

# THE E-LEARNING PREVENTS STRESS TO IMPROVE THE QUALITY

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## Abstract

*The most important risk to student's health and quality education is that posed by chronic stress. The objective of research is to propose the necessary changes in the system of institutions i.e. implement e-learning as part of existing system to enhance the traditional learning system. This paper investigates that e-learning helps to prevent students stress and improve quality in e-learning system as compared with students in traditional education. Specifically, the findings suggest that students of traditional system experience more frustration, exhaustion, overtiredness than the students of e-learning systems which increases the stress level and decreases quality of students work.*

**Keywords:** education, time, work, quality

## 1. Introduction

Stress normally occurs due to irregular, unexpected and unavoidable circumstances in learning education process. When expectations for academic performance increase, weak student-teacher relationship and unexpected or disorder sequences of activities at institution creates stress in its environment.

In case, institution is functioning well in its functions than it can create positive stress to groom its students at 360 degree level which is affordable to students i.e. Projects/Assignment Dead lines, End term examinations etc. On the other hand, academically, socially, or emotionally they experienced greater difficulty due to critical situations such as odd timings, un-certain scheduling, contents unavailability, more quantity of slides in classes at traditional institutions. This is because they don't have master skills at the same rate and time as their instructors, administrators and processes of the institutions owned.

The technology used may have a significant influence on online activity

(Kayworth & Leidner, 2002)[1] and it affects the way people interact in terms of the communications, environment it provides and the ease with which people can use it (Yoo & Alavi, 2001, Walther, 1996)[2]. So e-learning can help in reducing conflicts, stress, depression, time, cost etc.

## Literature Survey

T. I. Suvinen, J. Ahlberg (2004) explains: Stress is part of modern life. However, increased or prolonged stress can lead to difficulties in concentrating, tiredness and fatigue, decreased work performance, physical depletion or exhaustion, sleep difficulties, specific somatic and psychosomatic problems [3]. It has been shown also that stress-related chronic pain problems can lead to increased absenteeism from work and increased health care needs and costs.

Bill Wilkerson (2003)[4] explains: Mental health problems are burning like wildfire worldwide, leaving a landscape scarred by economic loss and human suffering. The major sources of disability worldwide are depressive disorders, self-inflicted injuries, dementia and alcohol dependence. Research since the 1950s has demonstrated that the prevalence of mental disorders hovers around 15% and rises to 40% if stress related disorders are included. These data have been exasperatingly ineffective as tools for lobbying governments about the need to change policies toward mental health care. Unfortunately, both governments and the other community have continued to assign a low priority to preventing and treating mental disorders. J. C. Wingfield\* and R. M. Sapolsky (2003) [5] explain environmental and social stresses have deleterious effects on reproductive functions. Global climate change, human disturbance and endocrine disruption from pollutants are increasingly ,likely, to pose additional stresses that could have a major impact on society. Nonetheless, some populations of vertebrates (from fish to

mammals) are able to temporarily resist environmental and social stresses.

*Harrison Wein(2000)* [6] people believed that stress made you sick. Up until the 20<sup>th</sup> century, the idea that the passions and emotions were intimately linked to disease held sway and people were told by their doctors to go to spas or seaside resorts when they were ill. Gradually these ideas lost favor as more concrete causes and cures were found for illness after illness. But in the last decade, scientists like Dr. Esther Sternberg, director of the Integrative Neural Immune Program at NIH's National Institute of Mental Health (NIMH), have been rediscovering the links between the brain and the immune system. There are several components of stress to think about, including its duration, how strong it is, and how long it lasts. Every stress has some effect on the body, and you have to take into account the total additive effect on the body of all stressors when considering how to reduce stress.

Dolores Kong(1999) [7] European and Japanese scientists have been looking at the influence of strain on heart disease, gastrointestinal illness, immune system function, back and joint pain, and depression and absenteeism, as well as at ways to redesign the workplace to reduce stress.

#### Stress description interpretation

Students in virtual schools showed greater improvement than their conventional school counterparts in critical thinking, researching, using computers, learning independently, problem-solving, creative thinking, decision-making, and time management (Barker & Wendel, 2001). [8]

Learning is not a spectator sport. Students do not learn much just sitting in classes listening to teachers, memorizing prepackaged assignments, and spitting out answers. They must talk about what they are learning, write reflectively about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves" (Chickering & Gamson, 1987) [9].

Students asked to present their work to the rest of the class. Class members may also be encouraged to give feedback on the projects that are presented. In the e-learning system, bulletin board assignments were typically available for all to see while discussion forum is also available for discussing the conflicting points. This will

lead to urgent feedback system on ideas; work performed in projects and research dimension in studies which give rise to the innovations and quality in work.

Collaboration or integration is one of the most critical issues in educational context, especially in e-learning system where people and knowledge are distributed across time and space. A number of studies in education have examined the relationship between collaboration and learning (Johnson and Johnson, 1985; Slavin, 1987; Johnson and Johnson, 1989; Sharan and Shaulov, 1990; Dobos, 1996). According to Christiansen and Dirckinck-Holmfeld (1995), collaboration is a way of overcoming two major problems in distance learning: the problem of accommodating to the academic discourse and the problem of becoming part of the academic community living at a distance.

School examinations and the culture of grading and assessment, as well as many games and sports, encourage early individual competitiveness. While this develops many good qualities, it needs to be counterbalanced by collaborative/integrative activity i.e. discussion forum. Otherwise, people learn that they get on better on their own. They feel that they have to differentiate themselves from others in order to succeed. There is need for trust in student-student contacts and teacher-student relationship. Moreover, standardized information, knowledge will keep the students up to date about the trends in market.

