

An Integrated Model of Stress, Personality, Social Support and Job Outcomes: A study of Financial Sector of Pakistan

Shabbar Hussain* and Rauf-i-Azam**

Abstract

The current study examined the impact of organizational stressors on role performance and job satisfaction. After briefly studying the relationship between the internal and external stressors, a comprehensive and integrated model was built. In addition, moderating role of social support and mediated role of personality are discussed in the model. Sample of 730 employees of banks and financial institutions were selected as a sample. Our findings revealed that the media aggression, terrorism and economic stress have positive association with job stress. Internal stressors have a critical role in contributing towards employee stress. Out of six internal stressors three were accepted and three were rejected due to insignificant results. Media aggression, terrorism and economic stress also have direct association with job stress. The tests verified that personality type partially mediates the relationship between stressors and outcomes. On the other hand it was found that the social support dampens the relationship between job stress and performance.

Keywords: Stress, Terrorism, Job satisfaction, External stressors

Introduction

Stress in organizations is growing due to change in the working patterns and practices. Cooper and Payne (1988) stated that the changing pace of technology and an increase in competition across the globe has increased the information flow and work demands. Literature has focused on exploring different sources of stress at work and types of strains which are caused by stress (Sauter and Murphy 1995). The influence of stress is found on the individual level of employees in different dimensions such as decreased performance, the increased ratio of absenteeism, fatigues at the job, use of alcohol and drugs outside work place and decreased organizational commitment. Such effects are alarming as the individual is considered as an important entity in organizations. Cartwright (1997) identified several biological effects of such effects on the human body as well and presented a strong case of illness and different cardiovascular diseases. Yerkes & Dodson (1908) have explained that, up to a certain

* Shabbar Hussain, Department of Management Sciences, MAJU, Islamabad

** Dr. Rauf-i-Azam, Vice Chancellor, University of Education, Lahore

level, pressures at work may motivate individuals by enhancing their confidence and increasing the employee performance. Referring to Beehr (1985) the relationship between the stressful environment and the stress may be positive, but such notion does not possess strong empirical support.

There is no harmony on the definition of stress as different theorists have defined stress from several different angles. They have operationalized stress in different settings and believe that stress does not arise from one reason. Cox (1978) quotes that there is a big confusion in the manner stress has been used in different studies. This term is also perceived as a response of the individual who is exposed to the factors causing stress and is also taken stress as the source or the stimuli.

Recent literature in this area had focused on how organizations or individuals can bring the moderating and mediating factors in order to keep a balance between the employee and the environment (Luszczynska et al, 2005).

Literature Review

Cox et al (2002) reported the importance of stress within the organization and they believed that work related stress had brought a huge challenge for the people and their health. In depth analysis of the stressors had revealed different stressors contributing towards employee stress, which are within and outside the organizations. Factors, which disturb the balance of the employee and the environment, are called as stressors. Tubre (2000) had investigated different kinds of stressors at work for example role ambiguity, role conflict, lack of employee control, amount of workload, organizational constraints (Jex, 1991), resource limitations, job insecurity, and time pressure (Garst, 2000). In addition, the dimension of interpersonal conflict holds considerable weight, drawing a wide range of detrimental responses (Frone, 2000; Jex, 1991; Spector, 1998). Different studies have investigated several factors commonly act as stressors on the job which contribute in the process of stress. The variables investigated in the study are role ambiguity, role conflict, quantitative overload, qualitative overload, concerns about career development and job responsibility.

Role Stress

One of the most commonly studied stressor at work is role stress at the individual level (Beehr, 2003), it is observed when the expected roles are not similar to the actual roles performed at work. This factor is also considered as an antecedent to the stress outcomes such as anxiety, tension and burnout (Fisher and Gitelson, 1983; Jackson and Schuler, 1985; Van Sell et al., 1981; Lee, 1996; Jones, 1995). In depth analysis by Jackson and Schuler (1975) owed two main components of role stress,

one is role ambiguity and other is role conflict. A meta-analysis presented by Lang, Bliese and Adler (2007) concluded that role stress has a negative relationship with job behaviors and job satisfaction. On the other hand role clarity at job has a positive relationship with exhaustion. This association has been supported by different studies as well. (Mulki, 2008; Young and Corsun 2010). According to role theory employees work as subordinates to their supervisors and they also can perform the role of supervisors for their subordinate. The orders employees receive from their bosses must be clear and there must not be a situation of cross fire between multiple supervisors (Rizzo et al., 1970).

In situations where employee has high role clarity at job, the performance is high because employee can easily determine the knowledge and other requirements for a certain task and can decide the process to achieve the targets (Griffin, 2007). It can be said that high role clarity can increase the control on the job and thus may help in better performance (Griffin Greiner, Stansfeld, and Marmot, 2007).

Work Load

Work load has been widely recognized in the different studies related to workplace stress. (Babakus, 2009). The studies relevant to organizational behavior had reported negative relation between over work and job performance, along with one of the important factors for work strain. (Shirom, Nirel, & Vinokur, 2006), anxiety and depressive symptoms (Griffin, et. al., 2007).

