

## **Association of Stress, Knowledge Management, and Change with Organizational Effectiveness in Education Sector of Pakistan**

**Muhammad Khalid Khan**

*University of the Punjab, Lahore*

**Rizwan Qaiser Danish**

*University of the Punjab, Lahore*

**Yasin Munir**

*University of the Punjab, Lahore*

**Sadia Hafeez**

*University of the Punjab, Lahore*

**Noureen Alam**

*University of the Punjab, Lahore*

**Arooj Fatima**

*University of the Punjab, Lahore*

### **Abstract**

The purpose of this study is to analyze the impact of organizational stress, knowledge management, and organizational change on organizational effectiveness. A valid questionnaire was distributed to administrative staff and faculty members of different educational institutes. 100 questionnaires were distributed in public and private educational sectors. 75 complete questionnaires were received at response rate of 75%. A non probability random sampling technique was used to select the sample. Pearson's moment correlation and linear regression was applied to study the relationship between organizational stress, knowledge management, organizational change and organizational effectiveness. Results show significant relationship of factors and positive impact on organizational effectiveness. This research also discusses practical implications and research limitations.

Keywords: Stress, Knowledge Management, Change, Organizational Effectiveness, Education Sector, Pakistan

### **Introduction**

Organizations throughout the world are deeply focused in implementing such knowledge management practices that can enhance the organizational effectiveness. Organizational effectiveness is affected by various antecedents of

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knowledge management including organizational culture and organizational learning. An organization's formal and informal expectations of individuals are best described from organizational culture. Organizational culture describes what kind of people will fit into the organizations, and influences how people communicate within the organization and outside the organization. Constructing an effective culture within which people work in an organization is very important for effective management. Therefore, an organization must build a culture of openness, faith, autonomy and satisfaction for implementing organizational culture successfully. Organizational culture will increase the knowledge workers satisfaction that will positively contribute in the organizational effectiveness.

Organizational learning is the process through which an organization builds knowledge and rebuilds existing knowledge. Employees will more understand knowledge creating and sharing activities positively, if organization has a culture of learning. Therefore, organizations should more focus on learning behaviors. Organizations that have learning environment are more competitive in a changing environment. Organizational learning positively contributes in organizational effectiveness.

There are many factors that contribute to workplace stress such as excessive workload, isolation, extensive work hours, tensed work environments, lack of autonomy, difficult associations between co-worker and management, management bullying, harassment and lack of opportunities or motivation to improvement in one's skill level. Pressure at the workplace is unavoidable due to the demands of the current work environment. Pressure perceived as acceptable by an individual, may even keep workers alert, motivated, able to work and learn, depending on the available resources and personal characteristics. However, when this pressure becomes excessive or otherwise uncontrollable it leads to stress. Stress can damage an employee's health and the business performance. Job stress sometimes may cause job burnout in the employees. Work-related stress can be caused by poor work organization, poor management, poor work design, poor working conditions, and lack of support from colleagues and supervisors.

If a large number of workers are affected, work stress may confront the healthiness and performance of their organization. Unhealthy organizations cannot get the best from their workers and this may also affect not only their performance in the increasingly competitive market but also even their survival. Job stress has negative impact on organizations due to which organizations may face high absenteeism, increased labor turnover, poor time keeping, poor productivity and performance, poor motivation, low morale, increased ill-health, increased employee complaints accidents and incidents reports. These all things ultimately affect the organizational effectiveness. This work stress affects the performance of the employees and when the employees will be unable to give their best the organization will not be able to achieve its goals effectively. So overall it will affect organizational effectiveness. One of the main reasons for job stress is work family conflict. When an employee will fail to maintain a balance between his

work life and family life he will surely face job stress and his performance will be affected.