Trust is at the heart of collaboration (Herriot et al, 1998)[11]. It plays an important role in knowledge sharing. It plays a more crucial role when it has to be created in an online or virtual context. Good relations among people in community purge the process of distrust and fear, and break down personal and organizational barriers (Nonaka and Takeuchi, 1995). Through well-established relationships, people develop the sense of trust, identity and commitment that allows them to create new knowledge and share that knowledge to other people in the community.

### Theoretical Framework

Independent variable is Stress which has strong negative impact over the biological variable health of students and performance variable quality of students work.

Stress impacts health, quality

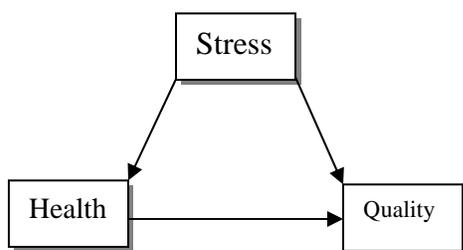


Figure - 1

## Research Hypotheses

### H0:

The e-learning stress does not prevent stress to improve quality

### H1:

The e-learning stress prevents stress to improve quality

## Research Design

Population for this study is comprised 20-25 universities in Islamabad and Rawalpindi region.

All the respondents were regular students of undergraduate and graduate program studying in different disciplines. To participate in this study, respondents must have more than 1 semester in traditional or e-learning system.

Sample size of 400 students is used in the research study.

Survey Instrument was developed to investigate factors influential to stress at traditional education system. The survey instrument categorized into 4 parts i.e. course contents, faculty, time and administrative issues. It comprises of areas related with personal and educational factors that create stress. The questionnaire includes inquiries about faculty profile, course contents, student-teacher and student-students collaborations, Time, cost, distance constraints, quantity vs. quality of material and issues faces by students due to mis-management, irresponsible and informal behavior towards the students facilities. Stratified sampling technique was used in survey.

## Data analysis

To effectively complete an analysis of the data, a quantitative method of analysis was applied. The hypotheses corresponding to the study objectives were analyzed using Microsoft Excel Spread Sheet. Descriptive statistics was performed on all variables

to obtain frequencies and measures of central tendency such as mean. Following information is extracted from the survey.

55% respondents strongly agrees that contents of e-learning than traditional systems are excellent, 25% responded as agree that contents are good, 10% reply that e-learning contents are satisfactory and 10% does not responds. About course instructor profile responses are as follow:

40 % excellent

25 % good

20% satisfactory

15% poor

20% students have strong relationship, 30% have good relationship, 15% have satisfactory relationship and 35% have poor relationship with instructor in e-learning system than traditional education system.

In area of time management, 70% responded as excellent, 15% responded as good, 10% responded as satisfactory while 5% responded as poor.

Administrative area of questionnaire was responded as 65% responded as strongly agree. 20% as agree 10% not agree and 5% strongly not agree

## Discussion

The responses shows that e-learning system reduces stress and helpful in time management, cost savings, collaborations. Moreover, it shows that the contents of courses are more up to date and comprehensive than others. Faculty profile is also good. It proves that H0: The e-learning stress does not prevent stress to improve quality is not true. So H1: the e-learning stress prevents stress to improve quality proves to be true hypothesis.

## Conclusion

Currently in higher education, both on campus and online, we individualize faculty practice (that is, we allow individual faculty members great latitude in course development and delivery) and standardize the student learning experience (that is, we treat all students in a course as if their learning needs, interests, and abilities were the same). Instead, we need to do just the opposite: individualize student learning and standardize faculty practice. But with its connotations of words like *regulate*, *regiment* and *homogenize*, the word *standardize* does not precisely capture what is required. What higher education needs is greater consistency in academic practice that builds on accumulated knowledge about improving quality and reducing costs.

Two factors in the design strategies used by e-learning system: (1) the collective commitment of all faculty teaching the course, and (2) the capabilities provided by information technology. Would it be possible for a single professor conducting an online class to develop such creative, comprehensive, learner-centered designs? Information technology enables best practices to be captured in the form of interactive Web-based materials and sophisticated course-management software. Faculty can add to, replace, correct, and improve an ever-growing, ever improving body of learning materials.

Sustaining innovation depends on a commitment to collaborative development and continuous quality improvement that systematically incorporates feedback from all involved in the teaching and learning process.

### Recommendations

1. The university should provide opportunities for and encourage instructors to share best practices with each other through faculty development workshops, seminars, etc. Incentives such as awards and recognition might also be used to encourage excellence.
2. Instructors and students should be taught how to capitalize on the strengths of asynchronous conferencing tools by using them more effectively in their courses. (This document laborates on some principles that will help instructors to use asynchronous conferencing tools more effectively.)
3. Encourage instructors to learn about and implement course management strategies that do not compromise the quality of the instruction. (Several specific strategies are presented in this document.)
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5. In spite of difficulties in measuring stress, both faculty and administration regularly make judgments about levels of stress and the level of associated risk.
6. Universities need to develop a dynamic culture that recognizes that work satisfaction factors such as flexibility, autonomy, security, recognition, ownership, participation and involvement are as essential as stable student-admin, student-faculty, student-student relations.
7. Some stresses cannot be solved: fears of the future, regrets about the past, losses, self doubt and deliberate decisions to endure a stressful

situation fall into this category. But, if you cannot change your situation, you can change your attitude. Cognitive techniques such as thought stopping and reframing should be applied.

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