

A Hidden Threat: Work Stress among Business Managers in Pakistan

KHURAM SHAHZAD^{a*}, SARWAR AZHAR^b AND
FARHAN AHMED^c

^{a,b}*University of Management & Technology, Lahore, Pakistan*

^c*COMSATS Institute of Information Technology, Lahore, Pakistan*

ABSTRACT

This paper aimed to identify the significant sources and level of work stress experienced by the frontline, middle, and senior level business managers in Pakistan. Six factors namely role ambiguity, role conflict, quantitative role overload, qualitative role overload, career development, and responsibility for others were used as major antecedents of work stress in this study. Study used quantitative strategy and cross-sectional survey method for data collection from 456 respondents belonging to front line, middle, and senior managerial positions from 30 randomly selected organizations operating in private sector of Pakistan. Results revealed that 81% of the respondents have been exposed to moderate level of work stress. Responsibility for others and concern for career development were viewed as factors causing relatively greater amount of stress at workplace. Role ambiguity and role conflict were viewed as factor causing relatively least amount of work stress among respondents. Significant differences between different demographic groups for most of the stressors were also found. Since no study identifying sources and level of work stress in Pakistan has been conducted so far, importance of this study lies in highlighting the exact antecedents of work stress and amount of stress caused by them in Pakistan.

Key words: Measuring work stress; Sources of work stress; Stressors; Work Stress among Gender; Pakistan

* Corresponding Author: E-mail: urideal@gmail.com

Any remaining errors or omissions rest solely with the author(s) of this paper.

INTRODUCTION

Increased complexity in organizational work environment along with escalating work demands have given rise to higher levels of work-related stress experienced by the employees (Champy, 1995). Work stress has emerged as one of the important problems at workplace in number of countries of the world (Siu *et al.*, 1999). Work stress is defined as an uncomfortable and undesirable feeling that employees experience at workplace in the result of opportunities, constraints or demands relating to potentially important work- related outcomes (Parker and DeCotiis, 1983). Work stress has been linked to various individual and organizational outcomes such as falling individual health, illness (Bosma *et al.*, 1997, Lange *et al.*, 2003, Kram and Hall, 1989), decreased individual performance (Jamal, 1990, Manning *et al.*, 1996, Spector and Jex, 1998), decreased organizational effectiveness (Beehr and Newman, 1978, Siu, 2003), and increased organizational health care costs (Manning *et al.*, 1996, Siu, 2003).

Employees experience stress when their working conditions become complex, demanding, unclear and ambiguous as well as when they perceive themselves less equipped with required competences and resources to cope with these demands (Lazarus and Folkman, 1984, Michie, 2002). In work stress literature various stressors have been identified by researchers so far. However role ambiguity, role overload, role conflict (Michie, 2002, Jonge and Dormann, 2006, Ivancevich *et al.*, 1982), career development (Michie, 2002), and responsibility for others (Sutherland and Cooper, 1990, Murphy *et al.*, 1995) are the most critical and frequently cited sources of work stress at workplace having significant link with individuals' stress experiences and negative stress outcomes (Barling, *et al.*, 2005; Ivancevich & Matteson, 1980; Johnson, *et al.*, 2005). This study will use critical stressors as presented by Ivancevich and Matteson (1980) to gauge the sources and level of work stress in Pakistan.

Numerous studies have examined the causes of work stress (stressors) and their relationship with various organizational variables (Fotinos-Ventouratos and Cooper, 2005, Sparks *et al.*, 2001). However, almost all the research work on work stress has been developed and tested in western countries (Siu, 2003, Jamal, 1999, Xie, 1996, Bhagat *et al.*, 2010). Despite its cultural disparity from western countries, no study so far, in this regard has been conducted in Pakistan. Pakistan, one of the developing but major Asian countries, is undergoing a rapid economic, technological and social transformation along with the global and domestic business challenges. These challenges in result have placed an increased pressure on business managers to build and maintain their organizations competitively in the given hyper-competitive business world, thus making the phenomenon of

work stress important in Pakistani context (Ram *et al.*, 2011, Hussain and Imran, 2010). However it is still unrevealed that the sources of work stress as identified in western organizations are causing same or different level of stress in Pakistan. Since the work stress results from the interaction between environmental factors and individual's appraisal of those factors (MacKay *et al.*, 2004), differences in culture, context, and individuals' characteristics can affect this process.

Humans are considered to be the most significant strategic resource of firms and this resource should be dealt with great care to build a competitive advantage for the firm. In the time of hypercompetition organizations must be sensitive towards employees' perception in order to keep them motivated and focused toward organizational performance. Organizational leaders must understand the nature of stress that employees may experience at workplace and should device specific strategies to safeguard employees from the deleterious effects of work stress. This study aims to help organizations and managers develop robust and customized stress management strategies by knowing the exact antecedents of work stress and the amount of stress being caused by them in Pakistani business context.

Aim and Significance of the Study

In light of the above discussion the objectives of this research therefore are;

- To identify the overall level of work stress being experienced by the business managers in Pakistan.
- To identify the sources/antecedents of work stress in terms of their relative intensity (high vs. low) of causing work stress among business managers in Pakistan.
- To identify if the differences in managers' perception about sources and level of work stress exist because of the different demographic variables.

LITERATURE REVIEW

Sources of Work Stress

One important dimension of work stress literature focuses on identification of major sources of stress called stressors. Stressors are defined as factors that threaten one's physical and psychological well-being (Lazarus and Folkman, 1984). Over 40 interacting factors have been identified by different researchers as major sources of stress at workplace. However, Michie (2002) and Murphy, *et al.*, (1995) have presented various stressors into five general categories. These categories tend to dominate early studies in the field of workplace stress.

