

**HIGHER EDUCATION THROUGH DISTANCE LEARNING:
VERIFYING BIJAN MASHAW MODEL IN THE
CONTEXT OF PAKISTAN**

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ABSTRACT

Higher education is the need of time in Pakistan. Growing number of degree awarding institutes is a step in the right direction. Private sector universities are playing pivotal role in this regard. We analyzed the situation through literature review and found that the trend of distance learning in higher education is increasing worldwide. We also analyzed the situation in Pakistan and found that Pakistan is not following the world trend with the same pace. With that knowledge in mind we surveyed undergraduate and graduate students of two private sector universities in Karachi. The result shows that distance learning is favored among the surveyed students and they are more willing to continue their higher education through distance learning programs.

INTRODUCTION

The awareness and demand for higher education in Pakistan are increasing very rapidly. This is also evident from the increasing number of higher education institutes in the country. Institutes in Pakistan are competing for space in the higher education system. The Higher Education Commission (HEC) is playing a pivotal role in increasing the quality of higher education. Research requirement have been successfully inculcated into the system and a good number of universities are having their own research journals today. These journals have also been categorized based on their quality papers. More and more disciplines are introduced for the students to cater the market need. For example, courses like fashion designing and media production were never part of the higher education curricula but today such courses form part of the program in a number of institutes.

This paper addresses the increasing need of higher education in Pakistan. Globally the trend of distance learning is increasing. More and more programs are being offered through distance learning. We feel in Pakistan this is not yet prevalent in a larger perspective. The distance learning program has also not been advocated by the HEC of Pakistan to a greater extent. While some critics may contend about the quality of education through distance learning, more people appreciate the reach through this system. As high as seventy percent of the people live in rural areas and for them higher education through regular classroom programs is a dream that they are unable to materialize. Under such circumstances distance learning solves their problem. As far as quality is concerned, we feel that competition at the market place takes care of the quality itself.

LITERATURE REVIEW

Linn (1996) gave importance to cognition in distance learning. She emphasized more on transmission than designing of courses. She coined the term autonomous learning with reference to the requirements of distance learning. However she felt the need of guidance in specific situations. According to her, guidance increases autonomy and supports discipline, lack of guidance may leave many students unprepared for the next course and to realize the benefits of distance learning course design needs support and nurturing. Anderson & Jackson (2000) studied computer assisted learning. They think that a true learner support environment is needed for distance learning program. According to them there are many different learning styles. Observations show that as the knowledge level increases learners tend to move from structured and guided style to exploration and discovery style of learning. Structured and guided styles are best for presentation type while unguided discovery styles are best suited for simulated or game learning. Gu, Zhang, Lin & Song (2008) opined that different kinds of tools and resources should be given as support for learning. These include tutorial orientation coach, multi level scaffolding, and peer support, sharing of ideas and learning tools. Learning support may also be provided through online courses.

Additionally, the designing of the support system in a particular way is another dimension of the system. The authors also stressed about the effective sharing and evaluation. Frohberg, Göth & Schwabe (2009) explained about mobile learning. They suggested that mobile learning should first address the advanced learners. It should provide instruments that may invite reflection, communication and cooperation. The authors also suggested developing special tools for moderation and monitoring. This would give the learners more room for participation and improvement without risking disorientation of learners. Yang (2008) advocated integrated computer technology (ICT) in distance learning. She extended the importance of lifelong learning by earlier authors (Faure *et. al.* 1972) and said that a new vision of ICT is needed at policy, management and grass root practice level. According to her, equipped with ICT, educators and policy makers should be able to meet the challenge effectively thus reengineering online distance learning. Smyth analyzed the implications for teachers, learners and institutions for video communication in distance learning. A model developed by her refocuses the emphasis of online learning away from the affordances. She advocated the use of technology enhanced learning that seeks to move conceptualization of learning design into a more interactive set up. Her model emphasizes the transformative, constructive paradigm of learning. The video communications move beyond learner to content and learner to learner interaction. It would also empower the learners to engage in collaborative exchanges within the parameters of designed learning.

