



ORIGINAL ARTICLE

Perception of faculty towards e-learning vs. traditional learning in a public sector medical college.

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ABSTRACT... Objective: To evaluate the perception of medical teaching faculty of a public sector medical college in Pakistan and the barriers in e-learning methodologies according to faculty's opinion. **Study Design:** Analytical Cross-Sectional Study. **Setting:** Department of Medical Education, Sahiwal Medical College Sahiwal. **Study Period:** 1st April 2020 to 30th April 2020. **Material & Methods:** The questionnaire was sent to all the faculty members through Whatsapp due to COVID-19 pandemic in Pakistan. Mean scores were calculated by using SPSS-26. **Results:** A total of sixty six faculty members responded to the questionnaire while it was sent to all 72. So the response rate of our study is 91.66%. According to our results, external sources barrier questions were found to be of highest mean value of 10.64 with standard deviation of 4.64. Internal source barriers were found to have least of the means value of 5.39 with standard deviation of 2.41. Motivation related to e-learning was with highest mean score of 2.67 and with standard deviation of 0.591. Lack of central policy was found to be of major concern by the respondents with mean value of 1.15 and standard deviation of 0.361. **Conclusion:** This study found that motivation towards e-learning as the most dominant factor. Also external sources barriers were predominately revealed in the college such arrangements are required to speedily guarantee that fast web get to and dependable systems are accessible at the higher education institutions.

Key words: E-learning, Higher Education Institutions (HEIs), Perception.

INTRODUCTION

The progressions of Information, sight and sound innovation, and the utilization of web as another method of educating, has a rolled out a progressive improvements in the conventional instructing process.¹ Utilizing electronic media, for example, PC video conferencing, sound, web, intuitive TV and satellite as medium to lead electronic learning (e-learning), has energized the chance to present another learning condition and situations to likely benefiter.² It is contended that the accomplished results from the conventional instruction and preparing programs are frequently a long way from perfect, and consequently, establishments need to locate another method of preparing, learning and building up another framework to deal with the progression of information.³

During the most recent period of twentieth century, the read-just Web1.0 advances began affecting the advanced education industry with the rise of the expression "e-learning".⁴ By the beginning of the 21st century, the more intelligent read-and-compose Web 2.0 advancements rose in relationship with more prominent spotlight in advanced education on student focused instructing and learning rehearses.⁵ E-learning in advanced education keeps on creating with evolving advances, bringing more open doors for both the students and staff members.⁶ Be that as it may, e-learning needs significant help from infrastructural and calculated points of view, yet in addition from an instructive and substance viewpoints⁷, where innovation is relied upon to be viably incorporated over the immense exercises and instructing and learning exchanges inside

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higher education institutions (HEIs) through an all-encompassing and very much arranged methodology.⁸

Wrath of COVID-19 unfortunately fell upon us this year and caused a great damage to educational institutes around the world as they faced complete shutdown. Due to this the need of e-learning in the educational institutes increased to much greater levels than the usual routine.⁹ Pakistan also not left behind in facing the consequences of the forced shutdown of institutions due to COVID-19. So, e-learning was the only option left to educate the medical undergraduates.

This paper examined the observation towards successful selection and usage of e learning by faculty. To ensure as such, this study took Sahiwal Medical College Sahiwal as a contextual institution to produce understandings towards the instructors' recognition.

Studies have also recognized a scope of elements as hindrances to embracing e-learning in advanced learning. This paper examined all the fifteen writing revealed hindrances towards receiving e-learning^{9,10,11} (Table-I).

MATERIAL & METHODS

Sixty six questionnaires were collected by using Whatsapp during April 2020. Questionnaires were planned through the Google docs, an online assessment and questionnaire tool.

Inclusion Criteria

Questionnaires were conducted to all 72 faculty members through the faculty Whatsapp groups.

Exclusion Criteria

All the students and doctors other than the faculty members were excluded from the study.

Data poised through questionnaires largely concentrated on participants' perception towards e-learning centered on Table I. The content of the questionnaire have been already verified and authenticated by many professionals. A three-point response scale was used to evaluate attitudes and perceptions of faculty towards e-learning and whichever related obstacle towards applying it. The scale required the contributors to react to close-ended questions by engaging their reply on a 'agree' to 'disagree' scale in a straight, self-reported method.

- 1) Internal sources barriers: worries about the nature of e-courses, absence of impetuses to receive e-learning, self-scared by innovation, absence of satisfactory English capability, and no good examples to follow
- 2) External sources barriers: concerns identifying with access to students' absence of preparing on e-learning, poor web arrange, absence of IT support, absence of instructional structure support for e-learning, absence of institutional approach for e-learning, deficient accessibility of equipment and programming, and so on.
- 3) Across inward and outer sources: worry about workforce remaining burden, and absence of time to create e-courses.

The response of the faculty members was assessed by calculating mean values. Standard deviations were also calculated. SPSS version 20 was used for calculating the above mentioned statistics.

Barriers classification	Items or barriers included in this category
Internal Sources Barriers	Preparation of lectures via e-learning requires more effort, Lack of incentives to use e-learning, Video recording is not comfortable.
External Sources Barriers	Lack of guidance on e-learning, Lack of technical support in the university, Lack of comprehension for e-learning, Lack of institutional policy for e-learning, Concern about security issues on Internet, Less suitable to students,
Across Internal and External Barriers	E-learning is less motivating, students do not prepare better with E-learning methods, and E-learning is less suitable method of teaching, E-learning does not fulfil the challenging needs of modern times.

Table-I. Groups of supposed barriers to implementing e-learning

RESULTS

A total of sixty six faculty members responded to the questionnaire while it was sent to all 72. So the response rate of our study is 91.66%.