These five categories of stressors are:

1. Factors intrinsic to the job
2. Role in the organization
3. Relationships at work
4. Career development
5. Organizational structure and climate

Factors Intrinsic to Job

Factors intrinsic to job may include poor working conditions (Kempen *et al.*, 2002), danger involved in work, work overload (Cooper and Marshall, 1978), and long working hours (Raeve *et al.*, 2007). Poor working conditions create stress among employees and are linked with poor mental health (Cartwright and Cooper, 1997). Workload has also been intensively investigated because of its direct impact on level of work stress and employees' health. French and Caplan (1973), by dividing workload into quantitative and qualitative categories, have identified the nine symptoms of strain such as job dissatisfaction, job tension, increased smoking, heart problems etc. due to workload.

Role in the Organization

Role is an expectation from an individual in terms of output and behavioral patterns related to the job at workplace. Role ambiguity and role conflict are two of the major aspects of organizational role which were initially identified as sources of work stress. Role ambiguity originates when there is insufficient information available to a person regarding his role. Research has found role ambiguity as predictor of job dissatisfaction, strain, reduced self-confidence, low motivation, and intention to leave job (O'Driscoll and Beehr, 1994).

Role conflict arises, whenever a person is deemed to perform certain roles/ actions which are conflicting with each other or when a person is forced to indulge in certain role/action which a person does not like (Kahn *et al.*, 1964).

Role conflict has also been identified as predictor of reduced job satisfaction and enhanced tension and anxiety (Nystedt *et al.*, 1999). Role overload and responsibility are two other factors related to the role that individuals perform in organization. Individuals experience stress because of the role overload when they find themselves in a situation where they are expected to play number of roles simultaneously. Such a complicated situation can be interpreted as role overload having negative impact of work outcomes (Cartwright and Cooper 1997). Various

researchers have differentiated role overload into quantitative role overload and qualitative role overload i.e. see (French and Caplan, 1973, Ivancevich and Matteson, 1980, David and Catherine, 2003). Quantitative overload is experienced when job demands exceed the time available to complete the work, whereas qualitative overload on the other is experienced when the assigned workload, because of its complexity or high expectations, exceeds the perceived skills and abilities of the employees (Parasuraman and Purohit, 2000). Role overload has been linked with sick days, feelings of anxiety, frustration, depression, decrease in self-confidence, job burnout, attention and concentration problems and work accidents (Glisson *et al.*, 2006, Kahn and Byosiere, 1992).

Relationship at Work

Relations with others and social support at workplace are viewed as potential sources of work related stress (Cartwright and Cooper, 1997). French and Caplan (1973) have concluded in their studies that individuals' poor relationship with colleagues can lead to stress and strain which eventually threaten individuals' health and well-being. They have also found a negative impact of poor relationship on job satisfaction.

Career Development

Career development includes how individuals view their careers within organizations, and how organizations structure the career progress of their members. Empirical evidences show that occurrence of stress becomes more probable if individuals understand that there is a meager chance of vertical growth in organization for them (Parker and DeCotiis, 1983). Therefore, individuals suffering from "career stress" often show high dissatisfaction, job mobility, burnout, poor work performance, and less effective interpersonal relationships at work (Ivancevich and Matteson, 1980).

Organizational Structure & Climate

Leadership style, management structure and culture are the major organizational factors seen as potential sources of stress at workplace (Cooper and Cartwright, 1994). Because of the bureaucratic structure an organization may generate a sense of limiting individuals' freedom, autonomy and identity which can cause stress among employees. Interaction between life within an organization and personal life (beyond organization) also plays significant role in work stress. Other factors which are getting increasingly important in this regard include participation of

more females in workplaces, rapid technological changes and advancements, and changing social structure etc. (Frone *et al.*, 1992).

Demographics & Work Stress

Stress at work is also associated with certain other factors related to individuals' socio-economic and family factors (Manshor *et al.*, 2003, Swanson *et al.*, 2004). Research studies have found the variance in terms of stress experiences among different demographic groups (Aziz and Cunningham, 2008, Gyllensten and Palmer, 2005). The results regarding the significant role which gender plays in work stress experiences are mixed and inconsistent. Although males and females are exposed to same stressors, yet females have their unique stressors (Decker and Borgen, 1993b). Age as a demographic variable, in research work, has also inconsistent findings in terms of its significant impact on individuals' work stress experiences. One study undertaken by Osipow and Davis (1988) revealed that younger employees experience more stress because of environmental factors and less stress because of role overload and responsibility. However, various studies have found no significant correlation between age and occupational stress (Fogarty *et al.*, 1999, Richard and Krieschok, 1989). Time spent in organization or level of experience also bears an impact on the perception of work stress or stressors. The longer individuals are in the field or more experience they have, less stress they will experience (Patterson, 1992).

HYPOTHESES

In the light of reviewed literature, found gap, and research objectives following hypotheses are proposed for investigation.

H₁: Role overload (quantitative) is a source of work stress in Pakistan.

H_{1a}: Role overload (qualitative) is a source of work stress in Pakistan.

H₂: Role conflict is a source of work stress in Pakistan.

H₃: Role ambiguity is a source of work stress in Pakistan.

H₄: Responsibility for others is a source of work stress in Pakistan.

- H₅: Career development is a source of work stress in Pakistan.*
- H₆: There is no difference in level and sources of work stress among different age groups across all stressors.*
- H₇: There is no difference in level and sources of work stress among males and females across all stressors.*
- H₈: There is no difference in level and sources of work stress among individuals' level of education across all stressors.*
- H₉: There is no difference in level and sources of work stress among individuals' years of experience across all stressors.*

METHODOLOGY

This study used quantitative research strategy and cross sectional survey method to collect data. A self-administered questionnaire containing 30 questions was used for data collection. Research instrument was adopted from Ivancevich and Matteson (1980). They developed this instrument exclusively to measure work stress in relation to six factors i.e. role ambiguity, role conflict, role overload quantitative, role overload qualitative, career development, and responsibility for others. The major reason of using this particular instrument was its ability to simultaneously identify sources and level of work stress through the actual experiences of respondents, and to measure work stress in relation to the frequency of the occurrence of various stressors. In order to develop a better understanding about stress experiences, it is highly recommended to consider both the existence and frequency of stressors among individuals (DeFrank and Ivancevich, 1998, Dewe, 1989).

