divorce and family support.

Table 2. T-Test, Two-Sample Assuming Unequal Variances

	Middle Level	*Operational Level*
Mean	0.5	0.263157895
Variance	0.263157895	0.197368421
Observations	20	47
Hypothesized Mean Difference	0	
Df	30	
t Stat	1.837117307	
P(T<=t) one-tail	0.03805872	

2019
Vol.19 No.1

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

t Critical one-tail	1.697260851
P(T<=t) two-tail	0.011744001
t Critical two-tail	2.042272449

Since P value 0.01 is less than α value 0.05 thus null hypothesis is rejected (Table 2). This implies that managers are more likely to seek social support that non-management team. This is surprising as one would expect that non-management are likely to seek social support. The results could be attributed to occupational stress. That is, the higher the hierarchy, the more demanding the job is and hence more stressful. Findings are consistent with the work of Sackey and Sanda (2011).
In the second part of statistical test, the organisational commitment in terms of gender and level of management is explored. It is as following:

Table 3. T-Test, Two-Sample Assuming Unequal Variances

	Male	*Female*
Mean	0.558139535	0.323529412
Variance	0.252491694	0.225490196
Observations	33	34
Hypothesized Mean Difference	0	
Df	73	
t Stat	2.09808405	
P(T<=t) one-tail	0.019679455	
t Critical one-tail	1.665996224	
P(T<=t) two-tail	0.039358911	
t Critical two-tail	1.992997097	

Since P value 0.039 is less than α value 0.05 [P < α] thus null hypothesis is rejected (Table 3). This implies that female employees are more committed to the organization compared to the female workforce. The findings support work of Haque et al. (2018) while oppose work of Kumasey et al. (2014). This could be attributed to the social support they expect and get from their employees. As noted above, female employees are more likely to seek social support such as going through maternity.

Table 4. T-Test, Two-Sample Assuming Unequal Variances

	Middle Level	*Operational Level*
Mean	0.6	0.298245614
Variance	0.252631579	0.213032581
Observations	20	47
Hypothesized Mean Difference	0	

Df	31
t Stat	2.358536569
P(T<=t) one-tail	0.012415973
t Critical one-tail	1.695518742
P(T<=t) two-tail	0.024831945
t Critical two-tail	2.039513438

Null hypothesis is rejected since P value 0.024 is less than α value 0.05 [P < α] thus null hypothesis rejected. The results indicate that management are more likely to be committed to their employees compared with non-management team. Findings are cosistent with the work of Haque and Aston (2016) and Haque et al. (2018) while contradicts work of Kumasey et al. (2014). This could be attributed to the fact that non-management team are likely to be routine work and could change their jobs much quicker that management team.

Thus, quantitative analysis confirmed the earlier qualitative findings that social support and organisational commitment differ among the contrasting gender at distinctive level of management.

Conclusion

It is concluded that stress reduction and sustenance of human capital are two important challenges related to work, worker and workplace that is catered by the management through social support programme. The results indicated that the leading causes of stress include; excessive control, pressure, long hours, and distraction resulting in depression, losing concentration, health disturbance, and frustration that affects the wellbeing of worker at workplace. Furthermore, managerial position employees perceive and receive social support positively; thus, finds it more effective in comparison to non-managerial positioned employees. It also shows that employees having higher access to social support are more likely to deal with stressors and able to manage their work in adequate manner. Additionally, overall female individuals find social support more effective; thus, experience less stress.

However, social support is more effective in sustaining human capital at Toronto than Karachi from economies' perspective, particularly among males by reflecting the high level of normative and continuance commitment. Since, Toronto workforce receives higher emotional support indicating personal affiliation and loyalty towards the existing organisation. Toronto workforce had more moral support; therefore, it had affective commitment, but low normative and continuance commitment. Moreover, managerial position view job loyalty as a significant factor; thus, it demonstrates more normative commitment; while, non-managerial employees view it as insignificant, thus exhibiting low normative commitment because of low social support and high organisational stress. In terms

of gender, female workers have higher organisational commitment due to social support.