As the technology changes rapidly, organizations need to modify the ways of doing things. To be competitive organizations must respond to change quickly. Most of the organizations apply change to improve their effectiveness. Organizational culture has impact on organizational change that will influence the organizational effectiveness. Culture is the set of norms, values, beliefs, and expectations of individuals in organizations. For the reason that its shared values, beliefs, and nature, culture has a significant effect on efforts to change organizational behavior. Organizational culture will affect the implementation of change. Various aspects of organizational performance, i.e. financial performance, innovation, and employee and customer satisfaction have been linked by characteristics of organizational culture. Organizational culture is considered as barrier to change and may cause for the failure of change initiatives. Incapability to fix change initiatives in the organizations culture may as one of the main cause that change efforts fail. There are other obstacles that also come across during major organizational change such as poor communication, employee resistance to change, cultural mismatch in mergers and acquisitions and insufficient timelines developed for effective change implementation. These all are barriers that will affect during implementing change in an organization and will influence the performance of an organization. Organizations need to define and identify the change that is required and managing change within the organizational culture is important for organizational effectiveness.

Knowledge is considered a valuable asset and its effective use as core competency will fetch the desired outcomes. The current societal culture of Pakistan does not favor open sharing of knowledge because it is considered as similar to sharing of power. Organizations are not putting efforts for knowledge management. A significant number of Pakistani organizations don't have the appropriate under-structure required for implementing knowledge management initiatives. Most of the organizations structure does not support the free flow of communication. Organizations must identify the need of knowledge management and also its alignment with organizational strategy will help to gain the competitive advantage. Stress is a universal factor faced by employees all over the world. Stress has become major problem for employer specifically in developing countries like Pakistan where employer does not fully perceive the effect of stress on employee performance. Most of the organizations in Pakistan do not care their employees and those employees do not like to work with their organizations because of high level of stress among them. Employees who do not adjust with the organization, no involvement in decision making are considered the main cause of stress. Moreover personality traits, lack of relaxation along with confusing rules, rigid organizational structure, no control over work environment, high unpredictability in job pattern all affect employee performance. Organizations in Pakistan do not much focus on stress management. Managers should realize the

effect of workplace stress otherwise the potential of competent employees can be wasted causing lowering the overall organizational performance and lowering organizational effectiveness. It is the requirement of today organizations to remain competitive and respond change quickly. In Pakistan most of the organizations have their structure very rigid so that organizations cannot easily adopt change. Organizations in Pakistan usually not respond to change and prefer things to stay the way they are and view the change as an inconvenience. Management needs to understand the change process so that organizations can better help managers and employees deal with change. The objective of this study is to analyze the impact of knowledge management, organizational stress, and organizational change on organizational effectiveness specifically in Pakistani context.

### Literature Review

Global outsourcing has become an integral part of the organizations who want to survive in the global environment and attain a competitive advantage (Elmiti & Kathawala, 2000). It is the need of the organizations today to develop and implement such management structures which help to protect the information assets of the organization. There are certain organizational factors which influence the implementation of Information Security Management (ISM) like organization size and industry type etc (Chang & Ho, 2006).

Non-profit organizations are also under pressure like the profit making and public organizations to develop strategies and such management practices which help to attain organizational effectiveness. Organizational effectiveness is as important for non-profit organizations as for profit making (Papadimitriou, 2007). There is an approach for the organizations to attain effectiveness that they should try to develop their manpower through different techniques like innovation, managerial competence and strategic HRM (Wang, 2005). There is a relationship among organizations' learning orientation and networks. The learning process of an organization drives co-innovation focus (Westerlund & Rajala, 2010).

The employees vary in their attitudes regarding management of stress. Almost every small organization of the world, individual employees and managers face stress. Stress may have destructive or beneficial effect on the organization and its employees so there should be proper trainings about how to deal with stress (Treven & Potocan, 2005). The managers should try to enable themselves to use mindfulness techniques so that they can best deal with the emotional reactivity and they deal with stress in a best way (Hede, 2010). Humor is an essential part of human life and it helps a lot employees to get rid of their stress. If the sense of humor is good it helps the individuals to relax and also improve personal interactions. Studies show that if the workers are happy they will be more productive for the organization (Lee & Kleiner, 2005).

Job stress causes the burnout situations and burnout further may cause psychological stress. This psychological stress negatively affects their

organizational performance which ultimately affect the interpersonal relations and performances. And these all stresses disturb the construction project manager's activities (Leung & Chan, 2011). Today the organizations are changing very speedily according to the environment and to compete in the global world. There are certain factors which are very necessary for the organizations to be successful like the senior managers should be committed towards their jobs, staff should be willing to participate, realistic expectations and a time frame should be set for the outcome. There should be health promotion outcomes as well (Coffey, Dugdill, & Tattersall, 2009). It is hard to bring change in the public sector. If certain methods are adopted like a better appraisal system and reward system are implemented a good and qualitative change can be brought in the public sector. Research shows that different methods of organizational change may create different change (Palermo, 2011). The results shows that the change that has occurred in the military organization has resulted in enhancement of an alignment of communication artifacts and the structures of organization knowledge has been distributed among various units and a great focus on the process of standardization has been given (Barbaroux, 2011).

