INVESTIGATING THE RELATIONSHIP BETWEEN ORGANIZATIONAL FACTORS OF STRESS AND DELAY OF SOFTWARE PROJECTS IN A LARGE KNOWLEDE BASED COMPANY

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ABSTRACT

Today, occupational stress has become a crucial issue .Stress is originated from two places: Inside our bodies and outside our bodies. Internal stresses are associated with biology and personality. External stress factors have three categories: Personal, Organizational and environmental. Stress has become common among the working people in information technology sectors because of the competitiveness, job complexity, advanced technologies and various other reasons. Today, software projects have delays for various reasons and they are not completed on time. Knowledge-based companies require identifying factors causing delays. The aim of this study is to investigate the relationship between organizational factors of stress and delays of software projects. This is a descriptive correlational research. The population consisted of knowledge workers of a large knowledge-based company (n = 200), a sample of 127 knowledge workers were selected randomly. The data collected through questionnaire.

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The effect of organizational factors of stress on delay of software projects were assessed using Pearson correlation coefficients. The results show that there is a significant positive relationship between organizational factors of stress and delay of software projects in a large knowledge-based company.

Keywords: Stress; Occupational Stress; Delay, Project; Software Project.

1. INTRODUCTION

Stress means pressure and force, and it is the accumulation of life events that disrupts the individual's adaptation to the existing situation. Occupational stress is one of the outcomes of modern lifestyles. Nowadays, human resources are considered as of particular importance in organizations. Skilled and efficient manpower is the most important wealth of each country and organization.

Managers' concerns to physical and mental health of staff improve the quality of work and efficiency. Nowadays, stress is a global issue, and regardless of age, sex and education, and even the social and economic class, most of humans have been confronted with it.

Occupational stress is a type of stress that originates from individual's job and the workplace. Most people who have a job are faced with job stress (occupational stress). Stress comes from two places: inside our bodies and outside our bodies. Potential causes of stress have three categories: environment, organizations and individuals.

Environmental factors include the uncertainty of the economic system, the uncertain political situation, uncertainty of technology. Organizational factors grouped into six factors: 1- Job characteristics 2-Personal relations (colleagues), 3-Leading (leadership style) 4-Technology and material properties (working conditions) 5- Organization's structure 6- Organization's Life cycle (ROBBINS, 2012). Individual factors include individual's biology, personality differences, family issues, economic and financial problems, failure of education (HILLS, 2005).

Griffin (1995) also divided the causes of stress in two categories: 1 - organizational neural pressure as workplace factors causing stress, including: job requirements, physical requirements, role requirements, communicating with others

2- life neural pressure causing stress which are factors of daily life including: life changes and life disasters (GRIFFIN, 1995).

Occupational stress defined by National Institutes of Health of the United States in the best: The harmful physical and emotional responses emerge as a result to mismatch of job and worker's capabilities, resources or needs.

Today, occupational stress has become a crucial issue. Stress and psychological pressure are the topics of organizational behavior studies for several reasons. First, it seems that the individual tension or stress is directly related to individual's performance and job satisfaction, so it can be considered as an independent relevant variable. The implementation of an internalization strategy has raised job satisfaction both directly and indirectly, through affecting job characteristics (KASHEFI, 2009).

Second, the organizational management has an implicit commitment to improve life quality in the organization (for employees). Since, the heart disease is directly related to stress or psychological pressure, thereby reducing stress can guarantee the public health and durability of the organization's workforce.

Behr and Newman in 1978, have mentioned three categories of signs that appear in terms of occupational stress: psychological symptoms (depression, anxiety, boredom, frustration, isolation and alienation), physical symptoms (cardiovascular disease, gastrointestinal disorders such as gastric ulcers, allergies and skin diseases, sleep disorders, headaches and respiratory distress) and behavioral symptoms (two categories: first, signs that are directly related to employees.

