

ORIGINAL ARTICLE

Exploring the Journey of Students in an Online CHPE Program of a Pakistani University: An Exploratory Qualitative Study

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ABSTRACT

Objective: To explore the factors affecting the learning of students of certificate in health professionals education (CHPE) in an online learning environment, and the strategies to improve their learning environment.

Study Design: An exploratory qualitative study.

Place and Duration of Study: CHPE program Riphah International University. The study was conducted from 15th August to 15th September 2020.

Materials and Methods: An exploratory qualitative study was conducted, eight students from the CHPE program Riphah International University volunteered to participate in the study. Eight Semi-structured open-ended individual interviews were carried out. Data were transcribed and thematically analyzed manually.

Results: Thematic analysis of data identified 26 codes, 12 subthemes, and 6 themes. Themes were learning enhancing factors, best about online learning, biggest challenges, learning hampering factors, satisfaction with online sessions, and suggestions for improvement.

Conclusion: The current study showed overall satisfaction with the online learning environment of the CHPE (certificate in health profession education) program, despite this satisfaction few hampering factors were identified, addressing these factors can improve the online learning environment. Strategies suggested for improvement were faculty training, students training, planning of the session, and fewer participants for online learning.

Key Words: *Hampering Factors, Improvement Suggestion, Learning Environment, Online, Promoting Factors.*

Introduction

The year 2020 began with a pandemic COVID -19, humans were not immune to this new disease they changed their lifestyles to prevent further infections and control of spread. The institutes were closed immediately. For maintaining social distance, in this era of crisis, advancement in technology was the only hope to prevent disruption of learning. This sudden closure of institutes posed a challenge in the educational field and the need for the development of an online learning environment in the world.¹ Despite COVID 19 being a crisis for the world, it has laid the foundation of a new era of development of the online learning environment. According to

Maslow's hierarchy of needs, a learning environment must fulfill certain requirements for efficient learning of the students. Achieving the objective requires defining needs, gaps and problems. Hence for corrective measures for a conducive learning environment, institutes are striving for improving teaching and assessment strategies in an online learning environment.²

"Online learning is an education that takes place over the Internet. It is often referred to as "e-learning" among other terms. However, online learning is just one type of "distance learning" -the umbrella term for any learning that takes place across distance and not in a traditional classroom."³ "Online learning systems are web-based software for distributing, tracking, and managing courses over the Internet."²

According to the literature, many universities in Pakistan have shifted their on-campus learning to an online learning environment abruptly. Riphah International University has also shifted all of its programs including undergraduate and postgraduate masters and certificate programs to an online learning environment in line with HEC guidelines.^{4,5} This sudden transition of the learning environment to an online learning environment lead

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Funding Source: NIL; Conflict of Interest: NIL

Received: June 18, 2021; Revised: December 02, 2021

Accepted: December 03, 2021

to a few challenges faced by the students during online learning.⁶ To improve the online learning environment according to their resources and context many universities have evaluated their learning environment and got perceptions of the students. Every institute needs to improve its learning environment according to the perception of the students.^{2,7} Among different universities in Pakistan, Riphah International University is conducting a CHPE course of six months duration. According to Maslow's hierarchy of needs, a learning environment plays a crucial role in the learning of students. If the basic needs are fulfilled in and learning environment only then one can be shifted to the level of self-actualization.⁸ For improvement of the online learning environment, it is important to understand the experiences and challenges faced by students as major stakeholders.⁹ The current study is focused to address, the following research are the factors affecting the learning of students of certificate in health Professionals education (CHPE) in an online learning environment, and the strategies to improve their learning environment.

The objectives of the study were; To explore the factors affecting the learning of students of certificate in health Professionals education (CHPE) in an online learning environment, and the strategies to improve their learning environment

Theoretical Framework

Maslow's hierarchy of needs can be used for evaluation of Learning environments since the online learning environment is new but it can be evaluated using Maslow's hierarchy of motivation.¹⁰ Through students' perceptions about the online learning environment, the student's satisfaction and motivation can be assessed using this Hierarchy of needs.¹⁰ For improvement, one must identify the strengths and problems in their online learning environments and find out ways to address these issues to improve the learning of students.¹¹

Materials and Methods

An Exploratory Qualitative study was conducted at Riphah University of Pakistan from 15th August to 15th September 2020. The study was carried out on students of CHPE Riphah International University, purposive homogenous sampling was carried out. Ethical approval for the study was taken from the ethical committee of Riphah International

University. The feasibility of the participants was ensured and the informed consent was taken on what's app and text message. The anonymity, confidentiality of data was assured on call just before the interviews.¹² Eight students from the CHPE program who volunteered were included in interviews. There were four females and four male students. The Researchers were MHPE students, and they were not knowing the CHPE students before the research. The study was conducted during the period of COVID- 19, so all the interviews were conducted online (WhatsApp and Phone calls).