Research Limitations and Future Directions

On the other hand, there were several limitations such as the study did not discuss the relationship between employees and managers. Ideally, the future researchers shall explore the dimension of interpersonal relationship to explore the stress and human capital. Furthermore, the impact of harsh comments and unequal treatment given to employees and its impact on their work was not discussed. Future researchers shall focus on discussing it through Delphi technique as well as one-on-one sessions with the workforce. Therefore, there will be much in-depth understanding about the research phenomenon from both; experts' panel and professionals experiencing stress. Moreover, the impact of authoritative behaviour was not discussed that might lead to the creation of sense of inferiority among employees. Additionally, only software houses were considered; however, to generate adequate results several other departments must also be considered. Lastly, only two countries were selected to carry out the research; whereas, more regions specifically from developing countries can be undertaken.

Managerial Recommendations

It is recommended to the software houses to consider the stress management sessions and workshops to ensure employee related stress could be managed and they can be trained to cope up with internal and external stressors. The management of software houses to adopt ABC (Awareness, balance and control) strategy. In awareness stage, management shall consider exploring the causes of stress and prepare workforce to react according to the situation. After awareness, next step is to bring "balance" by finding a fine line between positive and negative stress. It is essential to educate employees how to cope up with stress before it turns into bad/negative stress. Lastly, in the control phase, it is important that management helps the workers to combat with the negative consequences of stress. Techniques to self-control and overcome stressful situation could be dealt through various techniques such as, social support working as ventilation therapy, yoga and meditation to divert negative thoughts and relax mind and so on. It should be noted that individuals differ and therefore different strategies after scanning the strengths and weaknesses of the individuals should be used in ABC rather than opting for "one-fit-for-all".

Appendixes

A	*"Using my own imagination gives me boost to do better."*
B	*"Creativity and thinking out of box give me extra push."*
C	*"Everything, like competitiveness brings the best out of me."*
D	*"I think too much, and I do know that this is not good. Sometimes just*

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

2019
Vol.19 No.1

	to calm myself, I share my problems with my friends or closest family members.”
E	*Yes, at times I just ring one of my friends and discuss it so I can feel at ease.”*
F	*“Often I talk to my best buddy because it makes me feel better.”*
G	*“Well...I maintain my focus by taking yoga classes.”*
H	*“If I am too stressed than I go out for a smoke.”*
I	*“I eat and eat a lot to divert my concentration from the stress or hectic.”*
J	*“Not always but yes sometimes I sleep so I leave office bit early. Because I know not much could be done so I try to sleep.”*
K	*“Just take a small break from work.”*
L	*“I like to move around a lot. Because sitting is tiring. So, basically, I like to stand while I am working for almost 70% of the time. So, you know I have invested in sit-and-stand table.”*
M	*“Loyal to your work. Like if I am given a job I must do it honestly….Yes. I see it most employees.”*
N	*“Personal faith. It is personal thing. I have it that is why I have been here from so long. Those who don't will last nowhere.”*

References

Allen N.J., Meyer J.P., 2000, *Construct validation in organizational behaviour research, pp. The case of organizational commitment*, [In:] Goffin R.D., Helmes E. (eds.) Problems and Solutions in Human Assessment, Boston, MA: Springer.

Ashraf J., 2017, *Examining the public sector recruitment and selection, in relation to job analysis in Pakistan*, "Cogent Social Sciences", 3(1).

Balagam A., Fariduddin S., 2008, *A survey of major HR challenges in the mature and emerging industries: A comparison between IT and banking industries of Pakistan*, "Journal of Independent Studies and Research (JISR)-Management and Social Sciences and Economics", 6(2).

Brannon L., Feist J., 1992, *Health psychology: An introduction to behaviour and health*, (2nd ed.)", California: Brooks/Cole Publications.

Creswell J.W., 2013, *Research Design, pp. Qualitative, Quantitative, and Mixed Methods Approaches*, 4th Edition, USA: SAGE Publication.

Cubillo, L., Brown M., 2003, *Women into educational leadership and management: international differences?* "Journal of educational Administration", 41(3).