The research shows that implementing change in practice is difficult. Researchers argue that differing experiences of top and middle managers and complications of their communication is a problematic factor in applying organizational change. The managers found those competencies helpful that "make sense" of change they afterward experienced (Andrews, 2008). The research depict that managing change is very difficult and change management methods can increase the environmental aspects of a firm (Ronnenberg, Graham, & Mahmoodi, 2011). Most change initiatives are unsuccessful because management do not pay much attention towards employees change process and do not provide enough time to adjust with the change. Useful change tends to be associated with a multi-step process that will engage employees and to provide enough time for each step to make a part of the organization (Stanleigh, 2008). The data shows enough evidence to develop a correlation between organizational culture, organizational learning, and Knowledge Management and employee satisfaction (Singh, 2011). Technology can play an important role in gaining competitive advantage. The organizations should use strategic view of managing their technology. The organizations need to use those strategies that boost up continuous learning in order to gain competitive advantage (Ahmad, 2011). Knowledge is a core entrepreneurial asset. The research shows the significance of before the job learning and on the job learning and transfer of knowledge in entrepreneurial product development (Burns, Acar, & Datta, 2011).

Organizations may have different cultures and values and understand knowledge differently. Sharing knowledge has become important to handle the global projects successfully. And it is difficult to build up Knowledge Management processes where culture has verity of standards (Anantamula, 2010). It was derived from observation that private sector follows knowledge

management dimensions more than public sectors. Although private sector is ahead of the public sector but there is still a need of improvement (Chawla & Joshi, 2010). After studying about 84 feedback forms they were permitted to introduce the different methods of analyzing the different layers of organizational culture existing in current environment and various prospective wished by their employees and to behave their affairs with other employees and higher authorities in the organization (Grigoruta & Viorica, 2006).

A highly developed and practical technique to experience modeling is offered and is brought under discussion in the perspective of an extensive change in the organization. There must be the proper combination of experiences and knowledge of employees to sustain and improve the organizational performance (Vakola, Soderquist, & Prastacos, 2007). EI is a forecaster of victory and is best way to improve the working behaviors of organizational employees. With the proper existence of EI into the main methodologies of organization affect positively to the overall organization and not only limited to the some number of employees (Chrusciel, 2006). Now a day's regular positive change is very important need of organizations. The observation by futurist Charles Handy (1993) that: achieving change in organizations is not so much about "managing" – is a method which suppose managers know what to do and how to do and can argue others to follow him – but is a direction finding method of change (Smith, 2006).

This reading narrates the complications of change management in the university libraries and indicates that the management of university, the library manager, and the employees in library are very important to bring the change in the university libraries. Specifically narrates that managing change is equally important as well as the developing their staff is important. Regular check and balance and advancement of technologies and education of employees ensure the effective change (Malhan, 2006). Examination is very light in the reality and also the resulting penalties of high pressure on the working and lives of managers. Stress can be minimized by communication discussions team working and proper planning. However there is always a crucial need for the authentic research to minimize the stress of higher management and lower level employees to polish their performances in disasters (Flin, 1999).

The research shows that there is quite low levels of employees who are satisfied with their jobs because of the huge level of constant worry. Results depict that there are some factors which show a significant relation with their academic knowledge related to the work and the decreasing abilities of students which are influencing negatively to the lack of satisfaction of their jobs and stress. The results obtained from research narrate that the work performance with accounting academic background is much better than the work performances with the science academic background (Pop-Vasileva, Baird, & Blair, 2011). IT projects are mostly uncertain to achieve the success all time. But the project manager has to manage it in a manner so that excellent results can be achieved. For this purpose the project manager must own the extra technical expertise. IT project's success significantly depends upon the managers' optimism and stress on project. It's the manager's

attitude which can increase the chances of success of a project. For the success of a project there must be the analysis of personal needs of employees and there must be the minimum external interference (Smith, Bruyns, & Evans, 2011). The findings of the study depict that the actual and positive results can be achieved by those teachers who take part actively in training program. Some teachers prefer the comprehensive courses believing that these will result in a strong analysis of subject. And the practical training outside the class is much better than the classroom based imaginative exercises (Jesus & Conboy, 2001).