Sampled Population

Population of interest of this study encompassed the privately run business organizations working in Pakistan. One hundred organizations, listed in Lahore Chamber of Commerce, were randomly selected and invited to participate in this study. However, thirty organizations finally responded to the survey. Unit of analysis of this study was managers. Managerial levels are usually segregated as frontline managers, middle managers, and top level managers (Daft and Marcic, 2008, Robbins and DeCenzo, 2007). This segregation has been frequently used in

various researches. Following the tradition, for present study, management levels were defined in terms of front line managers, middle managers, and top level managers. Since the managerial positions are subjective in nature and thus vary from organization to organization and country to country, certain characteristics such as number of subordinates, and relative position/designation held in organization were used to identify the relevant participants. Selection of managerial level as unit of analysis is based on several factors. It has been investigated that people from managerial positions experience more work stress than the people from non-managerial positions (Rees, 1997) and due to increasing responsibilities are exposed to more deleterious effects of work stress. (Li and Shani, 1991, Salleh *et al.*, 2008).

Instrument

Research instrument used in this study was adopted from the work of Ivancevich and Matteson (1980). This factor analyzed instrument measures work stress in relation to the existence of six factors/stressors i.e. role ambiguity, role conflict, quantitative role overload, qualitative role overload, career development, and responsibility for other people. Five questions were asked against each factor/stressor. Sample questions for six factors are for instance; “My duties and work objectives are not clear to me (role ambiguity)”, “I receive conflicting requests from two or more people (role conflict)”, “I simply have more work to do than can be done in an ordinary day (quantitative role overload)”, “The organization expects more of me than my skills and/or abilities (qualitative role overload)”, “I have few opportunities to grow and learn new knowledge and skills in my job (career development)”, “My responsibilities in this organization are more for people than for things (responsibility for others).” Different conditions given in the form of questions are rated on 7 points semantic scale where 1 denoted “condition is never a source of stress” and 7 “condition is always a source of stress”. Questionnaire measures employees’ perceived stress in terms of “Low”, “Moderate” and “High” where scores between 1-15 denotes low level of work stress, between 16-25 moderate level of work stress, and between 26-35 high level of work stress caused by each factor. Accumulative Mean scores of six factors, independently and in a combined form, can also be calculated to gauge the level of work stress. Higher the score, the more agreement respondent showed for higher level of stress because of the related factors. This instrument has been used and validated by different previous studies conducted in different cultures (i.e. see Deluga, 1991; Nelson and Sutton, 1990; Rush, Schoel and Barnard, 1995). One page containing information related to employee’s demographics was also included in the questionnaire.

RESULTS

Reliability

In order to see the reliability of the collected data, Cronbach's Alpha test was used. Cronbach's Alpha test showed a score of 0.79, 0.78, 0.74, 0.73, 0.68, and 0.73 for role ambiguity; role conflict; quantitative role overload; qualitative role overload; career development; and responsibility for others, respectively. Reliability score for complete instrument was 0.94, Since the obtained scores were relatively high and within the good range, thus showing high reliability of data for further analyses.

Respondents' Profile

456 useable questionnaires were received from thirty companies, out of which 14 belong to manufacturing (47%) while 16 belong to services (53%) sector. Participating organizations are from nine industries e.g. 4 from banking, 5 from telecommunication, 3 from pharmaceutical, 4 from education, 3 from petroleum, 1 from consultancy, 3 from electronics, 3 from high tech, and 4 from textile. Out of 456 participants, 81% are male and 19 % are female. In terms of education level, 14% have undergraduate (14 years education), 44% have masters (16 years education), and 33% have higher level degrees i.e. MS/MPhil/PhD (18 years and above education). The minimum degree held by the sample is intermediate (12 years education). Age wise, 59% of the respondents belong to age bracket of 21-30 years whereas 27.4% belong to age bracket of 31-40 years. The minimum age found in the sample is 23 years. In terms of work experience, 16% have 1 to 2 years of experience, 26.3% have 3 to 5 years of experience, 34% have 6 to 10 years of experience, and 22% have more than 10 years of experience. Majority of the respondents i.e. 60% have work experience ranging from 3 to 10 years.

Level of Work Stress

Table 1 shows that on average majority of the population (81%) have been exposed to moderate level of work stress. On the other hand only 13% have experienced low level of work stress. However, the ratio of events causing high level of work stress is very low i.e. 6% only.

Table 1 Frequency and % of level of work stress among the sample

Level of stress	Frequency	%
Low Stress	53	12.8
Moderate Stress	337	81.2
High Stress	25	6.0
Total	415	100.0

Sources of Work Stress

Table 2 shows that all the factors included in the survey have significantly caused above average or moderate level of work stress. According to the results for six stressors; on average “responsibility for others” is reported to cause the highest level of work stress (Mean: 3.9478; Level: Moderate-High- 84%) followed by the career development (Mean: 3.8659; Level: Moderate-High- 83%), quantitative role overload (Mean: 3.5938; Level: Moderate-High- 77%), qualitative role overload (Mean: 3.5865; Level: Moderate-High- 76%), role conflict (Mean: 3.5430; Level: Moderate-High- 73%), and role ambiguity (Mean: 3.4574; Level: Moderate-High- 69%).