Participants underwent one-to-one interviews, that were conducted on mobile phones and zoom. Both researchers conducted interviews with participants. Semi-structured questions were asked; the interviews were recorded. Informed consent was taken before the start of the interviews. The questionnaire used for the interview is attached as Appendix 1.

For quality assurance, the strategies followed were triangulation, member checking, peer debriefing, data analysis was rooted in participants' responses which removed the researcher bias. Two types of triangulation were used, i) Data triangulation to strengthen the conclusion of finding and prevention of false interpretations. ii) Investigator triangulation to minimize the bias in gathering, analyzing, and reporting the data. For this two authors were involved in data collection and analysis.¹³ The transcripts of the participants were sent to the participants for validation. The participants in peer debriefing were told about the title, aim and process. According to the guidelines in AMEE guide no. 87, semi-structured open-ended questions were designed to conduct individual interviews.¹³ The questions were designed to address the research question. This Questionnaire was sent to three Medical educationists for validity and credibility. A pilot interview lasting 20 minutes was conducted with two participants of CHPE 2020 to ensure the quality and the logical sequence of the Questions. The interviews were transcribed, coded and thematic analysis was done manually.¹⁴ The use of software was limiting the researcher's critical thinking ability, so the manual analysis was preferred by the researcher. The data was sifted, refined, and

categorized for creating distinct thematic categories.¹⁵

Results

After manual thematic analysis, 26 codes were identified, which were merged into 12 subthemes and 6 themes were identified. That exhibits Learning enhancing factors, learning hampering factors, best

about online learning, the biggest challenge, satisfaction with online sessions and the suggestions for improvement of the online learning environment, which adequately answers the Research Question. Table 1 provides an overview of the findings of this study.

Table No: I Overview of Findings of the Study

Themes	Subthemes	Codes	Participants Quotations
Learning enhancing factors	Student engagement	Motivation, Relevance,	<i>"Motivation, Relevance, Sessions were according to International Standards" P2</i>
		Use of different apps, group activities,	<i>"Use of different apps, breakout rooms, online learning activities" P3</i>
		Student engagement, Cooperative staff	<i>"Teacher's motivation, every student was involved, Cooperative staff" P6</i>
Best about online learning	Convenient and Conducive environment	Comfortable	<i>"No need to look presentable" P4</i> <i>"The learning environment was more comfortable I mean we can ask questions without any fear" P7</i>
	audiovisual aids	PPT quality	<i>"Yes, good quality ppt" P7</i>
Biggest Challenge	Technology effects on Health and Learning	Lacks face to face interaction	<i>"Missing face to face interaction b/w peers and teachers" P1</i>
		Monotony, Long screen time	<i>"Monotony, Long screen time, no physical movement and missing psychomotor teaching" P2</i>
		Net issue	<i>"Internet connection was not very fast" P4</i>
		Lacks teaching of skills	<i>"Mendeley could have been better face to face" P6</i>
Learning Hampering factors	<ul style="list-style-type: none"> • Large groups and Technology • Net etiquettes • Time limitations 	Large group	<i>"There was a large group of students and Internet issue. We have to sit for long hours in front of computers" P1</i>
		Rules ignored	<i>"Net etiquettes and Ground rules were not followed" P1</i>
		Time management	<i>"the reading material was too much, and we had less time to read them". P6</i>

	<ul style="list-style-type: none"> • Distractors. 	Distraction	<i>"Distractors, like chatbox on zoom and WhatsApp chat" P8</i>
Satisfaction with online sessions	Very satisfied	A new experience but a good one	<i>"I am very satisfied with the online sessions. It was a new experience at the start of the covid era but overall a good experience" P7</i>
Suggestions for improvement	Planning of sessions	Time management	<i>"reduction of teaching hours per day, Gap in contact sessions" P2</i>
		Sequencing of topics,	<i>"Sequence of topics need to be improved" P6</i>
		Customized e-learning activities for CHPE,	<i>"Interactive videos, online apps, Strong IT experience, Student Support System.P1 "..... customized e-learning activities for CHPE" P8</i>
	Students support	Less number of participants	<i>"Less number of participants, some teachers should be trained more" P3</i>
	Teacher availability	<i>Teacher availability after contact session" P1</i>	
	The mock session, teaching net etiquettes,	<i>"Mock session must be planned, net etiquettes should be taught to students and better student support for technology" P2</i>	
	Faculty training	The online learning environment and challenges for faculty	<i>"Few facilitators need to be trained more on the transition from face to face to online teaching, Planning of online activities should be improved P8</i>