De Munnik D., Dupuis D., Illing M., 2009, *Computing the accuracy of complex non-random sampling methods: The case of the Bank of Canada's Business Outlook Survey* (No. 2009, 10), Bank of Canada Working Paper.

Edvinsson L., Malone M.S., 1997, *Intellectual capital: Realizing your company's true value by finding its hidden brainpower*, NY: Harper Business.

Faizan R., Zehra N., 2016, *Quality Work-Life as Predictor to Organisational Commitment under Contrasting Leadership Styles: IT Responses from Pakistans Private Software Houses*, "Global Journal of Management and Business Research", 16(6).

Field A., 2013, *Discovering statistics using IBM SPSS statistics*, London: Sage Publication.

Hamoud A., Saad A., Ahmed A.S., 2016, *Management of Intellectual Capital in Business Organizations,* UAE: Dar Kuttab Publishing and Distribution.

Hango D., 2015, *Gender differences in science, technology, engineering, mathematics and computer science (STEM) programs at university*, Statistics Canada.

Haque A.U., Aston J., 2016, *A relationship between occupational stress and organisational commitment of IT sector's employees in contrasting economies,* "Polish Journal of Management Studies", 14(1).

Haque A.U., Aston J., Kozlovski E., 2018, *The impact of stressors on organisational commitment of managerial and non-managerial personnel in contrasting economies: Evidences from Canada and Pakistan*, "International Journal of Business", 23(2).

Haque A.U., Aston J., Kozlovski E., 2016, *Do causes and consequences of stress affect genders differently at operational level? Comparison of the IT sectors in the UK and Pakistan*, "International Journal of Applied Business and Management Studies" 1(1).

Haque A.U., Faizan R., Cockrill A., 2017, *The relationship between female representation at strategic level and firm's competitiveness: evidences from cargo logistic firms of Pakistan and Canada*, "Polish Journal of Management Studies", 15(2).

Haque A.U., Yamoah F., 2014, *Gender Employment Longevity: I.T Staff Response to Organizational Support in Pakistan*, "International Journal of Academic Research in Business and Social Sciences", 4(12).

Hassanein A.J., 2016, *Strategic Training*, UAE: Dar Kuttab Publishing and Distribution.

Hirani S.S., 2017, *Social Support Intervention to Improve Resilience and Quality of Life of Women Living in Urban Karachi, Pakistan: A Randomized Controlled Trial*, University of Alberta.

Holmes E., Miscampbell G., Robin B., 2013, *Reforming Social Work: Improving social worker recruitment, training and retention*, London: Policy Exchange.

House J.S., 1983, *Work stress and social support*, Book 4, Addison-Wesley Series on Occupational Stress.

Hurlbert, J.S., 1991, *Social networks, social circles, and job satisfaction*, "Work and occupations", 18(4).

ILO, 2006, *Achieving Decent Work in Asia, Busan Korea*, "Asian Regional Meeting", 14.

Jamal, M., 2016, *Job stress and job performance relationship in challenge-Hindrance model of stress: An empirical examination in the Middle East*, "Pakistan Journal of Commerce and Social Sciences", 10(3).

Kahn R.L., Byosiere P., 1990, *Stress in organizations,* [In:] M.D. Dunnette, L.M. Hough, Handbook of industrial and organizational psychology, 3.

Kanter R., 1977, *Men and women of the corporation*, New York: Basic Books.

Kovács G., 2012. *Productivity improvement by lean manufacturing philosophy*. "Advanced Logistic Systems: Theory and Practice, 6(1).

Kulvisaechana, S., Stiles, P., 2003, *Human Capital and performance: A literature review*, Cambridge: University of Cambridge.

Kumasey A.S., Delle, E., Ofei S.B., 2014, *Occupational stress and organizational commitment: does sex and managerial status matter?* "International Journal of Business and Social Research", 4(5).

Louangrath P., 2013, *Alpha and Beta Tests for Type I and Type II Inferential Errors Determination in Hypothesis Testing* (September 28, 2013), available at SSRN: https://ssrn.com/abstract=2332756.