The common hurdles creating the stress are the day by day changes in the organization and the employees have no believe in the managing authorities and they are doubtful to real value of new study. There must be the high level of commitment from the side of higher authorities and the willingness of all staff members and there must be the proper education and training for them. Management must show the concern to their personal needs also (Coffey, 2009).

On the basis of above literature review following hypothesis are drawn:

**H1:** *Knowledge Management is significantly and positively associated with Organizational Effectiveness.*

**H2:** *Organizational Stress is significantly and positively associated with Organizational Effectiveness.*

**H3:** *Organizational Change is significantly and positively associated with Organizational Effectiveness.*

## **Methodology**

To obtain the most important information questionnaires were filled by the respondents and separate questionnaires were distributed in administrative staff and faculty members to determine the impact of organizational stress, knowledge management and organizational change on organizational effectiveness. Questionnaires contain two sections, demographic and subjective.

Demographic section comprises of Gender, Age, Marital Status, Establishment size, Sector, Job tenure, Industrial Sector, and Position. Subjective section comprises of Organizational Stress, Knowledge Management, Organizational Change, and Organizational Effectiveness. 70 administrative staff and 30 faculty members were selected to obtain responses and 100 questionnaires were distributed and 75 out of 100 were received complete questionnaires at the response rate of 75%. 5-points Likert scale was used to measure the responses. Data were gathered from higher education institutes of Pakistan with stratified random sampling technique. Administrative staff and faculty members of the universities were the population of this study. A survey instrument in the form of close ended questionnaire was developed for the purpose of data.

**Results and Discussion**

To examine the impact of organizational stress, knowledge management, organizational change on organizational effectiveness, Pearson’s moment correlation was examined and to test the relationship linear regression was applied. To analyze the tendency of respondents descriptive statistics were computed and to test the reliability of the variables Cronbach’s alpha was measured.

Table 1 shows mean value of organizational stress is 3.56 that show positive response of respondents. 3.56 is close to 4 that shows organizational stress has significant relationship with organizational effectiveness while .54 is the standard deviation that shows 54% variation among responses where as alpha is .657 that shows 65.7% reliability of the survey about organizational stress of the respondents. In Table 1 the mean value of knowledge management is 3.35 that show positive response of the respondents. 3.35 is close to 4 that shows knowledge management increases the organizational effectiveness while .42 is the standard deviation that shows 42% variation among responses where as alpha is .746 that shows 74.6% reliability of survey about knowledge management of the respondents. Table 1 shows that organizational stress and knowledge management is strongly correlated with organizational effectiveness and also significant correlate with each other. From Table 1 mean value of organizational change is 3.35 that shows positive response of respondents. 3.35 is close to 4 that shows organizational change has relationship with organizational effectiveness while .48 is the standard deviation that shows 48% variation among responses where as alpha is .610 that shows 61.0% reliability of survey about organizational change. Table 1 shows that organizational change has poor correlation with organizational stress and strongly correlated with knowledge management and organizational effectiveness. From Table 1 3.61 is the mean value of organizational effectiveness that show positive response of respondents while .47 is the standard deviation that shows 47% variation among responses where as alpha is .795 that shows 79.5% reliability of survey about organizational effectiveness. Table 1 shows that organizational stress, knowledge management, and organizational change are strongly correlated with organizational effectiveness and also significant correlate with each other.

**Table 1: Pearson’s moment correlation N=100**

Description of Variables	Mean	SD	Alpha	1	2	3	4
Organizational Stress	3.56	.54	.657	1	.493***	.0152	.339**
Knowledge Management	3.35	.42	.746	.493***	1	.514***	.658***
Organizational Change	3.35	.48	.610	.152	.514***	1	.528***
Organizational Effectiveness	3.61	.47	.795	.339***	.658***	.528***	1

**\*\*.** Correlation is significant at the 0.01 level (2-tailed).

To test the relationship of organizational stress, knowledge management, organizational change, and organizational effectiveness linear regression is analyzed while Durbin-Watson is also analyzed to test the normality of data and nature of correlation.