This category includes behaviors such as refusing work, bulimia anorexia seeking, aggressive behavior towards colleagues or family members, and general interpersonal problems. The second category of behavioral symptoms refers to the organization or administration, including absenteeism, dropping the job, increasing work-related accidents and lack of productivity).

All mentioned tensions have been created for variety of reasons and affect productivity of people. And the impact of the performance reduction on the delay of the delivered work can certainly be investigated. A theory suggests that the anger,

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sadness and threatening events such as horror and terrible events typically results in decreased performance (DURBIN, 1988).

To determine the association between stress and performance so many researches have been done. One of the obvious consequences of severe stress is lack of proper and correct performance (GRIFFIN, 1995). The most famous document or evidence presented in this regard is theory of upside U letter. The logic confirming the upside U is: the low or moderate level of stress motivates the body and increases its ability to response. In that case people do things better and faster. But extreme stress keeps the person in limits or makes people facing inaccessible demands and the performance will be decreased. Even a moderate level of stress can have negative effect on performance in a long time (ROBBINS, 2013).

Today stress has become common among the working people in information technology sectors because of the competitiveness, job complexity, advanced technologies and various other reasons. Developments in technology and communication are done with surprising speed and extent. Performing IT projects including software projects has grown dramatically.

The nature of information technology projects is in a way that often not completed on time and on schedule and delay occurs. The delay, especially when the difference between delivery time and expected time is significant, in addition to imposing costs for beneficiaries and losing credibility, will cause so many problems for knowledge producers.

The nature of knowledge-based works and the characteristics of IT projects specially software projects such as: being intangible, complexity, need to flexibility to keep pace with the changes, high costs, need to high degree of expertise, different standards of quality, diversity in architecture, methodology, tools and their continuous change, the difficulty of measuring return on investment and other business metrics, unrealistic goals, need to provide better, faster (in the shortest possible time) and cheaper software products forces knowledge workers to have more efforts, so makes additional pressure on project team. (YAGHOUBI; MOTAVALLI, 2012).

Some kind of jobs has tension or stress. Due to the mentioned characteristics of software projects, it is clear that knowledge workers have stress potentially.

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2. RESEARCH BACKGROUND

In the age of highly dynamic and competitive world, man is exposed to all kinds of stresses that can affect him in all realms of life (KRISHNAMORPHY; PRABAKARA, 2015). In a study researchers investigated the relationship between stress and management in construction management organizations. It was found that workplace stress decreases performance (PACHING, 2014).

At the individual level, stress affects the health of staff (COX et al. 2000, COX; GRIFFITHS, 2010). The results of a research showed that occupational stress impacts on efficiency and is very important in society and organizations (PETREANU, 2013). Stress at work can reduce performance (COX; GRIFFITHS, 2010).

Taghavi (2010) in a research stated that there is a significant relationship between occupational stress and efficiency of the staff units of the Ministry of Economic and finance. Safdarian (2014) in a study surveys the relationship between occupational stress and job performance and found a significant relationship between occupational stress and performance. In the study of school administrators it was found that there is a meaningful relationship between job satisfaction and occupational stress (ABDULLAHI, 2011).

Nezafat Shoar (2011) in a study investigated the relationship between occupational stress and job performance of nurses. Results showed that there is a significant negative relationship between occupational stress and job performance of nurses. In an article some factors like employees not being supported by authorities, lack of communication, a large amount of work, lack of job security, fear of unemployment, doing things that are very difficult, undesirable conditions of work, a work that don't fit with the worker, excessive pressure due to the unrealistic deadline of doing things cause stress and psychological pressures and ultimately lead to reduced productivity and increased lesions.

Pouremadi (2010) in a study concluded that stress caused by poor working facilities impacts on managers' performance more than the average level. The results of a study showed that leadership style has an effect on employees stress. Task-oriented leadership style has a significant impact on stress (SOLEIMANIAN; MEHRABI, 2013).

