Impact of Distance Education on Student Performance: A Case of Allama Iqbal Open University

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Abstract: The aim of this study was to investigate the relationship between Distance Education and Student Performance by taking Allama Iqbal Open University, Pakistan as a case. Assignments, tutorial meetings and face to face workshops were taken as Independent variables, while, student performance was considered as a dependent variable. The target population for this research was the students of AIOU studying in Sahiwal region and a total of 150 samples were taken for data analyses. A self administered questionnaire survey was used for data collection through non-probability and convenience sampling. Results indicate that the relationship of various variables was positive with student performance. The study supports the hypotheses that assignments and tutorial meetings have the most significant and strong impact on student performance.

Key words: Distance Education · Student Performance · Assignments · Student-Instructor Interaction · Face-to-Face-Workshops

INTRODUCTION

Most of people have a negative perception about distance learning education, the perceived it is poor in performance. New tools and techniques, e-learning, new courses, instructors are playing an important role in distance education and increasing the satisfaction level of students [1]. In developed countries it is encouraging that distance education is using the new technologies and improving the services. And lack of institutional supports such as class rooms, face to face learning, instructive material, fulfill with distance education [2]. Virtual learning concept and libraries where students are reaching and studying across town and country. Discovering ways to provide virtual research consultations, creating learning objects that can be utilized for distance instruction and administering online assessments are all tasks that fill contemporary public service librarians’ to-do lists [3].

Statement of Problem: The specific problem statement of the study:

To find the out, weather its only perception of people about distance learning or evidence about the poor performance as compared to the traditional education.

Objectives of Research: The objective of this study is to investigate the various variables such as instructor performance, course evaluation and student-instructor interaction impact on student performance.

Review of Literature: The expansion dynamics of teaching and learning is enhanced significantly by the rapid development of the Internet and various web resources, a major influence on the quality of teaching and learning [4, 5] adds that it knows the use of computers in education. Modernized form of communication emerged, changing student preferences for online education face to face. Furthermore, it offers the availability of distance education courses and the growing number of students, all of the importance of this teaching method [6] appear to be. [7] argues that students are facing distance education as well or even better face to students in the class. Additionally, [8]. A comparative study and found no significant differences in the effectiveness of online learning compared to learning during face to face for the students. In an online learning environment, the teacher requires a new set of skills to the success of the latest technology brings many changes to the instructors as they do for students [9]. Now change the role of teachers is the most important
source of knowledge for students to be stewards of the resources of knowledge of students [10]. On the other hand, in an online learning environment effective teacher plays a central role. This is not only because of the technology, but the practical application of the technology, which has an impact on learning [11]. However, the interaction of different in this environment [12], with more emphasis on the role of the teacher as a mediator between the student and the materials [13] or between student and technology [14]. Therefore, the teacher should have a greater diversity of students and therefore determine the assay formats, methods of measurement and evaluation strategies [15], to convince and motivate students able to accept a environment - learning [16]. In an online course for instant access to the information, support and feedback from the instructor determine student satisfaction. If suspended or denied for technical problems, accessibility, students are frustrated [17]. In fact, success depends on a learning environment in the level of interaction between students and teachers are required to stimulate good results [18]. Due to a learning environment, the teacher gets more time to interact and directly access each student so that most students follow a pre-defined e-learning courses and pre-developed [19]. The student interaction through discussions during seems to be one of the main characteristics of distance education [20]. Along with this, the design must, of course, a great potential for communication, the communication level has an obvious impact on student learning, satisfaction and loyalty of online courses [21]. There may be a possibility that this frustration can lead to poor student outcomes. Therefore, the student is in a learning environment, information on their needs and preferences is critical to the successful design and implementation of this environment [22].

**Theoretical Framework:** This research is based on independent and dependent variables. Research model is describing the relationship of independent and dependent variables.

**Research Model**

**Hypotheses:** For any research the hypothesis is very important part of research. For this research hypotheses is used by the researcher: The researcher uses the following hypothesis.

H₁: Assignments have a positive relation with Student Performance.

H₂: Student-Instructor interaction has a positive relation with Student Performance.

**Methodology:** To investigate the perception of people about the distance learning performance is poor or not, researcher uses the deductive approach and identified the relationship between independent and dependent variables. Researcher uses the survey method and five point likert scale questionnaire for data collection. The population for this research will be the students of master program of Allama Iqbal Open University Islamabad, Sahiwal Region. Convenience sampling technique and a sample of 150 students will be use. After collection and compilation of primary data, will be analyzed with correlation and regression.