In light of the study’s objectives and reviewed literature six hypotheses are developed and tested. First hypothesis states that quantitative role overload is a source of work stress in Pakistan. Since, 77% participants, according to study’s findings, have experienced stress due to the quantitative role overload stressor which means employees are receiving multiple role based demands with inadequate time and resources, therefore can be concluded that quantitative role overload is a source of work stress in Pakistan and thus the first hypothesis cannot be rejected. Second hypothesis views qualitative role overload as a source of stress at workplace and according to the results 76% people have experienced work stress because of the qualitative role overload. This finding also results in an inability to reject the hypothesis suggesting that qualitative role overload is a source of work stress in Pakistan.

Third hypothesis undertakes that role conflict is a source of work stress in Pakistan. Since, the role conflict causes moderate to high level of work stress to 73% people the third hypothesis cannot be rejected.

Similarly, fourth hypothesis states that role ambiguity is a source of work stress in Pakistan. According to the results obtained through this study, 69% respondents have experienced work stress due to the stressor of role ambiguity. Thus, the fourth hypothesis cannot be rejected.

Table 2 Frequencies, mean averages & standard deviation of sources & level of work stress

Sources of work stress	Mean	Std. Deviation	Level of work stress			Pearson Chi-Square
			Low	Moderate	High	
Responsibility for others	3.9478	1.37	71 (16%)	317 (71%)	57 (13%)	.000*
Career development	3.8659	1.40	78 (17%)	304 (69%)	58 (14%)	.000*
Quantitative overload	3.5938	1.30	100 (23%)	303 (69%)	34 (8%)	.000*
Qualitative overload	3.5865	1.35	109 (24%)	295 (66%)	41 (10%)	.000*
Role conflict	3.5430	1.35	114 (27%)	235 (55%)	80 (18%)	.000*
Role ambiguity	3.4574	1.47	136 (31%)	259 (60%)	40 (9%)	.000*

*Results are significant @ P<0.01

Against the fifth hypothesis which assumes that responsibility for others is a source of work stress in Pakistan, 84% people have reported work stress because of this stressor, thus this hypothesis cannot be rejected.

Sixth hypothesis states that career development is a source of work stress in Pakistan. Results show that 83% people have experienced work stress because of the factors related to career development. Consequently this hypothesis cannot be rejected as well.

DEMOGRAPHICS AND WORK STRESS

For rest of the hypotheses independent t samples T-Test and one way ANOVA were used.

Age and Work Stress

Hypothesis 6: There is no difference in level and sources of work stress among different age groups across all stressors.

Using ANOVA (see Table-3), it is found that there is a significant difference among all the age groups for career development ($p < 0.054$) and responsibility for others ($p < 0.001$). However, the difference in term of different age groups for other stressors i.e. role overload, role ambiguity, and role conflict is not found significant. Since, the difference among different age groups for most of the sources is not significant, the hypothesis cannot be fully rejected.

Table 3 ANOVA: Results for work stress difference among different age groups

	Age	N	Mean	Std. Deviation	F	Significance
Career development	21-30	261	4.0038	1.36860	2.195	0.054***
	31-40	117	3.6496	1.44028		
	41-50	35	3.7714	1.45695		
	51-60	16	3.7500	1.48324		
Responsibility for others	21-30	261	4.1264	1.33996	4.113	0.001*
	31-40	119	3.5126	1.39530		
	41-50	35	3.8286	1.22440		
	51-60	15	4.3333	1.44749		

* $P < 0.01$, $P < 0.05$ **, $P < 0.10$ ***

Gender and Work Stress

Hypothesis 7: There is no difference in level and sources of work stress among males and females across all stressors.

Independent samples T-Test shows that there is a significant difference among males and females in their perception about sources of work stress. As Table-4 shows, male members experience more work stress than their counterpart females across all the job stressors i.e. role ambiguity ($p < 0.004$), role conflict ($p < 0.038$), quantitative role overload ($p < 0.036$), qualitative role overload ($p < 0.046$), career development ($p < 0.132$), and responsibility of others ($p < 0.011$). However, the difference among males and females for career development is not significant. Since the difference among males and females for five out of six variables is significant, the hypothesis can be rejected.

Table 4 Independent sample T-Test measuring work stress differences among gender

	Gender	Mean	Std. Deviation	Sig. (2-tailed)
Role ambiguity	Male	3.5556	1.48050	.004*
	Female	3.0465	1.39669	
Role conflict	Male	3.6072	1.36150	.038**
	Female	3.2651	1.27914	
Quantitative role overload	Male	3.6556	1.27444	.036**
	Female	3.3294	1.35742	
Qualitative role overload	Male	3.6482	1.32321	.046**
	Female	3.3214	1.44923	
Career development	Male	3.9136	1.39063	.132
	Female	3.6543	1.43318	
Responsibility for others	Male	4.0279	1.35527	.011**
	Female	3.6024	1.42229	

* $p < 0.01$, ** $p < 0.05$

Education Level & Work Stress

Hypothesis 8: There is no difference in sources and level of work stress among individuals' level of education across all stressors.

No difference among different groups is found significant based on level of education; thus hypothesis cannot be rejected.

Experience and Work Stress

Hypothesis 9: There is no difference in sources and level of work stress among individuals' years of experience across all stressors.

ANOVA (see Table 5) reveals a significant difference among different groups for role ambiguity ($p < 0.070$), qualitative role overload ($p < 0.076$), career development ($p < 0.070$), and responsibility for others ($p < 0.004$). This result indicates that the level of work experience has an impact on the individuals' work stress experiences. Since, the significant difference is found for four out of six stressors, hypothesis can be partially rejected.