Steim, Shephard and Harris (2011) developed five conceptions of e-learning and four conceptions of professional development for e-learning. The conceptions of e-learning are tool and equipment, as a facilitator of interaction, as learning, as a reduction in distance and as a collaborative enterprise. The four conceptions of professional development for e-learning are training, as opening up possibilities, as collaboration and as relevant and purposeful. The authors provide some insights for individuals, institutions and those responsible for planning and implementing professional development programs. Xin, Jian and Yanhui (2010) discussed distance education in China. They studied

the programs and the relationship of distance education with the industry, theoretical research, practical exploration and talent cultivation. The authors pointed out that certain issues still exist in China. These are exploration of laws, resource construction and sharing. They hope that distance education in China will gradually enter a virtuous circle of innovative system, talent cultivation and modes and services. Zacharis (2011) examined the learning styles. He found that learning style does not impact students' ability to successfully complete a course or their choice for online or face to face instruction. The online classrooms provide the tools to address different learning styles and preferences. The processing of information is not different from the face to face classroom. Therefore, same learning activities may be designed and utilized in both environments. In view of the learning styles, students may choose effectively the tools that would add most value to their learning experience. As a result, instructors are able to design online modules and activities, or redesign sequences of events and interventions.

Ahmed (2010) developed a model explaining hybrid e-learning as a method of course delivery. His model incorporated instructor's characteristics, information technology infrastructure and institutional support. It was found that all the factors significantly influenced learners' decision to accept hybrid e-learning. The author found that hybrid e-learning was highly affected by the instructor's characteristics, information technology infrastructure and the organizational support for e-learning. An instructor's attitude was dependent on the organizational support and readiness and reliability of the information technology. Mattheos *et. al.* (2001) dealt in distance learning with reference to medical education. They emphasized on the cost factor and opined that distance learning reduces the overall cost of education for the students. They said that the existing technology has facilitated the complicated distance learning environment and structured the learning methods. In such structures, study in teams and formation of small groups were given more importance than individual study. According to the authors, this minimizes dropout rates and increases students' motivation level in continuing their study. The assessment methods were also analyzed. The following methods of

assessment were considered: no assessment, self assessment questions or on campus examinations, evaluation of actual cases, presentations and tutor marked assignments. To support the distance learning program, there is a lack of theoretical framework. The study concludes that students educated through distance learning present similar achievements with their classroom controls.

Mashaw (2012) proposed a model for online course. According to him the model measures the effectiveness of an online course. The model is reproduced below. We have taken the following variables from his model: 'Technology', 'Interaction Participation', 'Mentor's Inspiration', 'Learning Experiences', and 'Facilitator'. The results of our findings have been shown under the respective heading.



(Model of Mashaw, Bijan 2012)

HYPOTHESES

Based on the Mashaw model the following hypotheses were developed:

- H1: Technology plays an important role in imparting higher education through distance learning,
- H2: Interaction participation between the students and the university is important for higher education through distance learning,
- H3: Mentor's inspiration is important for higher education through distance learning,
- H4: Learning experiences are important in acquiring higher education through distance learning,
- H5: Facilitators are important in gaining higher education through distance learning.

METHODOLOGY

After literature review we decided to adopt a model that suits our requirements. In this regard model of Mashaw Bijan (2012) was adopted with some modification. Five variables from the model were adopted for our study. These are 'technology', 'interaction participation', 'mentor's inspiration', 'learning experiences' and 'facilitator'. A questionnaire was developed based on these variables and field survey was conducted. The period of survey was the second and third week of March, 2013. The respondents were selected based on convenience strata sampling method and undergraduate and graduate students of two private sector universities were included in the sample. A total of 200 respondents were targeted but due to some constraints and limitations 178 questionnaires could be finalized.