Terrorism, Media coverage and Economic Stress

Researcher and policy makers believe that terrorism is one of the serious concerns in organizations. Czinkota and Ronkainen (2009) concluded that terrorism is now a key issue in global business, his argument is supported by Jain and Grosse (2009) who believed that almost 33% of the top management survey pointed terrorism as the major challenge for them. Most of the stress literature has focused on the micro factors affecting the stress levels of the employees and the macro or extra organizational factors have been ignored. The evidence related the external factors such as terrorism, media stress and economic stress is limited. Studies have investigated the negative effects of terrorism on performance of business and organizational key decisions. (Li, 2005) in multinational companies (Berrong, 2009). The issue has been taken very seriously not only in the terrorism affected countries but also developed countries as well. The concern for the organizations is to make policies in order to protect their employees while on work and international assignments as well (Mankin, 2004; Liou, 2008). The effect of terrorism on organizations is of two types; one is the direct effect and second is the indirect effect. The direct effects include the damage to the infrastructure

or any damage or abduction of employees and loss of money (in case of ransom). On the other side the indirect effects refers to the overall business loss (in case of decreased revenues) and backordering or shortage of material (Jain and Grosse 2009) and extraordinary security budget (includes equipment, personnel, vehicles or security clearance). It is important to note that the evidence of the workplace effect of terrorism is less (Czinkota et al., 2010). There is a growing need to explore this relationship especially in Pakistan. This study examined the negative relationship of terrorism on stress levels of employees. As terrorism is negatively effect to employee job attitudes, performance and satisfaction (Reade, 2009), studies in HR domain considers these factors as the most important outcomes of a certain variable (Harrison, 2006).

Another determinant of psychological stress which is chronic at times is economic factor (Ross, 1985; Holahan, 1997). Financial difficulties which arises from work creates psychological stress is reported in different countries (Kinnunen, 2004; Scaramella, Sohr-Preston, Callhan, & Mirabile, 2008; Dew, 2009). Economic stress refers to the subjective evaluation of the employee regarding the financial situation and its consequences for family. It also includes worries regarding the fulfillment of the daily financial requirements (Donnelly, 1988).

Personality Type and Stress

Every person has different attitudes and behaviors towards the stress factors thus; all of them should be treated individually and given importance (Matteson and Ivancevich, 1979). They concluded from their research that individual differences integrate with the demographics and personalities and can be researched upon in the future. With the support of previous research, the study analyzed personality type mediation in the basic model. The variable is supported by Personality environment fit theory and a strong research support is present for the mediating role of personality type (Type A behavior patter) in stress literature.

Conger et al (1999) have argued that the research at workplace has included the Type A personality as another dimension of study. Researchers like Ganster (1987) propose that TABP indeed influence the work place stress factors and can lead to modified psychological reactions resulting in a variety of diseases. According to Kivimaki et al. (1996) the stress at the workplace including more achievement in less time has a positive relation with the anxiety and intolerance. Whereas the ambitions created due to TABPs have a negative relation with the stress aspects of work/family conflicts etc. The personality type of the Type A also affects their health and wellbeing as diseases like high blood pressure and coronary heart diseases are common in them (Judge, Jackson, Shaw, Scott, & Rich, 2007).

Perceived Social Support

The perceived organizational support is considered to be important aspect where the employees are of view point that their contribution is given importance and the organization's concern about their wellbeing (McFarlane, 1983). The study examines perceived organizational support as a moderator to stress and its effect on employee job satisfaction. Social support is conceptualized in different studies, it represents a vital resource which is termed as a social network and individuals strive to maintain the existing and also expand to new ones. Hobfoll and Stokes (1988) explained social support as a social relationship or people and groups due to a certain attachment to each other. This attachment may be loving or caring in emotional relationships. This does not only include the social relationships but also includes informational support which can benefit the individual. It can be a good advice or counselling. The social support construct believes that such resources are very critical in human life because humans tend to consume these resources and it may deplete after a certain time if not maintained properly. Generally the social support an individual receives is differentiated into four types namely: informational, emotional, appraisal and instrumental. (House, 1981). The positive effect of social support is strongly acknowledge and high social support may help in reducing negative effect of stress (Beehr, et al, 2003).

Although the research has depicted the social support as a moderator for stress but there has been no proof of it being a moderating variable in relation to the stress at workplace (Parasuraman et al., 1992). The evidence for social support is only supported by the small number of experimental studies (Dolan, 1992). Researchers like Parasuraman et al. (1992) have argued that there is a weak relation of the societal support, work / family stress and work/family conflict to the mental state of distress and unease. Ganster et al (1986) have proposed that although there has been uncertainty in the findings the prevailing hypothesis is that the social and societal support provides a moderating effect and influences the occupational stress levels. Hence this study examines social support as a moderator in order to see the extent to which it may increase or decrease stress levels.