Table 5 ANOVA results measuring work stress differences based on experience

	Experience	N	Mean	Std. Deviation	F	Significance
Role ambiguity	1-2 Years	70	3.6286	1.40570	2.365	.070
	3-5 Years	119	3.4790	1.50056		
	6-10 Years	153	3.5425	1.47339		
	> 10 Years	97	3.1031	1.46120		
	Total	439	3.4419	1.47449		
Qualitative role overload	1-2 Years	70	3.5714	1.22263	2.309	.076
	3-5 Years	118	3.7203	1.39526		
	6-10 Years	152	3.6382	1.41678		
	> 10 Years	98	3.2653	1.23147		
	Total	438	3.5662	1.34758		
Career development	1-2 Years	69	3.9420	1.38143	2.368	.070
	3-5 Years	117	4.0598	1.45205		
	6-10 Years	149	3.8591	1.40952		
	> 10 Years	98	3.5612	1.32437		
	Total	433	3.8591	1.40469		
Responsibility for others	1-2 Years	69	4.1014	1.33003	4.538	.004
	3-5 Years	117	4.1795	1.38723		
	6-10 Years	152	3.9605	1.39953		
	> 10 Years	96	3.5208	1.31373		
	Total	434	3.9447	1.38340		

* $P < 0.01$, ** $P < 0.005$, *** $P < 0.10$

DISCUSSION

The primary aim of this study was to identify the level and sources of work stress present in Pakistani organizations. Results of the study showed that on average 87% people have experienced moderate to high level of work stress. This significantly high percentage shows that people working in Pakistan have been regularly exposed to situations causing stress in their daily work. Commonly reported stressors are

related to responsibility of others, career development, quantitative and qualitative role overload, role conflict, and role ambiguity. Currently, the reported ratio of high work stress is very nominal i.e. 6%. However, organizations must consider the fact that stress is not harmful only in relation to the intensity of the stressors rather it involves the consistency of the stressors over time as well. Similarly, the ratio of respondents that have experienced low level of work stress is substantially low i.e. 13% compared with the 81% who have experienced moderate level of work stress. The higher percentage of moderate level of work stress experienced by the respondents confirms the due presence of work stress in the business environment of Pakistan. On the other hand presence of work stress at moderate level strongly suggests the urgent and careful examination of these areas in order to safeguard employees and organizations from the deleterious effects of work stress. The presence of moderate level of work stress in Pakistan seems justified as Pakistan since its inception has experienced substantial changes in its social, political, economic, and businesses settings. These changes along with the pressure of globalization and competitiveness have complicated and intensified the work demands. Champy (1995) asserts that the increased complexities and work demands give rise to increased level of stress at workplace.

However, it is vital to mention that the composition of all the factors in endowing low, moderate, or high level of work stress is not same. "Responsibility for others" among all is the factor due to which people have experienced maximum amount of work stress (i.e. 84% with highest mean score of 3.95). Findings of this study regarding responsibility for others are consistent with the work of Johnson (1995) who has explored this factor as one of the significant sources of work stress in organizations. This study also shows that on the broader level relationship at work is a main source of work stress in Pakistan. One of the possible reasons behind this experienced work stress could be because of the fact that Pakistan holds a collectivist culture (Hofstede, 1991) where social harmony, collective growth, and cohesiveness are highly valued and required as informal part of the social settings.

The second most stressful factor reported by the respondents is career development. For last ten years economic crisis have lead organizations into reduction of management layers, downsizing, stagnancy, and strategies for survival. These elements in turn have placed a huge pressure on organizational member in terms of their career growth and sustainability. Since Pakistan is of no exception in experiencing these factors, an increasing level of work stress is being experienced by the employees as well and this study confirms that.

Role overload both in terms of quantitative and qualitative have also been viewed as third and fourth most stressful factors respectively. Scarcity of resources and elements of cost reduction always impose some overload on employees.

From the results it can be deduced that organizations in Pakistan are seeking for generalists having multiple skills to perform multiple tasks. The marginal augmented difference in reported stress by employees because of the quantitative overload, compared with qualitative overload, shows that in Pakistan employees are expected to perform those tasks against which they are not provided with necessary resources. This finding is consistent with the work of Eldon and Abraham (1999) who have identified both quantitative and qualitative role overload as strong predictors of work stress among employees.

Role conflict as a source of stress comes at fifth most stressful factor related to work. Results revealed that almost 73% respondents have experienced moderate to high level stress due to role conflict. This high percentage of people reporting stress could be because of the structural problem or because of the employees' inability to respond to conflicting demands simultaneously.

Role ambiguity, compared with other sources, according to the results has been reported as factor causing relatively least amount of work stress among the all six factors. Only 69% people have experienced moderate to high level of work stress due to ambiguities that they had in their roles at workplace. This finding is consistent with the work of Eldon and Abraham (1991) who found role ambiguity having the lowest mean value among the four investigated stressors. Ivancevich *et al.*, (1983) have also found role ambiguity as not a major factor causing stress among manager. They found role ambiguity at fifth among the seven stressors in their study. However, in discrete term, relatively high percentage of reported stress because of the role ambiguity in this study highlights the problem of work design or organizational structure. Regarding the stress management techniques Lazarus (1991) has endorsed the need to change the work conditions, instead of solely emphasizing the individuals.