The questions were divided into three groups according to literature review of teachers' perception towards e-learning and their perceived barriers. As answers were given by the respected faculty members in the form of 'agreed, neutral and disagreed', their means were calculated and then graded according to total of the means of each question.

According to our results, external sources barrier questions were found to be of highest mean value of 10.64 with standard deviation of 4.64. Internal source barriers were found to have least of the means value of 5.39 with S.D. of 2.41. Across internal and external sources barriers were in of medium value of means.

As far as the teachers' perception towards the e-learning is concerned, we arranged the responses to the questions in a descending order of their mean scores. Motivation related to e-learning was with highest mean score of 2.67 and with S.D. of 0.591. It shows teachers' perception towards e-learning that feel it as a motivation. Teachers also showed their satisfaction towards the use of course materials related to e-learning with mean of 2.36 and S.D. of 0.853.

Incentive for e-learning was among the least of the mean values with mean of 1.36 and S.D. of 0.598. The idea of information technology playing its role in learning now a days was given less value of mean by respondents as well. Lack of central policy was found to be of major concern by the respondents with mean value of 1.15 and SD of 0.361.

	N	Mean	S.D.
External Sources Barriers	66	10.64	4.464
Across Internal and External Barriers	66	8.66	2.814
Internal Sources Barriers	66	5.39	2.411

Table-II. Sub-Scale groups of perceived barriers to adopting e-learning

Questions	N	Min	Max	Mean	S.D
E-Learning Is More Motivating	66	1	3	2.67	.591
Learning Materials For E-Learning Are As Effective As Face To Face Teaching	66	1	3	2.36	.853
I Am Able To Prepare Students Better With E-Learning Methods	66	1	3	2.33	.730
Video recording is more comfortable	66	1	3	2.24	.860
E-learning is more suitable as method of teaching	66	1	3	2.21	.814
E-learning is alternative for traditional learning	66	1	3	2.18	.875
I have security concerns while using internet	66	1	3	2.03	.803
E-learning is more comprehensive	66	1	3	1.82	.802
Preparation of lectures via e-learning requires more effort	66	1	3	1.79	.953
Equipment of e-learning is easily accessible	66	1	3	1.79	.851
For e-learning I need guidance	66	1	3	1.64	.777
E-learning should be continued	66	1	3	1.64	.777
E-learning fulfill the challenging needs of modern times	66	1	3	1.45	.706
To teach via e-learning is more difficult	66	1	3	1.42	.658
Incentive is needed for e-learning	66	1	3	1.36	.598
ICT plays important role now-a-days	66	1	3	1.21	.595
There is lack of central policy for e-learning implementation	66	1	2	1.15	.361

Table-III. Teacher's perception towards e-learning.

DISCUSSION

In the recent times the need for a modified form of learning has increased and teachers around the world are generally adopting to the new style of teaching methodologies. Out of these the e-learning is leading the way.¹¹ Customer's satisfaction is of paramount importance when a new product is launched.¹² So as teachers' response to this new methodology of teaching is equally of great concern to continue it in future. A good amount of work has already been done in this regard^{13,14} and our study also focused on the perception of teachers towards e-learning and the barriers they encounter towards the practicality of this method.

Our study found out that teachers have some concerns regarding proper implementation of the e-learning methodologies. External source barriers were found to be having maximum mean values in our study which was similar to a previous study.¹⁵ Faculty members of Sahiwal Medical College Sahiwal showed a great concern that a proper central policy is lacking in this regard. This result was similar to a previous study done at Saudi Arabia.¹⁶ Motivation related to e-learning was found a great response from teachers. Studies previously found factors other than motivation got better response from the teachers.¹⁷

Able to prepare students better with the help of e-learning and the availability of the materials for the e-learning methods also got good mean scores from the faculty of Sahiwal Medical College Sahiwal. On the contrary availability of proper resources for e-learning has remained a major concern for the educators in previous studies.^{16,17} Similarly according to mean values, educators at Sahiwal Medical College Sahiwal found video recording more comfortable than conventional lectures delivery in lectures halls which is also contrary to a previous study.¹⁸ This fact was also supported in answering to a question related to difficulty of teaching via e-learning, mean value was lesser in this regard. It was similar to a result found in the previous study.¹⁹

External sources barriers which are likewise

named resource barriers as indicated by Naveed et., al can be disposed of if funding is available and accessible.²⁰ Regardless of the normal offered specialized and budgetary help, employees at college are as yet encountering critical assets (outside) hindrances as clear by the top referred to barriers. This prompts for a more profound investigation into the explanations for the transcendence of outer boundaries in spite of government support.

As the study was conducted on the faculty members of one medical college so it was a limitation of our study. This study can be done in future by including faculty members from different medical colleges across Pakistan.

CONCLUSION

This study found that motivation towards e-learning as the most dominant factor. Also external sources barriers were predominately revealed in the college such arrangements are required to speedily guarantee that fast web get to and dependable systems are accessible at the higher education institutions.

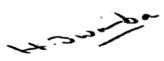
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AUTHORSHIP AND CONTRIBUTION DECLARATION

No.	Author(s) Full Name	Contribution to the paper	Author(s) Signature
1	Zahid Kamal	Conception and design of work, result compiling.	
2	Ahmad Zeeshan Jamil	Help in biostatics and data analysis.	
3	Muhammad Waseem	Suopervision and revising it critically for important intellectual content.	
4	Muhammad Junaid Iqbal	Final approval of the version to be published.	
5	Hafiza Swaiba Afzal	Analysis and interpretation.	
6	Nauman Aziz	Write-up of the article.	