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Lack of attention to ergonomics at the workplace and failure to comply with them will pose a lot of costs for both employers and employees and reduce efficiency and increase employees stress (SHARIFI RAVARI, 2010). Rough and inflexible rules, unrealistic job description, poor physical conditions of the workplace such as: too much noise, heat and cold, toxic gases and poor and inadequate lighting are factors which create stress and pressure on employees and decrease their performance (TABARZADI, 2005).

In examining the causes of delayed projects, 73 reasons were identified. From the view of frequency, employee's reduced productivity and poor unqualified labor, rank 4 and 5 respectively. Also from the view of importance, labor shortages, poor unqualified labor rank 1and 2. (ASSAF et al., 2006). By providing better physical facilities, strengthening the reward system, maintaining better interpersonal relations, job security, and promotion facilities provide for increased level of satisfaction that leads to better organizational climate (RODRIGUES; GOWDA, 2011).

Ravand and Salahi Abhari (2011) in a study evaluated causes of delay of oil and gas process in Oil and Gas National company and stated that defects and problems of project design and contract ambiguities are the main delay factors and lack of professional labor, lack of basic studies, side problems and lack of finance place next respectively.

In a study researchers revealed that Software job is stressful job. It is difficult to say what factors contribute to this stress, because job stress may be caused by a complex set of reasons. Some of the most visible factors of job stress are Work Stressors, Role Stressors, Personal development stressors, Interpersonal relation Stressors and Organizational Climate Stressors (SAILAJA; REDDY; KUMAR, 2013).

A research was intended to study the work stress among the employees working in IT sectors in employees in the Chennai city. Results of the study does not tend towards one direction, meaning that for some variables among employees in the company are more affected whereas for other variables is more affected employees in the other company, but overall IT sector is found to be more stressful.

From this research following variables were identified: Various factors relating to stress impact of stress in the family, work and individual, management of stress factors and organizational health factors. Overall, it is concluded from the study that

the stress level is same for all the IT companies but only one or two factor can cause difference in result (SAILAJA; REDDY; KUMAR, 2013).

Maria Melchion and Jenny (2009) have given their views on "Sickness absence, from work predicts worker's risk of later depression". They comment on participants who were studied were executives from the natural gas and Electricity Company. Required data (sickness absence) was obtained and assessed. The baseline for study on factors of age, gender, marital status, occupational grade, tobacco smoking, alcohol consumption, depressive symptoms and work stress were analyzed.

Mita Singh (2010) has expressed WLB on "The perception of work-life balance policies, among software professionals". He expressed that unbalanced work life relationship, can result in reduced health and low performance outcomes for individuals, families and organizations. A distorted life and work is prevalent among the software professionals. Therefore a study had been made to assess their policies importance, attitude etc.

Thirumaleswari (2013) stated that "A Study on Job Stress among Employees of Software Industries in Chennai". In the present scenario software industry has become one of the fastest growing industries in India. The reason for choosing particularly software industry and employees is that the level of stress these employees face is comparatively higher than other employees.

Kedar Rayamajhi (2014) made an attempt to study "Level of Stress among the Government Officers: Cases from the Nepal" Job stress can be defined as the inability to cope with the pressures in a job. The main objective of this study is to explore the level of stress among the government officers working in different offices of Nepal.

3. INFORMATION TECHNOLOGY PROJECTS

The major cause of stress is the rapid change in technology (KRISHNAMORPHY; PRABAKARA, 2015). Job stress is a common workplace problem experienced by all professionals irrespective of their nature of work; however, this phenomenon is more common in situations that are deadline driven. Software house is one such sector, which is affected profoundly by this challenge, and professionals serving these organizations are often observed under huge stress.

Software professionals' nature of job is highly time-bound, client-oriented and technology intensive. The trends in turn, coupled with many factors, contribute towards stress. The probable reasons found through the discussion are: they are supposed to learn newer technology along with their daily job chores which puts a lot of pressure.

They are more engaged in client interaction, and satisfying the client is considered the most difficult part in software projects. Also, most of the time, clients themselves are not clear about their requirements, hence, they do not freeze their requirements, which causes disruption and delays in the project and puts pressure on all other members working on the project. Therefore, it is concluded that the software professionals working in different software houses of Pakistan are experiencing moderate stress in their job (JALBANI; RASHIDI, 2009).