Regarding the postulated difference in work stress experiences among gender, the results of this study are consistent with previous studies who have explored gender as a significant demographic characteristic explaining stress experiences at workplace i.e. see (Jick and Mitz, 1985, Malley and Stewart, 1988, Decker and Borgen, 1993a). Significant mean differences for five factors/stressors, except career development, in this study show that male members have experienced more work related stress compared with their female counterparts. It is pertinent to mention that results of previous studies regarding gender differences in stress experiences are inconclusive and there are number of studies who have found no significant relationship between gender and work stress i.e. see (Martocchio and O'Leary, 1989, Spielberg and Reheiser, 1994). However, in case of Pakistan it is evident from the findings that differences exist among gender because of the level of work stress experienced. Although this is difficult to explain however some reasons can

be identified for these differences. Pakistan is a male dominated country and male members are considered as prime earners of the house. Found higher work stress experienced by males could be because of the increased pressures related to growth, income and sustainability. Reduced work stress among females could be because of their increased awareness of the stress symptoms and coping behaviors (Miller *et al.*, 2000). On the other hand relatively reduced level of work stress among females could be because of some of the personal characteristics of them. Organizations need to develop customized stress management activities for males to mitigate work stress. Females, due to their increased ability to handle stress, can be given tasks where work stress is more expected.

Age, in this study, has also been found as having significant difference in work stress experiences among different age groups for career development and responsibility for others. Although all age brackets are experiencing moderate level of work stress due to concern for career development and responsibility for other, however age group of 21-30 years has relatively experienced higher level of work stress because of concern for career development. Contrary to this, age group of 51-60 has experienced relatively higher level of work stress due to responsibility of others factor. These results seem logical as between age bracket of 21-30 employees, after starting their career as front line managers reach to mid-career, and during this course they become very concerned about their growth and career development. Since, as per this study's findings, concern for career is causing a greater amount of work stress among employees, it is expected that, for managers, opportunities for career development are not very promising in organizations operating in Pakistan, thus organizations need to revisit their HR strategies and practices to provide employees with promising career growth to mitigate their experienced stress. On the other hand, age group between 51-60 has experienced more work stress due to the 'responsibility of others' factor compared with career growth. By this age, managers usually reach to senior level positions where responsibility for other's performance, learning, development, growth, and social support becomes key ingredients of jobs. These factors in a job put greater cognitive, emotional, and social demands that can impose increased stress among managers sitting at senior levels (French and Caplan, 1973; Cartwright and Cooper, 1997).

Time spent in organizations or level of experience bears an impact on employees' perceptions of level of experienced work stress or stressors. According to this study's findings, significant differences exist in respondents' perceptions of role ambiguity, qualitative role overload, career development, and responsibility for others stressors because of the length/amount of work experience. From the results,

it is evident that respondents having 1 to 5 years of work experience are experiencing greater work stress compared with the people having 6 to 10 years and above work experience. Results of current study are consistent with previous researches that more years of experience, no matter what is the quality, can mitigate level of work stress i.e. see (Harrison, 1985, Patterson, 1992). Since work stress is an outcome of the individual's appraisal of the environmental factors, more experience can change the appraisal process either by augmenting individual capabilities to respond to the ambiguous, conflicting, and challenging work demands or by changing one's view about a particular stressful event.

CONCLUSION

The main objective of this study was to identify the sources and level of work stress experienced by the front line, middle, and senior managers in Pakistan. On the whole this study shows that employees in Pakistani organizations are exposed to a moderate level of work stress which if sustains can be deleterious both for employees and employers. Significant differences among demographic groups in terms of sources and level of work stress experiences also exist. Stress has become an inevitable component of organizational life. For organizations, in order to develop effective stress management strategies it is pertinent to know the particular stressors and level of stress that they are causing in Pakistan. This study has identified role ambiguity, role conflict, quantitative role overload, qualitative role overload, career development, and responsibility for others, as significant stressors causing a moderate level of work stress. Organizations after knowing the sources and level of work stress, as identified by this study, present in the business environment of Pakistan, can devise customized strategies to mitigate employees' work stress and to safeguard them from the deleterious effects of work stress.

LIMITATIONS AND FUTURE RESEARCH

This study used selected concepts and variables related to job stress. It was beyond the scope of this study to see all the significant issues and variables other than the job that may contribute towards work stress experiences. Future research can be undertaken by adding more variables. Link of different stressors with performance and productivity can also be investigated in Pakistani context to see if the western models yield the same result here or not. Stress management techniques to alleviate the impact of stressors and its consequent impact on different individual and organizational outcomes can also be studied as well.

REFERENCES

- Aziz and Cunningham, J. (2008) Workaholism, Work Stress, Work-life Imbalance: Exploring Gender's Role, *Gender in Management: An International Journal*, **23(8)**, 553–566.
- Beehr, T. A. and Newman, J. E. (1978) Job Stress, Employee Health, and Organizational Effectiveness: A Facet Analysis, Model, and Literature Review, *Personnel Psychology*, **31(4)**, 665–699.
- Bhagat, R. S., Krishnan, B., Nelson, T. A., Leonard, K. M., Ford Jr, D. L. and Billing, T. K. (2010). Organizational Stress, Psychological Strain, and Work Outcomes in Six National Contexts: A Closer Look at the Moderating Influences of Coping Styles and Decision Latitude, *Cross Cultural Management: An International Journal*, **17(1)**, 10–29.
- Bosma, H., Marmot, M. G., Hemingway, H., Nicholson, A. C., Brunner, E. and Stansfeld, S. A. (1997) Low Job Control and Risk of Coronary Heart Disease in Whitehall II (Prospective cohort) Study, *British Medical Journal*, **314(7080)**, 558–565.
- Cartwright, S. and Cooper, C. L. (1997) *Managing Workplace Stress*. Sage Publications, Inc: Thousand Oaks, California.
- Champy, J. (1995) Reengineering Management: The Mandate for New Leadership. *New York*.
- Cooper and Cartwright (1994) Healthy Mind; Healthy Organization—A Proactive Approach to Occupational Stress, *Human Relations*, **47(4)**, 455–471.
- Cooper and Marshall (1978) Sources of Managerial and White Collar Stress, in *Stress at Work* (Eds.) C. L. Cooper & R. Payne, John Wiley & Sons: Chichester.
- Daft, R. L. and Marcic, D. (2008) *Understanding Management*. South-Western Pub.
- David, F. E. and Catherine, R. S. (2003). Patterns of Stress, Work-Family Conflict, Role Conflict, Role Ambiguity and Overload Among Dual-Career and Single-Career Couples: An Australian Study, *Cross Cultural Management*, **10(1)**, 55–66.
- Decker and Borgen (1993). Dimensions of Work Appraisal: Stress, Strain, Coping, Job Satisfaction, and Negative Affectivity, *Journal of Counselling Psychology*, **40(4)**, 470–478.
- DeFrank, R. S. and Ivancevich, J. M. (1998) Stress on the Job: An Executive Update. *The Academy of Management Executive (1993-2005)*, 55–66.
- Dewe, P. J. (1989) Stressor Frequency, Tension, Tiredness and Coping: Some Measurement Issues and a Comparison Across Nursing Groups, *Journal of Advanced Nursing*, **14(4)**, 308–320.
- Eldon, Y. L. and Abraham, B. R. S. (1991) Stress Dynamics of Information Systems Managers: A Contingency Model, *Journal of Management Information Systems*, **7(4)**, 107–130.
- Fogarty, G. J., Machin, M. A., Albion, M. J., Sutherland, L. F., Lalor, G. I. and Revitt, S. (1999). Predicting Occupational Strain and Job Satisfaction: The Role of Stress, Coping, Personality, and Affectivity Variables, *Journal of Vocational Behavior*, **54(3)**, 429–452.
- Fotinos-Ventouratos, R. and Cooper, C. (2005) The Role of Gender and Social Class in Work Stress, *Journal of Managerial Psychology*, **20(1)**, 14–23.