POLISH JOURNAL OF MANAGEMENT STUDIES
Haque A.U., Oino I.

2019
Vol.19 No.1

Mahboob A.H., Abdul R., 2016, *Features and prospects of the future of the Saudi economy*, London.

Malkawi F.H., 2015, *Intellectual Construction: Its Concept, Levels and Maps,* International Institute of Islamic Thought, Books in Brief, USA.

Manal M., 2015, *The reality of the management of intellectual capital in the colleges of higher education in the Kingdom of Saudi Arabia*, "Arab Journal of Studies and Research of Educational Sciences and Humanities".

Manning M.R., Jackson C.N., Fusilier M., 2015, *Occupational Stress, Social Support, and the Costs of Health Care,* "The Academy of Management Journal", 39(3).

Mark G.M., Smith A.P., 2008, *Stress models: A review and suggested new direction*, "Occupational Health Psychology", 3.

Marr B., Gray D., 2012, *Strategic performance management*, Routledge.

Martínez-Torres M.R., 2006, *A procedure to design a structural and measurement model of intellectual capital: an exploratory study,* "Information & Management", 43(5).

McGuire G.M., 2007, *Intimate work: A typology of the social support that workers provide to their network members,* "Work and Occupations", 34(2).

Merchant K., 2012, *How Men and Women Differ: Gender Differences in Communication Styles, Influence Tactics, and Leadership Styles*, CMC Senior Thesis.

Miles M.B., Huberman A.M., 1984, *Qualitative data analysis: A sourcebook of new methods*, [In:] Qualitative data analysis: a sourcebook of new methods, London: Sage Publications.

Moghadam M.V., 2004, *Patriarchy in transition: Women and the changing family in the Middle East*, "Journal of Comparative Family Studies", 35.

Morse J.M., 2000, *Determining sample size*, "Qualitative Health Research", 10.

Mowday R.T., Steers R.M., Porter L.W., 1979, *The measurement of organizational commitment*, "Journal of Vocational Behaviour", 14(2).

Park K.O., Wilson M.G., Lee M.S., 2004, *Effects of social support at work on depression and organizational productivity*, "American Journal of Health Behavior", 28(5).

Parry G., Shapiro D.A., 1986, *Social support and life events in working class women: stress buffering or independent effects?"*, "Archives of General Psychiatry", 43(4).

Rastogi P.N., 2000, *Sustaining enterprise competitiveness–is human capital the answer?* "Human Systems Management", 19(3).

Schalk R., Van Dijk W., 2005, *Quality management and employee commitment: Illustrated with examples from Dutch health care*, "Leadership in Health Services", 18(2-3).

Sackey J., Sanda M.A., 2008, *Using CHAT to explore marriage as a societal artifact and its impact on the professional career development of Ghanaian women*, [In:] Second Congress of the International Society for Cultural and Activity Research, San Diego, California.

Sackey J., Sanda M.A., 2011, *Sustenance of human capital: Social support as managerial stress reliever for women in developing economies*, "Research and Practice in Human Resource Management", 19(2).

Sanda M.A., Sackey J., 2010, *Unmasking the sociocultural constraints to career growth of married women in Ghanaian organisations*, "Advancing Women in Leadership Journal", 32.

Schalkwyk J., 2000, *Culture, gender equality and development cooperation*, Note prepared for the Canadian International Development Agency (CIDA), Quebec, Canada.

Seetharaman A., Helmi Bin Zaini Sooria H., Saravanan A.S., 2002, *Intellectual capital accounting and reporting in the knowledge economy*, "Journal of Intellectual Capital", 3(2).

Sykes A.T., 2015, *Support structures and their impacts on employee outcomes: A longitudinal field study of an enterprise system implementation*, "MIS Quarterly", 39(2).

Tannen D., 1990, *You Just Don't Understand, Women and Men in Conversation*, New York: Ballantine Books.

Thomson M.S., Chaze F., George, U., Guruge S., 2015, *Improving immigrant populations' access to mental health services in Canada: a review of barriers and recommendations*, "Journal of Immigrant and Minority Health", 17(6).