The continuing streams of information technology innovations are transforming the business world (LAUDON; LAUDON, 2007) from traditional work processes to IT enabled integrated environment. The impact of this change has brought many challenges to software professionals and developers, working in organizations as in-house programmers and developers.

The rise in software demand to business and industry, beyond the capacity of MIS professionals, who cater to the needs of organizations, has given birth to software houses (RAJESWARI; ANANTHARAMAN, 2003). These software houses are fulfilling the demand of industry and providing customized software according to the need and requirements of the client organizations, by using latest available technology and skills in the market.

The technology is changing so swiftly that it is becoming difficult for the professionals to keep abreast with the upcoming technology along with the daily chores of the workplace. Software industry is a human capital intensive industry (RAJESWARI; ANANTHARAMAN, 2003) and largely based on knowledge workers with technology concentrated environment.

Also, the software development process is a learning and communication process (GLASS, 1997); hence, it requires greater interaction with the clients, deep understanding of the nature and business processes, clear and timely communication with people involved in the development process, and insight into

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technological innovations. This situation puts pressure on professionals involved in the process of software development in software houses and results in occupational stress among them.

3.1. Information Technology (IT) Projects Management

IT Projects Management is a kind of art, the knowledge of planning and leading software project. IT Projects Management is a branch of project management combining with software production. Time and other available resources- man power, machinery; line capacity and working capital- are the main elements of IT projects management. Planning is mostly done based on time or man power limits (MAHMOUDI, 2009).

3.2. Components of Performance in Software Projects management

There are three main components of performance in Software Projects management: time management that is required processes for implementing and completing software project on time and according to time table, cost management containing processes related to cost estimate, budget and control, and quality management containing executive processes and activities determining aims, responsibilities and quality policies to supply requirements (MAHMOUDI, 2009).

According to the researches done before, the lack of   identification of the effect of knowledge workers' stress on projects' delay is fully felt and scientific study of this subject considered as a necessity to propose solutions. Because reducing stress in the organizations and companies will promote productivity and develop quantitative and qualitative organizational capital. This study investigated the effects of organizational factors of stress on the delay of software projects. Therefore the hypotheses of the study are as following:

4. MAIN HYPHOTESIS

There is a significant relationship between organizational factors of stress and delay of software projects in a large knowledge based company.

5. SUB HYPOTHESES

a) There is a significant relationship between stressor job which employees and managers have to do and the delay of software projects in a large knowledge-based company.

b) There is a significant relationship between stressor cooperation with colleagues and the delay of software projects in a large knowledge-based company.

c) There is a significant relationship between stressor Leadership style and the delay of software projects in a large knowledge based company.

d) There is a significant relationship between stressor work condition and the delay of software projects in a large knowledge-based company.

6. METODOLOGY

This study is a practical descriptive correlation surveying study. Data was collected using library resources, scientific magazines and supplies, network sites and standard questionnaire. The questionnaire used to determine the relationship between organizational factors of stress and delay of software projects, has been prepared using available standard questionnaires (MOGHIMI, 2007) and finally developed based on the views of experts and managers of large knowledge-based company and then validated.

The Cronbach's alpha coefficients were used to determine the reliability of questionnaire. Coefficient was 0.877. Considering the coefficients higher than 0.7, this indicates acceptable reliability of data collection tool.

The final questionnaire containing 37 questions was about 3 items for knowledge workers biographical profile (gender, work experience, education) and 34 items consisting: 7 items to measure stress levels of knowledge workers, 19 items to measure organizational stressors (including 5 items for stressor job, 3 items for stressor colleagues, 4 items for stressor leadership style and 7 items for stressor working conditions) and 8 items were set to measure the delay of software projects. Answers were scored using Likert five-item spectrum.