- French, J. R. P. and Caplan, R. D. (1973) Organizational Stress and Individual Strain, in *The Failure of Success* (Ed.) A. J. Marrow, John Wiley, New York, pp. 30-66.
- Frone, M. R., Russell, M. and Cooper, M. L. (1992) Antecedents and Outcomes of Work-family Conflict: Testing a Model of the Work-family Interface, *Journal of Applied Psychology*, **77**(1), 65–78.
- Glisson, C., Dukes, D. and Green, P. (2006) The Effects of the ARC Organizational Intervention on Caseworker Turnover, Climate, and Culture in Children’s Service Systems, *Child Abuse & Neglect*, **30**(8), 855–880.
- Gyllensten, K. and Palmer, S. (2005) The Relationship Between Coaching and Workplace Stress: A Correlational Study, *International Journal of Health Promotion and Education*, **43**(3), 97–103.
- Harrison (1985) The Person-environment Fit Model and the Study of Job Stress, in *Human Stress and Cognition in Organizations* (Eds.) Beehr & Bhagat, Wiley, New York, pp. 23–55
- Hofstede, G. (1991) Empirical Models of Cultural Differences, in *Contemporary Issues in Cross-cultural Psychology* (Eds.) N. Bleichrodt & P. J. D. Drenth, Swets & Zeitlinger Publishers, Lisse, Netherlands, pp. 4-20.
- Hussain, R. S. and Imran, M. M. (2010) Emotional Intelligence & Organizational Performance: (A Case Study of Banking Sector in Pakistan), *International Journal of Business and Management*, **5**(10), 191–197.
- Ivancevich, J. M. and Matteson, M. T. (1980) *Stress and Work: A Managerial Perspective*. Scott, Foresman Glenview, IL.
- Ivancevich, J. M., Matteson, M. T. and Preston, C. (1982) Occupational Stress, Type A Behavior, and Physical Well Being, *Academy of Management Journal*, **25**(2), 373–391.
- Jamal, M. (1990) Relationship of Job Stress and Type-A behavior to Employees’ Job Satisfaction, Organizational Commitment, Psychosomatic Health Problems, and Turnover Motivation, *Human Relations*, **43**(8), 727–738.
- Jamal, M. (1999) Job Stress and Employee Well-being: A Cross-cultural Empirical Study, *Stress Medicine*, **15**(3), 153–158.
- Jick, T. D. and Mitz, L. F. (1985) Sex Differences in Work Stress, *Academy of Management Review*, **10**(3), 408–420.
- Jonge, J. and Dormann, C. (2006) Stressors, Resources, and Strain at Work: A Longitudinal Test of the Triple-match Principle, *Journal of Applied Psychology*, **91**(6), 1359–1374.
- Kahn and Byosiere, P. (1992) Stress in Organizations, in *Handbook of industrial and organizational psychology* (Eds.) M. D. Dunnette & L. M. Hough, Consulting Psychologists Press, Palo Alto, CA, US, 2 ed., Vol. 3, pp. 571-650.
- Kahn, Wolfe, D. M., Quinn, R. P., Snoek, J. D. and Rosenthal, R. A. (1964) *Organizational Stress: Studies in Role Conflict and Ambiguity*. Wiley: New York.
- Kempen, V. E. E. M. M., Kruize, H., Boshuizen, H. C., Ameling, C. B., Staatsen, B. A. M. and de Hollander, A. E. M. (2002). The Association between Noise Exposure and