RESULT

Communalities	Initial	Extraction
'Technology' plays an important role in distance learning in higher education H1 Accepted	1.000	0.780
In Pakistan the required 'technology' is available in every part of the country for distance learning program for higher education	1.000	0.713
There is an important role of 'interaction participation' in imparting higher education through distance learning H2 accepted	1.000	0.926
'Interaction participation' is widely available between the students and the university in distance learning program for higher education	1.000	0.737
'Mentor's inspiration' plays an important role in imparting higher education through distance learning H3 accepted	1.000	0.808
'Mentor's inspiration' is available at students level for imparting higher education through distance learning	1.000	0.786
The role of 'learning experiences' is important in imparting higher education through distance learning H4 accepted	1.000	0.563
'Learning experiences' can be gained in higher education through distance learning	1.000	0.795
The role of 'facilitator' is important in imparting higher education through distance learning H5 accepted	1.000	0.800
'Facilitators' are available for imparting higher education through distance learning	1.000	0.756
Extraction Method: Principal Component Analysis.		

Descriptive Statistics

	Mean	Std. Deviation	N
Higher education can be increased through distance learning	2.0225	.68027	178
'Technology' plays an important role in distance learning in higher education	1.6236	.48585	178
There is an important role of 'interaction participation' in imparting higher education through distance learning	1.8933	.73251	178
'Mentor's inspiration' plays an important role in imparting higher education through distance learning	1.7809	.65723	178
The role of 'learning experiences' is important in imparting higher education through distance learning	1.7809	.44120	178
The role of 'facilitator' is important in imparting higher education through distance learning	1.7135	.45341	178

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.854 ^a	.729	.722	.35896

a. Predictors: (Constant), The role of 'facilitator' is important in imparting higher education through distance learning, 'Mentor's inspiration' plays an important role in imparting higher education through distance learning, There is an important role of 'interaction participation' in imparting higher education through distance learning, The role of 'learning experiences' is important in imparting higher education through distance learning, 'Technology' plays an important role in distance learning in higher education

b. Dependent Variable: Higher education can be increased through distance learning

R= .854 shows that there is strong positive correlation between higher education and distance learning.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	59.747	5	11.949	92.735	.000 ^d
	Residual	22.163	172	.129		
	Total	81.910	177			

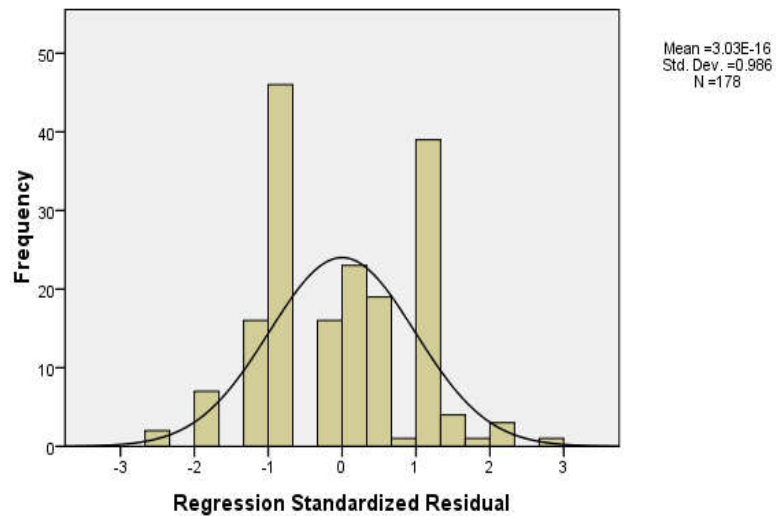
a. Predictors: (Constant), The role of 'facilitator' is important in imparting higher education through distance learning, 'Mentor's inspiration' plays an important role in imparting higher education through distance learning, There is an important role of 'interaction participation' in imparting higher education through distance learning, The role of 'learning experiences' is important in imparting higher education through distance learning, 'Technology' plays an important role in distance learning in higher education

b. Dependent Variable: Higher education can be increased through distance learning

Anova table shows that there is a association between higher education and distance learning (sig value <.05).