The population consisted of knowledge workers of a large knowledge based company (n = 200), a sample of 127 knowledge workers was selected randomly based on Morgan table. Due to the slip in the questionnaires, researcher distributed 135 Questionnaires and 127 completed questionnaires were collected.

Data obtained from questionnaires were analyzed using SPSS software to describe demographic information, assess normal distribution of sample, determine

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the average of variables, and test the hypothesis using regression analysis methods. The relationship between variables was determined using correlation coefficient. Variables were ranked using Friedman test and the results were analyzed. In the next section we analyze the data.

7. FINDINGS

Table1: Demographic characteristics of respondents

		Percent	Frequency
Gender	Man	%77	98
	Woman	%23	29
Work Experience	Under 5 years	%13	16
	5 to 10 years	%43	55
	10 to 20 years	%35	45
	More than 20 years	%9	11
Education	Bachelor degree	%72	91
	Master and higher degrees	%28	36

Table2: Mean and standard deviation of stress component

Variables	N	μ	σ2	SD
Stressor Job	127	3.8232	.70736	04329.
Stressor Colleagues	127	3.8146	.73468	.04496
Stressor Leadership Style	127	3.4691	.79486	.04864
Stressor work Condition	127	3.6879	.68090	.04167

Table 3. Descriptive Statistics of the two main variables

Variables	N	μ	σ2	SD
Stress Components	127	3.4243	.4371	.04426
Delay of software project	127	3.5831	.49821	.04312

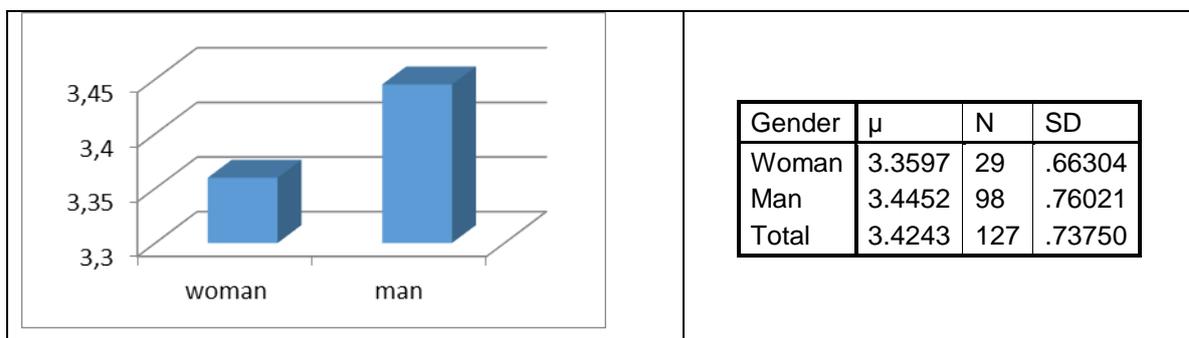| Gender	μ	N	SD
Woman	3.3597	29	.66304
Man	3.4452	98	.76021
Total	3.4243	127	.73750

Figure :1 Occupational stress divided by gender

According to the above chart, it can be said that mean of occupational stress in men is greater than women.