**Reliability of Data:** After collection of data it has been verified for its reliability by calculating the Cronbach’s Alpha. Alpha value is reliable when it is more than 0.6. The performance of student and its determinants has good internal consistency, with a cronbach’s alpha coefficient as 0.60. Researcher shows the results with Cronbach’s Alpha within the range of 0.618 to 0.641 which shows that the scale is reliable. Because it exceeded the standard value of 0.6 and demonstrating the internal consistency in the scale applied to the research model.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Variables</th>
<th>No of Items</th>
<th>Alpha Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Assignments</td>
<td>5</td>
<td>0.640</td>
</tr>
<tr>
<td>02</td>
<td>Tutorial Meeting</td>
<td>5</td>
<td>0.621</td>
</tr>
<tr>
<td>03</td>
<td>Face to face Workshop</td>
<td>5</td>
<td>0.618</td>
</tr>
<tr>
<td>04</td>
<td>Student Performance</td>
<td>5</td>
<td>0.641</td>
</tr>
</tbody>
</table>

**Analysis of Correlation:** Researcher used the correlation for data analysis which indicates that face to face workshop has a positive relationship with student satisfaction r=0.064, Assignments r=0.366, Tutorial meeting r=0.025 and Student performance r= 0.135. Correlation between the assignment and student satisfaction shows better involvement in assignment enhanced the student performance r=0.366, tutorial meeting r=0.312, ace to face workshop r=0.065 and Student satisfaction r= 0.207. Results indicate a strong, positive correlation between the two variables student satisfaction and tutorial meeting r=0.021, Student satisfaction r=0.135, Assignment r=0.165 and Face to face workshop r= 0.207.

**Regression Analysis:** Linear regression trend analysis the relationship of each factor and its impact on student satisfaction and to test the hypothesis. Both of
independent and dependent variables are aggregated for data analysis and are used for regression analysis. R squared value is 0.168. It is shows the portion of independent variable explained by the independent variables. Correlation coefficient of R is 0.384. This table shown the coefficients of regression.

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.410a</td>
<td>.168</td>
<td>.145</td>
<td>.38209</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Student performance, Assignment, Face to face workshop, Tutorial meeting

Interpretation of results shown below.

Assignments: In this study alternative is about the impact of assignments on student satisfaction. Alternative hypothesis has accepted and student performance factor has a coefficient value of 0.044 and significance of 0.666, it shows the consistency of study done. It shows the acceptance of hypothesis and shows the positive relationship between student satisfaction and assignments.

Tutorial Meeting: Results shows the coefficient value of 0.058 and significance of 0.000. It shows the positive relationship of the variable with performance of students. The result confirms the hypothesis (H2) that has found a significant positive relationship between student instructor and student satisfaction.

Face to Face Workshop: It indicates the coefficient value 0.020 and significance level 0.001, which suggested that Face to face workshop has the strongest relationship of satisfaction of students among the rest of the variables. Hence, hypothesis (H3) is accepted to be true.

Student Satisfaction: The result shows coefficients value of 0.043 the statistics is confirms a positive relationship between the independent and dependent variable at a significance level of 0.108. The result leads to the acceptance of our hypothesis (H4) and findings.

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assignments</td>
<td>.019</td>
</tr>
<tr>
<td></td>
<td>Tutorial meeting</td>
<td>.235</td>
</tr>
<tr>
<td></td>
<td>Face to face workshop</td>
<td>-.064</td>
</tr>
<tr>
<td></td>
<td>Student satisfaction</td>
<td>-.069</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Student satisfaction

CONCLUSION

This research determine how the performance of students could be measured in distance education. In distance education refers to the use of the internet, audio and video lectures along with correspondence of the tutorial meeting as a medium of instruction. The results of study confirm the reliability and validity of the three variables of students satisfaction in distance learning, which are Assignments, Tutorial meeting and Face to face workshop. The results of this study further indicated that the majority of the students at AIOU showed high levels of satisfaction regarding assignments, tutorial meeting and face to face workshop. It indicate its like as traditional education, in distance education at AIOU, have a sufficient interaction between the students and their instructors, all of the tutorial material are up to date, instructors are devoted, motivated and equipped with the required skill and knowledge. The availability of distance education is increasing the different degree degree programs and the increasing number of students, as well as students’ satisfaction. The findings of this study, it would not be logical to presume that distance learning students do not perform as well as traditional students. Moreover, the research team hopes that these findings may change the pessimistic perceptions of those people in Pakistan, who perceived distance learning as poor in quality. Besides, there appears to be a need for AIOU to increase the number of its sub-campuses to remote areas of Pakistan where the literacy rate is still low. It is important to recognize that students of these areas have strong desire to get education but due to financial, geographic and cultural reasons they cannot get it. Therefore, virtual university can play a vital role in improving the literacy rate in Pakistan.
**Limitations for Future Research:** Limitations of this study show the small sample size and it is not completely representative of the majority of students of distance education programs at AIOU. And the Sahiwal region of AIOU was selected but his may not represent the whole students of AIOU. For future point of view, one can select the students of other regional campuses of AIOU and specifically for those regions which are in small and underdeveloped cities in order to find out their satisfaction levels toward distance learning. Secondly, to find out the reasons why students select distance education for higher education in Pakistan is also indicate it is an important issue for further studies.

**REFERENCES**