Authors who have investigated the negative effect of job stress on different outcomes have reported that high level stress is dysfunctional for the employees and overall organization hence a there is a significant negative relationship exist between job stress and job performance (Gupta, 1979; Kahn, 1964). This negative linear relationship argues that high stress at any level of the organization consumes energy, time and attention away from the work assigned towards turnover and low motivation which may hurt the work attitude

of the employee and job performance as well (Jamal, 1985). The argument was supported by Kahn (1964) and he explained that there are two reasons of such linear negative relationship. One is that high pressure and stress affects the mental capacity of the individual and he/she may ignore the important information regarding work which can decrease performance. Second reason is that stress may result in physical and physiological reactions at job or away from job to affect the overall performance of the employee. The negative linear theory of this relationship is supported widely by several studies (Greer & Castro, 1986; Jamal, 1984; Lagace, 1988; Westman, 1991).

Methodology

According to the government sources¹, the number of scheduled banks in Pakistan is more than 38 with 10984 branches operating all across the country. Due to the huge number of the working employees in the banking/ financial sector, it was not possible to study all the unit of analysis. The sampling technique used in this study is convenient and judgmental sampling due to the difficulty of collecting data and the number of sample is 730. Of them 40 questionnaires were found incomplete or unanswered and 692 were punched for further data analysis. The sample was selected from five big cities of Pakistan i.e. Islamabad, Karachi, Lahore, Faisalabad and Bahawalpur.

Structured questionnaire was used for the data collection. To measure the job stress the scale developed by Ivancevich and Matteson (1980) named as Stress Diagnostic Survey has been used, to analyze the level of economic burden and hardship among the employees the instrument was developed by Aldana, Steven and Wendy (1998), to explore the negative effect of media terror and violence on the individuals the instrument was adopted from the original work of Goksu Gozen (2009), to evaluate personality type contains 12 items and has been originally developed by Maeda in 1991, job stress in this study is measured with the help of pre-established scale suggested by Parker and Decotiis (1983). Levels of perceived social support have been assessed using the Multidimensional Scale of Perceived Social Support (MSPSS) Zimet, Dahlem, & Zimet, 1988), in this study survey for job satisfaction by Brayfield and Rothe's (1951) is used and The construct of job performance is measured in this study by the questionnaire developed by Van Dyne et al (1998). The Cronbach alpha of all the instruments was reported between 0.60 – 0.90. The instrument reliability was measured and items were deleted following the first order analysis. Annexure-I (for results)

¹http://www.sbp.org.pk/publications/schedule_banks/Jun-2014/Title-Review.pdf

Data Analysis

The variables selected in this study were analyzed with the structural equation modeling technique. The questionnaires response from the sample was gathered through courier, email and personal visits. Total sample of the study was 730 out of which 38 questionnaires were rejected. Hence the total data punched was 692. This was comprised 450 male (65%) and 242 female (35%) respondents. Five major age categories were listed in the questionnaires and question regarding work experience was also included. The detailed descriptive statistics are attached at Annexure-II

Testing of Measurement Model

In order to identify the appropriateness of the data items the common factor analysis (first order which includes independent variable and item testing) and confirmatory factor analysis were deployed (second order includes combined variable item testing).

Common Factor Analysis

In order to analyze the measurement model different parameters are taken into account to see whether the constructs are valid for testing or not. The most popular parameters are Standard factor loading, the squared multiple regression, Relative Chi-square (Wheaton et al, 1977), Goodness Fit Index and Adjusted Goodness Fit Index (Jöreskog and Sörbom, 1984), Comparative fit index (Bentler, 1990), Root Mean Square Error of Approximation (Steiger, 2007)

Initial Measurement Model and Results

A two staged model building approach was used in this study. The emphasis of this approach is analysis of the model first by constructing the measurement model and followed by structured model. The complete model CFA after deletion of the items which were below the required cut off .The results of the initial measurement model are quiet significant with the RMSEA value of 0.03, GFI value of 0.854 (slightly below the perfect fit) and AGFI value of 0.88 (quiet significant). The squared multiple co-relations of all items are above 0.30 which indicates that all items are of appropriate value. As the model became very complex after including all dimensions in one model, it is important to mention that the factor loadings of all items are above 0.60 which shows that the items included in the measurement model are appropriate to be carried forward