- Blood Pressure and Ischemic Heart Disease: A Meta-analysis, *Environmental Health Perspectives*, **110(3)**, 307–317.
- Kram, K. E. and Hall, D. T. (1989) Mentoring as an Antidote to Stress During Corporate Trauma, *Human Resource Management*, **28(4)**, 493–510.
- Lange, A. H., Taris, T. W., Kompier, M. A. J., Houtman, I. L. D. and Bongers, P. M. (2003) The Very Best of the Millennium: Longitudinal Research and the Demand-Control-(Support) Model, *Journal of Occupational Health Psychology*, **8(4)**, 282–305.
- Lazarus, R. S. and Folkman, S. (1984) *Stress, Appraisal, and Coping*. Springer Publishing Company.
- MacKay, C. J., Cousins, R., Kelly, P. J., Lee, S. and McCaig, R. O. N. H. (2004) ‘Management Standards’ and Work-related Stress in the UK: Policy Background and Science, *Work & Stress*, **18(2)**, 91–112.
- Malley, J. E. and Stewart, A. J. (1988) Women’s Work and Family Roles: Sources of Stress and Sources of Strength, in *Handbook of Life Stress: Cognition and Health* (Eds.) S. Fisher & J. Reason, John Wiley & Sons, Essex, UK, pp. 175-190.
- Manning, M. R., Jackson, C. N. and Fusilier, M. R. (1996) Occupational Stress, Social Support, and the Costs of Health Care, *Academy of Management Journal*, **39(3)**, 738–750.
- Manshor, A. T., Fontaine, R. and Choy, C. S. (2003) Occupational Stress Among Managers: a Malaysian Survey, *Journal of Managerial Psychology*, **18(6)**, 622–628.
- Martocchio, J. J. and O’Leary, A. M. (1989) Sex Differences in Occupational Stress: A Meta-analytic Review, *Journal of Applied Psychology*, **74(3)**, 495–501.
- Michie, S. (2002) Causes and Management of Stress at Work, *Occupational and Environmental Medicine*, **59(1)**, 67–72.
- Miller, K., Greyling, M., Cooper, C., Lu, L., Sparks, K. and Spector, P. (2000) Occupational stress and Gender: A Cross-cultural Study, *Stress Medicine*, **16(5)**, 271–278.
- Murphy, L. R., Hurrell, J., J. J., Sauter, S. L. and Keita, G. P. E. (1995) *Job Stress Interventions*. American Psychological Association.
- Nystedt, L., Sjöberg, A. and Hägglund, G. (1999) Discriminant Validation of Measures of Organizations Commitment, Job Involvement, and Job Satisfaction Among Swedish Army Officers, *Scandinavian Journal of Psychology*, **40(1)**, 49–55.
- O’Driscoll, M. P. and Beehr, T. A. (1994) Supervisor Behaviors, Role Stressors and Uncertainty as Predictors of Personal Outcomes for Subordinates, *Journal of Organizational Behavior*, **15(2)**, 141–155.
- Parasuraman, S. and Purohit, Y. S. (2000) Distress and Boredom Among Orchestra Musicians: The Two Faces of Stress* 1, *Journal of Occupational Health Psychology*, **5(1)**, 74–83.
- Parker, D. F. and DeCotiis, T. A. (1983) Organizational Determinants of Job Stress, *Organizational Behavior and Human Performance*, **32(2)**, 160–177.
- Patterson, B. L. (1992) Job Experience and Perceived Job Stress Among Police, Correctional, and Probation/parole Officers, *Criminal Justice and Behavior*, **19(3)**, 260–285.

- Raeve, D. L., Jansen, N. W. H. and Kant, I. J. (2007) Health Effects of Transitions in Work Schedule, Workhours and Overtime in a Prospective Cohort Study, *Scandinavian Journal of Work, Environment & Health*, **33(2)**, 105–113.
- Ram, N., Khoso, I., Shah, A. A., Chandio, F. R. and Shaikih, F. (2011) Role Conflict and Role Ambiguity as Factors in Work Stress among Managers: A Case Study of Manufacturing Sector in Pakistan, *Asian Social Science*, **7(2)**, 113–118.
- Rees, W. D. (1997) Managerial Stress-dealing with the Causes, not the Symptoms, *Industrial and Commercial Training*, **29(2)**, 35–40.
- Richard, G. V. and Krieshok, T. S. (1989) Occupational Stress, Strain, and Coping in University Faculty* 1, *Journal of Vocational Behavior*, **34(1)**, 117–132.
- Robbins, S. P. and DeCenzo, D. A. (2007) *Fundamentals of Management*. Pearson Prentice Hall.
- Salleh, A. L., Bakar, A. and Wong, K. K. (2008) How Detrimental is Job Stress?: A Case Study of Executives in the Malaysian Furniture Industry, *International Review of Business Research Papers*, **4(5)**, 64–73.
- Siu, O. (2003) Job stress and Job Performance Among Employees in Hong Kong: The Role of Chinese Work Values and Organizational Commitment, *International Journal of Psychology*, **38(6)**, 337–347.
- Siu, O., Lu, L. and Cooper, C. L. (1999) Managerial Stress in Hong Kong and Taiwan: A Comparative Study, *Journal of Managerial Psychology*, **14(1)**, 6–25.
- Sparks, K., Faragher, B. and Cooper, C. L. (2001) Well-being and Occupational Health in the 21st Century Workplace, *Journal of Occupational and Organizational Psychology*, **74(4)**, 489–509.
- Spector, P. E. and Jex, S. M. (1998) Development of Four Self-Report Measures of Job Stressors and Strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory, *Journal of Occupational Health Psychology*, **3(4)**, 356–367.
- Spielberger, C. D. and Reheiser, E. C. (1994) The Job Stress Survey: Measuring Gender Differences in Occupational Stress, *Journal of Social Behaviour and Personality*, **9(2)**, 199–218.
- Sutherland, V. J. and Cooper, C. L. (1990) *Understanding Stress: A Psychological Perspective for Health Professionals*. Chapman and Hall London.
- Swanson, V., Power, K. and Simpson, R. (2004) Occupational Stress and Family Life: A Comparison of Male and Female Doctors, *Journal of Occupational and Organizational Psychology*, **71(3)**, 118.
- Xie, J. L. (1996) Karasek's Model in the People's Republic of China: Effects of Job Demands, Control, and Individual Differences, *Academy of Management Journal*, **39(6)**, 1594–1618.