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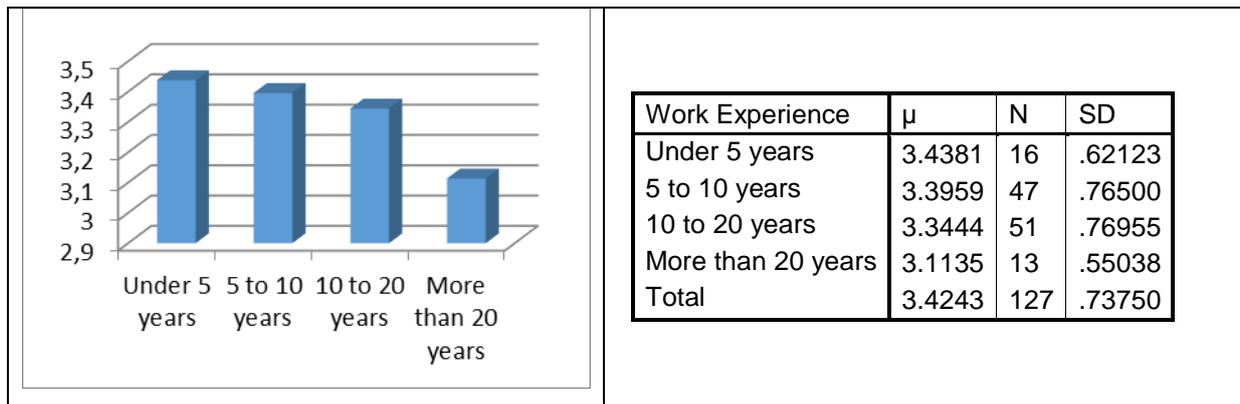| Work Experience	μ	N	SD
Under 5 years	3.4381	16	.62123
5 to 10 years	3.3959	47	.76500
10 to 20 years	3.3444	51	.76955
More than 20 years	3.1135	13	.55038
Total	3.4243	127	.73750

Figure 2: Occupational stress divided by work experience

According to the above chart it can be stated that the mean of occupational stress in those who are newcomers is greater than others and in those who have more work experience stress reduces respectively.

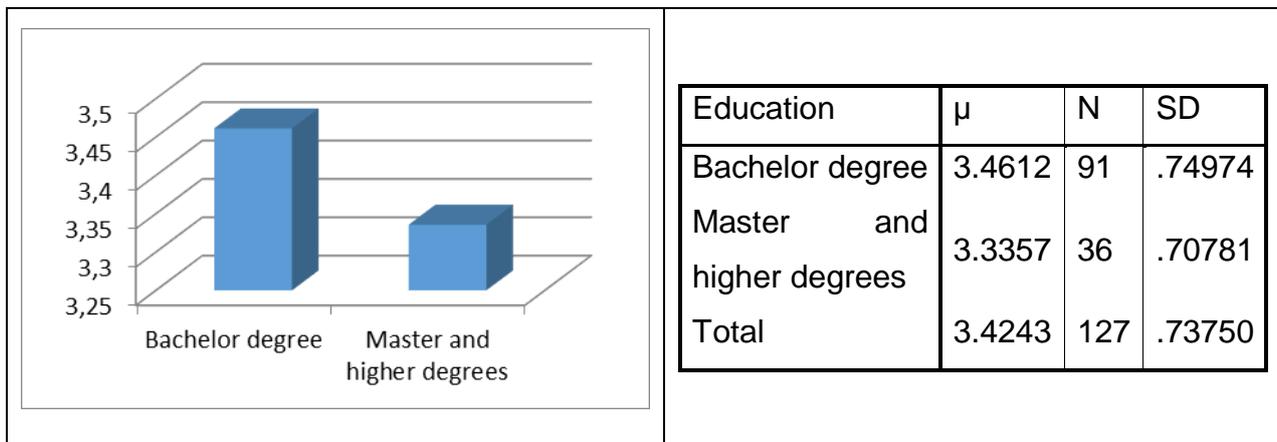| Education	μ	N	SD
Bachelor degree	3.4612	91	.74974
Master and higher degrees	3.3357	36	.70781
Total	3.4243	127	.73750

Figure 3: Occupational stress divided by education

According to the above chart, it can be seen that the mean of occupational stress is greater among experts who have bachelor degree.

In order to assess the normal distribution of the population and to test hypothesis, Kolmogorov - Smirnov test was used.

Table4. Normally distributed variables

	Stress Components	Delay of Software Project
Normal Average of Parameters	3/32	4/63
Standard Deviation	0/95	0/51
Kolmogorov – Smirnov Z	0/832	0/54
Significant	0/524	0/92

The results of Kolmogorov – Smirnov test in the above table shows that variable distribution is normal in the 95% confidence level.

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Considering the normal population, using parametric t-test is permitted. Thus, in order to explain and interpret variables, single-sample t tests with a Test Value = 3 and 95% (5% error) is used.