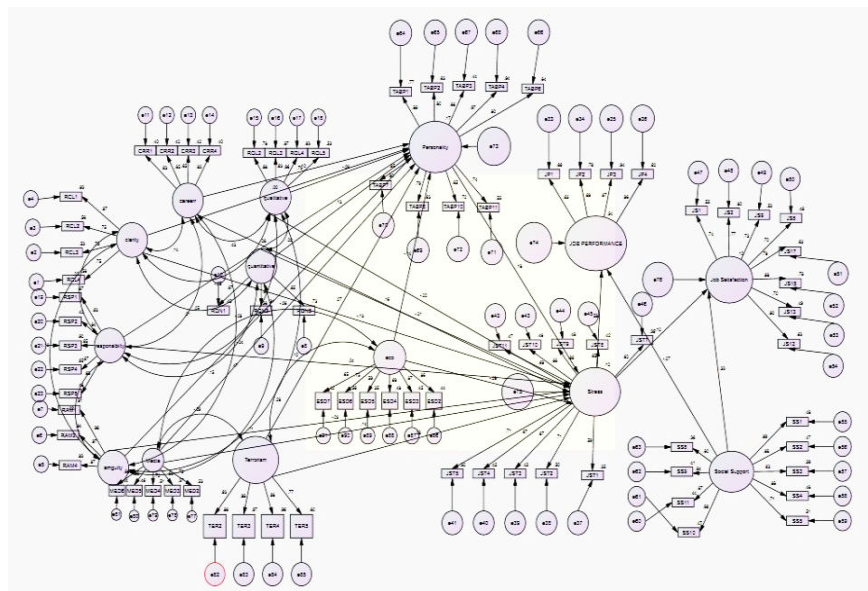
Structural Model and Testing

The structural model includes the hypothesized relationship between the latent variables with the path analysis. All the paths constructed were

supported by the theory. The model identification was quiet complex due to presence of many observed variables. The model estimation was also conducted in view of the different parameters i.e. regression weights and P values.

The path analysis indicated significant results between the constructs. The results show that the RMSEA value is 0.045, CFI is 0.90, GFI is 0.88 and all the squared multiple co-relations of items are between 0.3 - 0.90.

Figure 1: Structural Model – Path Analysis

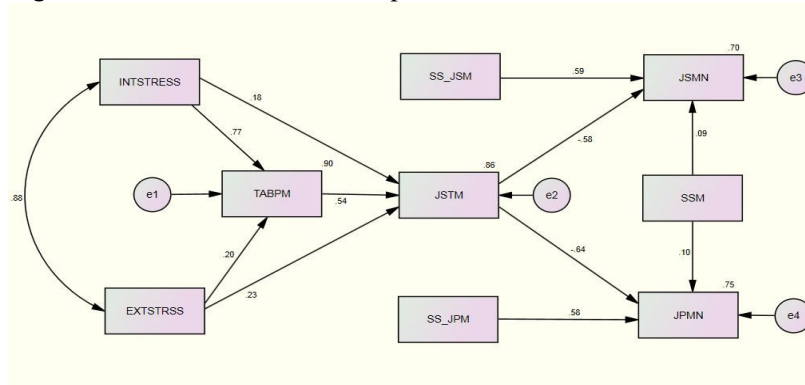


Structural model with Moderation and Mediation

The structural model explains the direct and indirect effects of the composite variables. The results show that direct effect of internal stress on job stress is positive with a regression weight of 0.18 (significant) and direct effect of internal stressors on personality is positive (0.77). The indirect effect of internal stress with job stress is 0.54. The direct effect of external stressors on job stress is positive and regression weight is 0.23, whereas the direct effect of external stressors on personality type is positive i.e. 0.20. The indirect effect of external stressors on job stress is 0.54. This shows that personality type mediates the relationship between stressors and job stress. The direct relationship of job stress with job satisfaction is negative and the regression weight is -0.58 and the results also show a negative relationship between job stress and job performance. The regression weight of job stress with job performance is

– 0.64. The direct effect of —social support on job satisfaction is found to be positive with .09 and 0.10 with job performance. As its regression weight is 0.59, the moderating relationship of social support is also tested which shows that social support dampens negative relationship between job stress and job satisfaction. It also shows that social support dampens the relationship between job stress and job performance. The regression weight of moderated relationship of job stress with performance is 0.58.

Figure 2: Extracted Structural Equation Model



INTSTRESS (Internal stressors), EXTSTRSS (External Stressors), TABPM (Type A behavior Pattern), JSTM (Job Stress), SSM (Social Support), JPMN (Job Performance), JSMN (Job Satisfaction)

Evaluation of Mediation Analysis

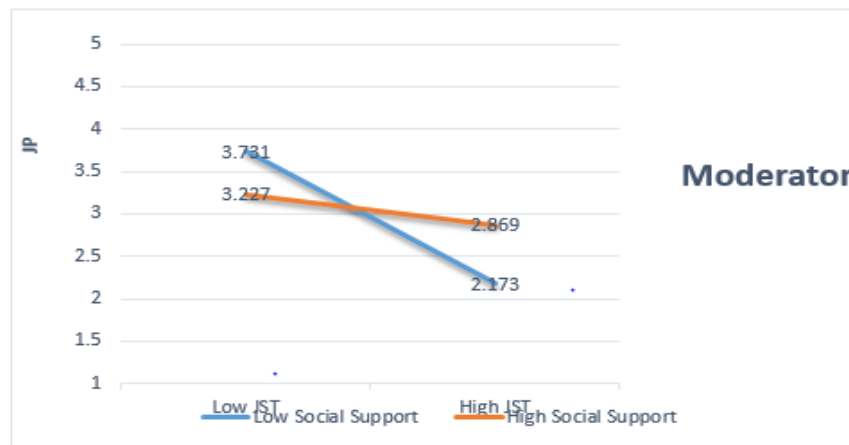
As recommended by Baron and Kenny (1986), a mediation analysis was employed with Bootstrapping. The initial causal variables are External stressors, internal stressors and the outcome variable is job stress. The proposed mediating variable in this case is TABP. The structural model shows that the assumptions were met and the P-Values are significant. The total effect of independent variables (Internal Stressors and External stressors) on Job Stress is 0.372 and 0.610. Stressors are significantly predictive to the mediating variable where $a = 0.217$ & 0.775 and personality was also significantly predictive to job stress with direct effect of $b=0.552$. The direct effect of internal and external stressors on job stress is significant with $c/ = 0.25$ and 0.183 . Job stress was predicted from the external stressors, internal stressors and Type A personality with $R^2=0.86$