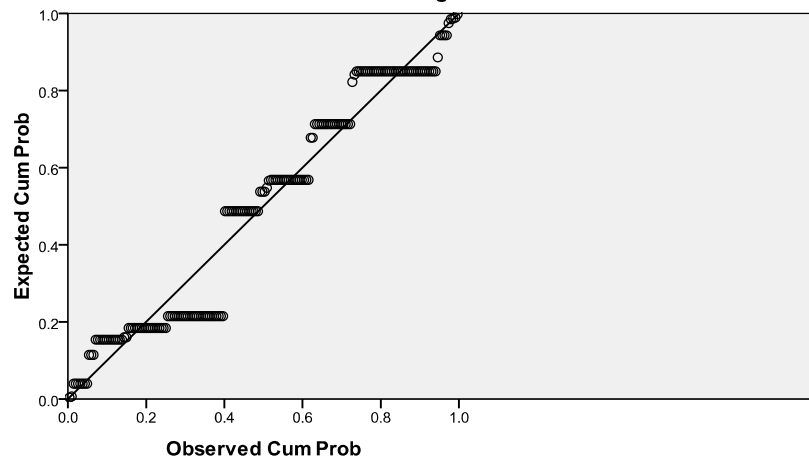
Histogram

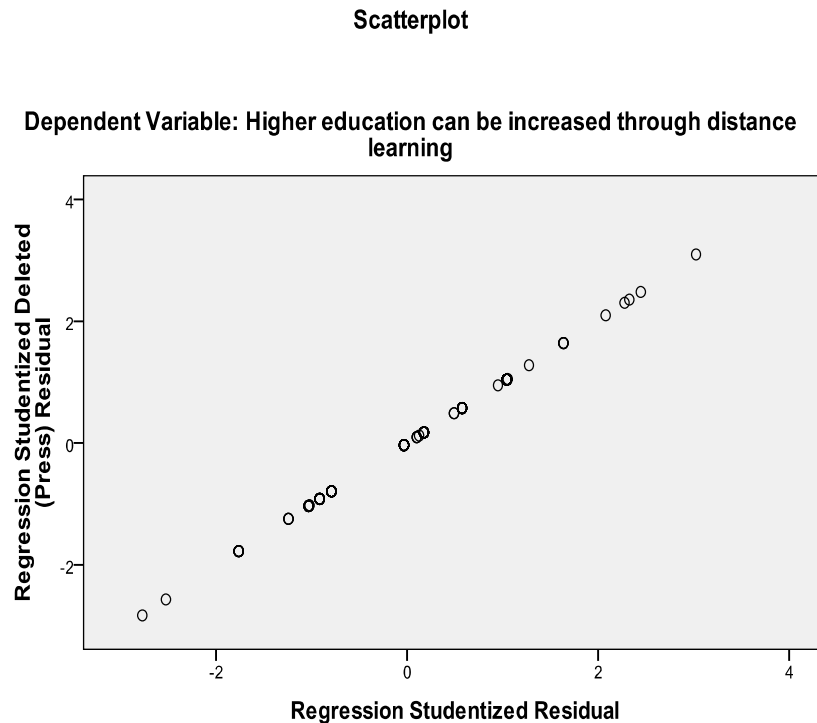
Dependent Variable: Higher education can be increased through distance learning



Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Higher education can be increased through distance learning





LIMITATION OF THE STUDY

The study was conducted based on a model previously used. We feel that instead of taking five variables more variables could have been included. We propose that variables be developed based on some Focus Group research and later they should be used for general survey. In our opinion the used variables are insufficient for a conclusive comment.

CONCLUSIONS

It was found that technology plays an important role in imparting higher education through distance learning and in Pakistan the required technology is available to some extent. Interaction participation between the students and the university is important for higher education through distance learning and this attribute is practiced in Pakistan. Mentor's inspiration is important for higher education through distance learning. Mentors inspiration is available in Pakistan to some extent. Learning experiences are important in acquiring higher education through distance learning. This attribute is also available in the target population. Facilitators are important in gaining higher education through distance learning. Facilitators are available in imparting higher education through distance learning. Thus, all the parameters of Bijan Masha model for higher education through distance learning are accomplished and the framework can be suitably promoted for higher education in Pakistan.

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