Table 5: The results of single-sample t tests with a Test Value = 3

Variable	p-value sig.(2-tailed)	μ	σ2	t
Stressor Job	0/001	3.8232	.70736	6/533
Stressor Colleagues	0/001	3.8146	.73468	0/093
Stressor leadership Style	0/001	3.4691	.79486	3/85
Stressor work Condition	0/001	3.6879	.68090	6/372

The results of the above table shows that all the factors have significant relationship with the test value (= 3). Mean survey also shows stressor job, stressor colleagues, stressor work condition and stressor leadership Style are present effective and strongly in the population.

8. ANALYSIS OF THE HYPOTHESIS

The first sub-hypothesis suggests that "There is a significant relationship between stressor job which employees and managers have to do and the delay of software projects in a large knowledge-based company ". As previously mentioned Pearson correlation coefficient was used to determine the relationship between two variables. According to the results, it can be stated that the relationship between stressor job and delay of software projects is significant at 95% confidence level. The Pearson correlation coefficient for variables is 0.392, which means that there is a significant positive relationship between these two variables.

The second sub-hypothesis suggests that "There is a significant relationship between stressor cooperation with colleagues and the delay of software projects in a large knowledge-based company ". Pearson correlation coefficient was used to determine the relationship between two variables. According to the results, it can be stated that the relationship between stressor colleagues and delay of software projects is significant at 95% confidence level. The Pearson correlation coefficient for variables is 0.432, which means that there is a significant positive relationship between these two variables but the relationship is not so strong.

The third sub-hypothesis suggests that "There is a significant relationship between stressor leadership style and delay of software projects in a large knowledge-based company ". Pearson correlation coefficient was used to determine

the relationship between two variables. According to the results, it can be stated that the relationship between stressor leadership style and delay of software projects is significant at 95% confidence level. The Pearson correlation coefficient for variables is 0.621, which means that there is a strong significant positive relationship between these two variables.

The forth sub-hypothesis suggests that "There is a significant relationship between stressor work condition and delay of software projects in a large knowledge-based company ". Pearson correlation coefficient was used to determine the relationship between two variables. According to the results, it can be stated that the relationship between stressor work condition and delay of software projects is significant at 95% confidence level. The Pearson correlation coefficient for variables is 0.813, which means that there is a very strong significant positive strong relationship between these two variables.

The main hypothesis suggests that "There is a significant relationship between organizational factors of stress and delay of software projects in a large knowledge based company". In this part, the Pearson correlation coefficient was used to examine the relationship between two variables (organizational factors of Stress and delay of software project). The Pearson correlation coefficient for variables is 0.325 which means that there is a positive significant relationship between two variables.

Table 6: Results of hypotheses

Hypothesis	R	P-Value	Result
Stressor job impacts on delay of software project	0/392	0/001	confirmed
Stressor colleagues impact on delay of software project	0/432	0/005	confirmed
Stressor leadership style impacts on delay of software project	0/621	0/023	confirmed
Stressor work condition impacts on delay of software project	0/813	0/001	confirmed

To test the average rank of four variables involved in delay of software project, Friedman test was used and the results are presented as following:

Table 7: Ranking Of stressor factors

Variables	Average Rank	Priority
Stressor job	3/89	Forth
Stressor colleagues	4/75	First
Stressor leadership style	4/41	Third
Stressor work condition	4/54	Second

After reviewing the research hypotheses, the effect of independent variables on the dependent variable was measured using multiple linear regression analysis and the direct effects of stressor factors on the delay of software projects has been

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examined. The Durbin - Watson test was used to evaluate independence of errors. Value of Durbin - Watson (1.838) is between 1.5 and 2.5, the assumption of non-correlation among the errors cannot be rejected and regression can be used.