The indirect effect of internal stress (ab) is 0.110 and external stressor (ab) is 0.418. In the bootstrapping a sample of 2000 was used. Several other criteria's were used to judge the significance of the indirect path. In this case, both (a & b) coefficients were statistically significant, the Sobel test, the Arion Test and Goodman Test for the ab product was

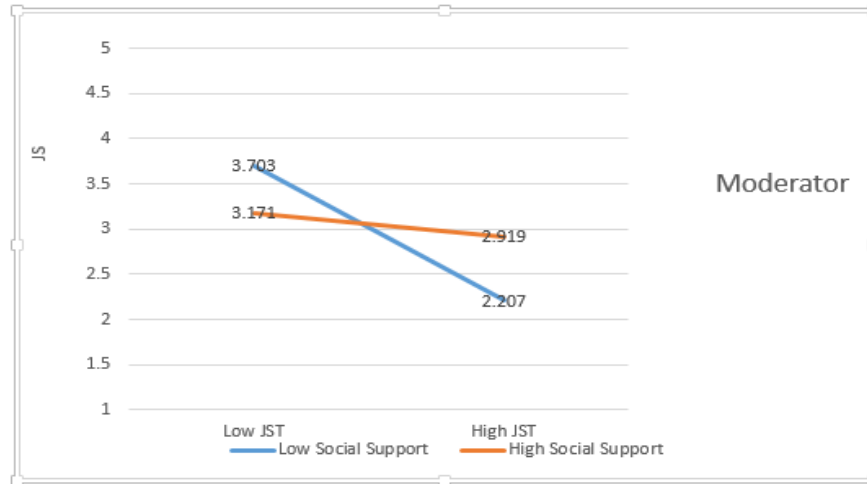
significant. The bootstrapped CI for ab did not include zero (The lower bound value for TABP is .856 and upper bound value is 0.95 with p value of 0.002). By all these criteria, the indirect effect of Internal Stress and External Stress on Job Stress through Type A Behavior Pattern (TABP) was statistically significant. The direct path from Internal Stress and External Stress to Job Stress (c') was also statistically significant; therefore, the effects of Internal Stress and External Stress on Job Stress were only partly mediated by TABP.

Two Ways Interactional Effect of SS between JS and JP

The social Support dampens the negative relationship between Job Stress and perceived Job Performance. The graph plot shows that the moderator is placed on the x-axis and job performance on y-axis. In the above computation the independent variable is job stress whereas the social support is treated as the moderator and dependent variable is job performance. The computation included the unstandardized regression co-efficient of the independent variable (Job Stress = -0.437), Moderator (Social support = 0.045) and the dependent variable (Job Satisfaction = 0.311). The result shows that social support significantly moderates the relationship between job stress and job satisfaction.



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Hypothesis Testing and Results

	Structural paths	St. regression weight	P-value	Results
IS→JST				
H1	IS → JST	.18	***	Accepted
H1a	RA → JST	-.357	***	Accepted
H1c	RC → JST	-.132	***	Accepted
H1d	CR → JST	.155	***	Accepted
H1e	RSP → JST	.037	Insignificant	Rejected
H1f	RQL → JST	-.021	Insignificant	Rejected
H1g	RQN → JST	-.014	Insignificant	Rejected
ES→JST				
H2	ES → JST	.23	***	Accepted
H2a	Media → JST	.143	***	Accepted
H2b	Terrorism → JST	.185	***	Accepted
H2c	Economic → JST	-.095	Insignificant	Rejected
TABP→JST				
H3	TABP → JST	.54	***	Accepted
H4	IS → TABP	.77	***	Accepted
H5	ES → TABP	.20	***	Accepted
IS→TABP→JST (Mediation)				
H6	IS → TABP → JST	.418 (ab)	***	Accepted
H7	ES → TABP → JST	.108 (ab)	***	Accepted
H8	JST → JS	-.58	***	Accepted
H9	JST → JP	-.64	***	Accepted
(Moderation)				