Table 2 shows R=.696 shows 69.6% variation in organizational stress, knowledge management, organizational change, and organizational effectiveness. R Square is the coefficient of determination which shows that 48.4% total variation with its linear relationship of organizational stress and organizational effectiveness. Durbin Watson test is used to test the nature of correlation whether it is positive autocorrelation, negative autocorrelation and zero autocorrelation. Since the value of "d" is less than 2 it means there is positive autocorrelation.

**Table 2: Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.696 <sup>a</sup>	.484	.468	.39703	1.576

- a. Predictors: (Constant), organizational change, Organizational Stress, knowledge management  
 b. Dependent Variable: organizational effectiveness

From Table 3 of ANOVA shows level of significance since the value of “P” is less than .05 so it is accepted that impact of organizational stress, knowledge management, and organizational change on organizational effectiveness is highly significant.

Model	Sum of Squares	Df	Mean of Square	F	Sigh
1	Regression	14.203	3	4.734	30.034
	Residual	15.133	96	.158	
	Total	29.336	99		

- a. Predictors: (Constant), organizational change, Organizational Stress, knowledge management  
 b. Dependent Variable: organizational effectiveness

**Table 3: ANOVA<sup>b</sup>**

In Table 4 A=.313 is the average of organizational effectiveness when organizational stress is zero whereas .064 is the value of “beta” that shows one unit increase of organizational stress will bring .064 increase in organizational effectiveness.

**Table 4: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.313	.412		.760	.449		
	Organizational Stress	.064	.098	.055	.652	.516	.449	1.345

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	Knowledge Management	.559	.111	.494	5.042	.000	.516	1.785
	Organizational Change	.342	.111	.266	3.085	.003	.000	1.384

a. Dependent Variable: organizational effectiveness

### **Organizational Effectiveness = .313 + .064 (Organizational Stress)**

Above linear equation shows that one percent organizational stress will bring 6.4% change in organizational effectiveness.

A=.313 is the average of organizational effectiveness when knowledge management is zero whereas .559 is the value of “beta” that shows that one unit increase in knowledge management will bring .559 unit increase in organizational effectiveness.

### **Organizational Effectiveness = .313 + .559 (Knowledge Management)**

Above linear equation shows that one percent knowledge management will bring 55.9% change in organizational effectiveness.

A=.313 is the average of organizational effectiveness when organizational change is zero whereas .342 is the value of “beta” that shows that one unit increase in organizational change will bring .342 unit increase in organizational effectiveness.

### **Organizational Effectiveness = .313 + .342 (Organizational Change)**

Above linear equation shows that one percent organizational change will bring 34.2% change in organizational effectiveness.

According to table 4 if tolerance value exceeds than 5 and VIF exceeds 10 it means Collinearity in data exist. Table 4 indicates .449 and 1.345 tolerance value is less than 5 and VIF is less than 10 that indicate there is no Collinearity exists.

## **Conclusion**

This study provides a guide to managers and employees of the organizations to know how different factors affect organizational effectiveness. The research findings help managers to identify the need of knowledge management and should also focus on stress management. It also helps managers to understand the change process. Knowledge management is considered as an important factor for the organizational effectiveness. Therefore, a more comprehensive research can be conducted for more detail. A larger population can be taken for future research. The nature of data is cross sectional while to measure change longitudinal data is required. Future researchers can take better the general application of the current study by replicating these outcomes using other statistical tools and methods.

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## Biographical Notes

**Dr Muhammad Khalid Khan** is working at Hailey College of Commerce, University of the Punjab, Lahore, Pakistan as Assistant Professor.

**Rizwan Qaiser Danish** is working at Hailey College of Commerce, University of the Punjab, Lahore, Pakistan as Assistant Professor.

**Yasin Munir** is PhD Scholar at UTM Malaysia in Faculty of HRD and Management

**Sadia Hafeez, Noreen Alam and Arooj Fatima** are MBA students at University of the Punjab, Lahore-Pakistan

**Noreen Alam** University of the Punjab, Lahore

**Arooj Fatima** University of the Punjab, Lahore

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