Table 8. Regression coefficients

Variable	Not Standardized coefficients		Standardized coefficients	T	Significance level
	B	SD	Beta (β)		
Stressor job	0/248	0/044	0/169	5/665	001/0
Stressor colleagues	0/281	0/039	0/002	7/012	001/0
Stressor leadership style	0/226	0/046	0/258	4/924	001/0
Stressor work condition	0/331	0/041	0/342	6/425	001/0

9. DISCUSSION

The aim of this study is to investigate the relationship between organizational factors of stress and delay of software projects in a large knowledge-based company. Results of testing hypotheses confirm that there is significant positive relationship between organizational factors of stress and delay of software projects in a large knowledge based company.

Accordingly, in the first hypothesis analysis, the results indicate that there is a significant positive relationship between stressor job and delay of software projects in a large knowledge based company. Stressor job variable has positive and direct effect on delay of Software projects. This relationship is significant at 95%. In fact the positive relationship indicates that by increasing stressor job, greater delay of software projects will occur, but due to the small amount, it hasn't so much effective role. The findings are consistent with results of Taghavi (2010), Abdullahi (2011), Rahmani (2006), Pouremadi (2010), Kashefi (2009) and Abdollahpour (2006).

In the second hypothesis analysis, the results indicate that there is a significant relationship between stressor colleagues and delay of software projects in a large knowledge-based company. Considering the results, it can be stated that stressor colleagues variable has positive, direct and significant effect, but not so strong, on delay of software projects. 77% of change of delays of software projects is related to stressor colleagues. This finding is consistent with the results of Rodrigues and Gowda (2011), Mita Singh (2010), Assaf Et al. (2006), Taghavi (2010), Rahman (2006) and Abdollahpour (2006).

The results of third hypothesis analysis indicate that there is a strong significant positive relationship between stressor leadership style and delay of

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software projects in a large knowledge-based. With a non- stressful leadership style, the delay of software projects will be reduced. 64 % of changes of delays of software projects are affected by stressor leadership style. This finding is consistent with the results of Taghavi (2010), Soleimanian and mehrabi (2013), and Abdollahpour (2006).

In the fourth hypothesis analysis, the results indicate that there is a significant positive relationship between stressor working condition and delay of software projects in a large knowledge-based company. Stressor working condition variable exists strongly in the knowledge based company. The results show that stressor working condition has very strong positive effect on delay of software projects in a large knowledge based company. Results show that high correlation between variables of this hypothesis states that even slight increase in stressor working conditions, can have effect on delay of software projects and cause further delay. 72 % of changes of delay of software projects are affected by stressor working conditions. This finding is consistent with results of Rodrigues and Gowda (2011), Taghavi (2010), Abdollahpour (2006), Rahmani (2006), Pouremadi (2010), Sharifi Ravari (2010) and Tabarzadi (2005).

In the analysis of main hypothesis, the results indicate that there is a significant relationship between organizational factors and delay of software projects in a large knowledge-based company. It can be concluded, stress factors variable has positive impact on delay of software project variable. Stressor working conditions plays the most important role in the model in this stage, because it has the most direct impact on the delay of software projects. 45 % of changes of are affected by stressor organizational factors. These findings are consistent with the results of Robbins and Griffin (2014), Assaf et al. (2006), Safdarian (2014), Abdollahpour (2006), Taghavi (2010), Rahmani (2006) and Ravand Salahi and Abhari (2011).

10. CONCLUSION

In this study the researcher investigated the relationship between organizational factors of stress and Delay of software projects in a large knowledge-based company. Results of testing hypotheses indicated that there is a direct and positive relationship between organizational factors of stress and delay of software projects in a large knowledge based company. This means that by increasing the

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level of each organizational factors of stress, delay of software projects increases. Findings show that there is a significant positive relationship between stressor job and delay of software projects So that increasing the level of stressor job leads to more delay of software projects.

There is a significant positive relationship between stressor colleagues and delay of software projects. Also the relationship between stressor leadership style and delay of software projects is positive and significant. Stressor working conditions and delay of software projects have a significant positive relationship. Among the four organizational factors assessed in this study, stressor working conditions have the greatest effect on delay of software projects

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