H10	JST*SS→JS	.59	***	Accepted
H11	JST*SS→JP	.58	***	Accepted

***<.001 **<.01

Discussion and Conclusions

The results show that there is a significant positive relationship between stressors and job stress. The regression weight of role ambiguity was -0.357 and P values less than 0.001 shows a significant negative relationship and the hypothesis is accepted. These findings are similar to the results reported by several authors in literature such as Boles (1994) and Kahn et al (1964). Hypothesis 3 to 7 deals with the direct and indirect relationship between stressors, personality type and job stress. The results in this study show that there is a direct positive effect of stressors on personality with a significant P value hence the hypothesis are accepted. Similar findings were reported in the previous literature (French, 1974). This means that high Type A pattern characteristics have high chances of stress because of their personality drives, hard work and perfectionism. Studies have also reported that high level Type A personality employees have more chances of stress in case of high work load, high responsibility and conflict (Hagihara, Tarumi, Miller, & Morimoto, 1997). The study will add a new effect of personality type (mediating role) which has been overshadowed by the literature. A less support is found for mediating role. The results prove that there is a partial mediating role of personality type on job stress and stressors. The indirect effect of internal stress (ab) is 0.110 and external stressors (ab) is 0.418. In the bootstrapping a sample of 2000 was used. Several other criteria were to judge the significance of the indirect path. In this case, both (a & b) coefficients were statistically significant, the Sobel test, the Arion Test and Goodman Test for the ab product was significant. The bootstrapped CI for ab did not include zero (The lower bound value for TABP is .856 and upper bound value is 0.95 with p value of 0.002). By all these criteria, the indirect effect of Internal Stress and External Stress on Job Stress through Type A. External Stress to Job Stress (c') was also statistically significant; therefore, the effects of Internal Stress and External Stress on Job Stress were only partly mediated by TABP. Hypothesis 8 examined the negative relationship of organizational stress with job satisfaction. Study results show a significant result with regression weight of -0.58 and a significant P value so the hypothesis is accepted.

This means that high job stress results in reduced job satisfaction and other outcomes. The moderation analysis showed that there is a significant effect of social support and it dampens the negative relationship between stress and satisfaction. This study extends the recommendation to the managers to modify the management system

where employees may be provided with appropriate social support from sources which may bring emotional stability in them.

The multidimensional stressor framework provides a guideline for the research to examine different effects of internal and external factors on job stress. It also gives us an idea that personality type is important in linking the relation between the stressors and stress as the study supports a weak mediation of personality type on stress. Though it is difficult to suggest definite answers to the relationship between the variables but still the results encourage us to conclude different aspects. First not all stressors effect the individuals in the same way. Some personality types take stressors in a challenging way and some in the distressful way. People react to the stressors in their own way. Secondly the results have proved that there is a strong relationship of personality with the stress. Third the results place an evidence that though a strong negative relation between stress and job satisfaction exists but the social support provided to employee may decrease the stress level of the employees. The results can be used by the organizations in order to see that how they can reduce the job demands, ensure the job fit of the employees and also in which ways organizations can provide support so that it may reduce stress and finally what coping strategies the organizations decide in order to address this serious issue.

Limitations and Future Research

The major limitation of the study is the sample size due to which the results will be difficult to generalize. In order to cover this limitation future studies may increase the sample size and may also add different sectors as well. As suggested by Podsakoff (2007), more research should be focused towards identifying more stressors at work due to rapid change in the working norms and environments. Studies can be carried towards a cross cultural comparison in order to magnify a clear picture for the multinational companies to analyze what corrective actions can be taken to address the problems. As this study includes internal factors and external factors as well, it calls in more research into important factors like economic stress, terrorism and media effect which may be critical in our country. The current study includes complex model testing which complicates the results, future studies may choose comparatively simple models. The future research may also focus on the constructs of burnout and coping strategies which may help the organizations supervisors to rethink on the stress strategies. As in this study personality type was examined as a mediating variable (less support from literature), researchers can investigate what other variables can fit into the mediator and moderator relationship.

References

- Aldana, S. G., & Liljenquist, W. (1998) Validity and reliability of a financial strain survey. *Journal of Financial Counseling and Planning* 9(2). pp.11.
- Baron, R. M., & Kenny, D. A. (1986) The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology* 51(6). pp.1173.
- Babakus, E. U. The Role of Customer Orientation as a Moderator of the Job Demand-Burnout-Performance Relationship. *Journal of Retailing* 85(4). pp.480–492.
- Beehr, F. G. (2003) The enigma of social support and occupational stress: Source congruence and gender role effects. *Journal of Occupational Health Psychology* 8(3). pp. 220–231.
- Beehr, T. A. (1985) n T. A. (Eds.), *Human stress and cognition in organizations Organizational stress and employee effectiveness: A job characteristics approach*. New York : Wiley. pp. 57–82
- Bentler, P. M. (1990) Comparative fit indexes in structural models. *Psychological Bulletin* 107(2). pp. 238–246.
- Berrong, S. (2009) Terrorism concerns businesses worldwide. *Security Management* 53(4).
- Boles, J. S. (1994) Role Stress Revisited: One or Two Constructs?. *Journal of Marketing Theory and Practice* 2(3). pp. 57–69.
- Brayfield, A. H., & Rothe, H. F. (1951) An index of job satisfaction. *Journal of applied psychology* 35(5). pp. 307.
- Cartwright, S. (1997) *Managing workplace stress*. Thousand Oaks: CA: Sage.
- Çitak, G. G. (2009) Constructing an attitude scale: attitudes toward violence on televisions. *International Journal of Social Sciences* 4(4). pp. 268-273.
- Conger, R. D. (1999) Couple resilience to economic pressure. *Journal of Personality and Social Psychology* 76(1). pp. 54–71.
- Cooper, C. L., and R. Payne (1988) *Causes Coping and Consequences of Stress at Work*. Chichester: Wiley.
- Cox, T. (1978) *Stress*. London: Macmillan.
- Cox, T., Randall, R., & Griffiths, A. (2002) *Interventions to control stress at work in hospital staff*. Sudbury: HSE Books.
- Czinkota, M. K. (2010) Terrorism and international business: a research agenda. *Journal of International Business Studies* 41(5). pp. 826–843.
- Czinkota, M. R., and Ronkainen, I.A, & (2009) Trends and Indications in International Business. *Management International Review* 49(2). pp. 249–265.