Top M., Akdere M., Tarcan M., 2015, *Examining transformational leadership, job satisfaction, organizational commitment and organizational trust in Turkish hospitals: public servants versus private sector employees*, "The International Journal of Human Resource Management", 26(9).

Wang L., Palacios E.L., 2017, *The Social and Spatial Patterning of Life Stress among Immigrants in Canada*, "Journal of Immigrant and Minority Health", 19(3).

Wijnhoven F., Ehrenhard M., Kuhn J., 2015, *Open government objectives and participation motivations*, "Government Information Quarterly", 32(1).

WYZWANIA MENEDŻERSKIE FIRM PRZYGOTOWUJĄCYCH DEDYKOWANE OPROGRAMOWANIE INTERNETOWE ZWIĄZANE Z PRACĄ, PRACOWNIKIEM I MIEJSCEM PRACY: ZMNIEJSZENIE STRESU I ZRÓWNOWAŻENIE KAPITAŁU LUDZKIEGO

Streszczenie: Badanie ma na celu ocenę wyzwań związanych z pracą, pracownikami i miejscem pracy w zarządzaniu domami wytwarzania programowania w Kanadzie i Pakistanie, a zwłaszcza zbadanie redukcji stresu i utrzymania kapitału ludzkiego poprzez program wsparcia społecznego. Studium koncentruje się na osiągnięciu perspektywy zarządzania na poziomie płci i kontrastu. W celu uzyskania jakościowej perspektywy uwzględniono literaturę menedżerską z czterech dekad na temat zaangażowania organizacyjnego, stresu zawodowego i wsparcia społecznego w miejscu pracy. W sumie 67 respondentów z prywatnych firm informatycznych w Karachi i Toronto przeprowadziło wywiady z wykorzystaniem celowej techniki doboru próby badawczej. Oczywiste jest, że zmniejszenie stresu i zatrzymanie pracowników to największe wyzwania dla firm IT. Oceniono, że kobiety są mniej podatne na stres w porównaniu z mężczyznami ze względu na efektywne wykorzystanie programu wsparcia społecznego. Wyniki ujawniły, że kobiety otrzymywały i postrzegały wsparcie emocjonalne lepiej niż mężczyźni. Ponadto pracownicy na stanowiskach kierowniczych mają niższy poziom stresu i większe ogólne zaangażowanie w porównaniu z pracownikami na stanowiskach innych niż kierownicze. Jeśli chodzi o gospodarkę, w Toronto zaobserwowano niższy poziom stresu niż u pracowników w Karaczi. Co ciekawe, kobiety na stanowiskach kierowniczyc mają większe zaangażowanie normatywne i kontynuacyjne; podczas gdy mężczyźni menedżerowie mają większe zaangażowanie afektywne. Wyniki potwierdziły, że ogólny poziom stresu, przyczyny i skutki różnią się pod względem płci w obu krajach. Jednak w przeciwieństwie do Kanady (gospodarka rozwinięta); wyższe przyczyny stresu występują w Pakistanie (rozwijająca się gospodarka).

与工作，工人和工作场所相关的软件住房的管理挑战：减少压力和人力资本的维持

摘要：该研究旨在评估和管理社会支持计划的问题。研究的重点是实现性别和对比管理层面的观点。管理资格是定性视角的获得。来自私人卡拉奇和多伦多的67名受访者使用有目的和便利的抽样技术进行了访谈。很明显，减压和员工是IT公司面临的最大挑战。据估计，女性不太可能使用社会支持计划。研究结果表明，女性比同龄人更能接受并感受到情感支持。

Ce，管理职位员工的总体定位工人越来越少。就经济而言，多伦多的压力低于卡拉奇的劳动力。有趣的是，女性管理者具有更高的规范性和持续性承诺；而男性经理则有更高的情感承诺。调查结果证实了两国的性别问题。然而，与加拿大（发达经济体）相反；巴基斯坦（发展中经济体）存在更高的压力因素。

关键词：情感承诺，持续承诺，规范承诺，组织压力，社会支持。