- Dew, J. P. (2009) Economic pressure and marital conflict in retirement-aged couples. *Journal of Family Issues* 31(2). pp. 164–188.
- Dolan, S. L. M. (1992) Personality, social support and workers' stress. *Industrial Relations* 41. pp. 125-139.
- Donnelly, V. (1988) Economic distress, family coping and quality of family life In Voydanoff & Majka(Eds), *Families and economic distress*. Newbury Park, CA: Sage.
- Fisher CD, G. R. (1983) A meta-analysis of the correlates of role conflict and ambiguity. *Journal of applied Psychology* 68(2). pp. 320-333.
- French, J. R. (1974) *Adjustment as person-environment fit Coping and Adaptation*. New York: Basic Books.
- Frone, M. R. (2000) Interpersonal Conflict and Work and Psychological Outcomes: Testing a Model Among Young Workers. *Journal of Occupational Health Psychology* 5(2). pp. 246–255.
- Ganster. (1987) Type A behavior and occupational stress. *Journal of Organizational Behavior Management* 8(2). pp. 61-84.
- Garst, H. F. (2000) The temporal factor of change in stressor-strain relationships: A growth curve model on a longitudinal study in East Germany. *Journal of Applied Psychology* 85(3). pp. 417–438.
- Greer, C. R. (1986) The relationship between perceived unit effectiveness and occupational stress: The case of purchasing agent. *Journal of Applied Behavioral Science* 22(2). pp. 159–175.
- Griffin, J., Greiner, B., Stansfeld, S. and Marmot, M. (2007) The effect of self-reported and observed job conditions on depression and anxiety symptoms: A comparison of theoretical models. *Journal of Occupational Health Psychology* 12(4). pp. 334–349.
- Griffin, M. A. (2007) A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal* 50(2). pp. 327-347.
- Gupta, N. (1979) Job stress and employee behavior. *Organizational Behavior and Human Performance* 23(3). pp.373–387.
- Hagihara, A., Tarumi, K., Miller, A. S., & Morimoto, K. (1997) Type A and Type B behaviors, work stressors, and social support at work. *Preventive Medicine* 26(4). pp.486-494.
- Harrison, D. A. (2006) How important are job attitudes? A meta-analytic comparison of integrative behavioral outcomes and time sequences. *Academy of Management Journal* 49(2). 305–325.
- Holahan, C. H. (1997) Psychosocial adjustment in patients reporting cardiac illness. *Psychology & Health* 12(3). pp.345–360.
- House, J. S. (1981) *Job Stress and Social Support*. Addison-Wesley Reading: MA.

- Ivancevich, J. M., & Matteson, M. T. (1980) *Stress and work: A managerial perspective*. Dallas: Scott, Foresman.
- Jackson, A. P. (1993) Black, single, working mothers in poverty: Preferences for employment well-being, and perceptions of preschool-age children. *Social Work* 38(1). pp. 26–34.
- Jackson, S.E. and Schuler, R.S., 1985. A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational behavior and human decision processes* 36(1). pp.16-78.
- Jain, S., and Grosse, R., & (2009) Impact of Terrorism and Security Measures on Global Business Transactions: Some International Business Guidelines. *Journal of Transnational Management* 14(1). pp. 42–73.
- Jamal, M. (1984) Job stress and job performance controversy: An empirical assessment. *Organizational Behavior and Human Performance* 33(1). pp.1-21.
- Jamal, M. (1985) Type-A behavior and job performance: Some suggestive findings. *Behavioral Medicine* 11(2). pp. 60-68.
- Jex, S. M. (1991) Emerging theoretical and methodological issues in the study of work-related stress. *Research in Personnel and Human Resources Management* 9(31). pp. 311–365.
- Jones, B. F. (1995) Perception of support from the organization in relation to work stress, satisfaction, and commitment. In S. L. Sauter & L. R. Murphy *Organizational risk factors for job stress*. Washington. pp. 41–52
- Jöreskog, K. G. S. (1984) *LISRELd-VI user's guide* (3rd ed.): Mooresville, IN: Scientific Software.
- Judge, T. A., Jackson, C. L., Shaw, J. C., Scott, B. A., & Rich, B. L. (2007) Self-efficacy and work-related performance: the integral role of individual differences. *Journal of applied psychology*. 92(1). pp.107.
- Kahn, R. W. (1964) *Organizational stress: Studies in role conflict and ambiguity*. New York: Wiley.
- Kivimäki, M., & Kalimo, R. (1996) Self-esteem and the occupational stress process: Testing two alternative models in a sample of blue-collar workers. *Journal of Occupational Health Psychology* 1(2). pp.187.
- Lagace, R. (1988) Role-stress differences between salesmen and saleswomen: Effect on job satisfaction and performance. *Psychological Reports* 62(3). pp. 815–825.
- Lang, T., Bliese, & Adler (2007) Job Demands and Job Performance: The mediating effect of psychological and physical strain and the moderating effect of role clarity. *Journal of Occupational Health Psychology* 12(2). pp.116-124.

- Lee, R. T. (1996) A meta-analytical examination of the correlates of the three dimensions of burnout. *Journal of Applied Psychology* 81(2). pp. 123-133.
- Li, S. T. (2005) Developing the eclectic paradigm as a model of global strategy: An application to the impact of the Sep. 11 terrorist attacks on MNE performance levels. *Journal of International Management* 11(4). pp. 479-496.
- Liou, D. (2008) Human resources planning on terrorism and crises in the Asia Pacific region: Cross-national challenge, reconsideration, and proposition from Western experiences. *Human Resource Management* 47(1). pp. 49-72.
- Luszczynska, A. M. (2005) Self-efficacy and social support predict benefit finding 12 months after cancer surgery: The mediating role of coping strategies. *Psychology, Health & Medicine* 10(4). pp. 365-375.
- Matteson and Ivancevich, J. M. (1979) Organizational stressors and heart disease; A research model. *Academy of management review* 4(3). pp. 347-357.
- McFarlane, A. N. (1983) The process of social stress: Stable, reciprocal, and mediating relationships. *Journal of Health and Social Behavior* 24. pp. 160-173.
- Mulki, F. G. (2008). The Effect of Self-Efficacy on Salesperson Work Overload and Pay Satisfaction. *Journal of Personal Selling & Sales Management* 28(3). 283-295.
- Parker, D. F., & DeCotiis, T. A. (1983) Organizational determinants of job stress. *Organizational behavior and human performance*, 32(2). pp. 160-177.
- Parasuraman, S. G. (1992) Role stressors, social support, and well-being among two-career couples. *Journal of Organizational Behavior* 13(4). pp. 339-356.
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007) Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: a meta-analysis. *Journal of applied psychology* 92(2). 438.
- Reade, C. (2009) Human resource management implications of terrorist threats to firms in the supply chain. *International Journal of Physical Distribution and Logistics Management* 39(6). pp. 469-485.
- Rizzo, J. R. (1970) Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly*, 15, 150-163.
- Ross, C. (1985). Hardship and depression. *Journal of Health and Social Behavior* 26. pp. 312-327.

- Sauter, S. L., and Murphy, L. R. (1995) *Organizational risk factors for job stress*. Washington, DC: American Psychological Association.
- Scaramella, L.V., Sohr-Preston, S.L., Callahan, K.L. and Mirabile, S.P., 2008. A test of the family stress model on toddler-aged children's adjustment among Hurricane Katrina impacted and nonimpacted low-income families. *Journal of Clinical Child & Adolescent Psychology* 37(3). pp.530-541.
- Schuler, R. (1975) Role perceptions, satisfaction and performance: A partial reconciliation. *Journal of Applied Psychology* 60(6). pp. 683–687.
- Shirom, A., Nirel, N., & Vinokur, A. D. (2006) Overload, autonomy, and burnout as predictors of physicians. *Journal of Occupational Health Psychology* 11(4). pp. 328-342.
- Spector, P. (1998) A control theory of the job stress process. In C. Cooper, *Theories of Organizational Stress*. New York: Oxford University Press. pp. 153-169
- Steiger, J. H. (2007) Understanding the limitations of global fit assessment in structural equation modeling. *Personality and Individual Differences* 42(5). pp. 893-898.
- Tubre, T. (2000) A meta-analysis of the relationships between role ambiguity, role conflict, and job performance. *Journal of Applied Psychology* 90. pp. 323-334.
- Van Sell M, B. A. (1981) Role conflict and role ambiguity: Integration of the literature and directions for future research. *Human Relations* 34(1). pp. 43-71.
- Van Dyne, L., & LePine, J. A. (1998) Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management journal* 41(1). pp. 108-119.
- Wheaton, B., Muthén, B., Alwin, D.F. & Summers, G.F. (1977) Assessing reliability and stability in panel models. In Heise, D.R. [Ed.] *Sociological methodology*. pp. 84–136.
- Yerkes, R. M. (1908) The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology* 18(5). pp. 459–482.
- Young, C. A. (2010) Burned! The Impact of Work Aspects, Injury, and Job Satisfaction on Unionized Cooks' Intentions to Leave the Cooking Occupation. *Journal of Hospitality and Tourism Research* 34(1). pp. 78–102.
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988) The multidimensional scale of perceived social support. *Journal of personality assessment*. 52(1). pp. 30-41.