Discussion

The study aims to explore promoting and hampering factors in an online learning environment. Also, identification of strategies for improvement of the online learning environment of the CHPE program. *The learning-enhancing factor* was student engagement. Students were motivated and they kept engaged with relevant online group activities. Different apps were used. The staff of the CHPE course was very cooperative throughout the course. *The best things students* experienced were a conducive learning environment and audio-visual aids. Students were comfortable since there was no need to look presentable and good-quality power points were used during the lecture. *Learning Hampering factors* were a large number of students, internet connectivity issues, violation of ground rules, limited time to read study material, and distractors like the use of Whats app during class. The biggest challenge faced by students were lack of face-to-face interaction, monotony, long screen time, internet connectivity issues, and lack of learning skills. *Students were satisfied* overall with this new experience. *Suggestions for improvement* given by the students were student support, faculty training, and proper planning of sessions.

The findings of this study are in line with the literature, and the participants identify that the learning enhancing factors are good student engagement, quality PowerPoint presentations and the best thing was the conducive and environment. Findings of a survey-based article on student engagement in an online learning environment state that students engagement promotes and motivates learners to learn and reduce their feeling of loneliness.¹⁶ Andrew W cole states that engaging students in an online environment are much more difficult than the regular face-to-face sessions.¹⁷ To engage students collaborative group tasks can play major roles.¹⁸ Moreover, a healthy interaction among students and faculty improves the learning experience of students by maintaining a conducive environment. Furthermore, clarity regarding goals to achieve is another way for student engagement.¹⁹ The new finding in this study is the role of cooperative staff in enhancing learning.

In this study, the biggest challenges identified are lack of face-to-face interaction and internet

unavailability or poor signals, and teaching skills is not an easy task in an online learning environment. However, in literature, the limited attention span, inability to teach skills, lengthy course, and ill-disciplined students are the key limitations.² In an article addressing challenges faced by preclinical faculty, the key limitation is poor computer skills and lack of hands-on activities.¹⁹ In another article, the author explains whats app and different chat groups can be used to interact with students. However, in this study, these are taken as distractors.²⁰

The literature shows that student satisfaction is the main criteria for a successful learning experience of students in an online learning environment.²¹ In this study, the students are generally found satisfied with their online learning environment when they state that, "yes I am satisfied because I have learned various apps to use in my undergrad classes".

As far as suggestions for improvement in an online learning environment are concerned, the literature shows various strategies aligned with this study. In an opinion piece by Xin Xie and Keng Siau the author says that the biggest opportunity in an online learning environment is that a bigger group of learners can learn at the same time but in this study, participants suggested incorporating the small number of students at a time in an online session to improve learning.²² An article on blended learning states that content organization plays a major role inadequate learning of students.²³ This supports the suggestion given in this study when the participants suggested reducing the teaching hours and improving the sequencing of topics. An article states that interaction with faculty is better in an online learning environment, however, the participants of this study suggested improving this interaction by making the faculty available after the online sessions.^{24,25} The communication and faculty fluency over the use of technology can impact learners positively as described in an article by Dimitros Valachopoulos.²⁵ In this study, the participants stressed upon both faculty and student training for using online learning modalities. An article suggests various strategies to improve the online experience of students but two major strategies are timely feedbacks and prompt student support.²⁶ The suggestion of this study is in line with the findings of literature where the participants advocate good

student support as a suggestion for improvement.

Limitations

The limitations of the study were, the study was qualitative and the sample was also small. This study was conducted on one program of CHPE in a single private university in Pakistan, therefore the findings are applicable in similar contexts. A survey-based on this study should be conducted across other universities for generalizability.

Future research

Future research can be done to explore the experiences of undergraduate medical students and post-graduate medical students.

Conclusion

The current study showed overall satisfaction with the online learning environment of the CHPE program. Despite this satisfaction few hampering factors, were identified, addressing these factors can improve the online learning environment. The strategies suggested for improvement were faculty training, students training, planning of the session, and fewer participants for online learning.

Implications of the study

The current study will help in improving online learning in post-graduate certificate courses like CHPE.

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APPENDIX 1: Screenshot Of Consent Taken on Whatsapp from Participants of CHPE for Interviews



Appendix 2 : Showing Questions for Interview

Questionnaire	
Q1	What is the best and the worst thing about online learning environment of online contact session of CHPE?
Q2	Which biggest challenge do you perceive in online learning environment of CHPE?
Q3	Does online contact session enhance my knowledge, skills and attitude?
Q4	How variation in teachers and teaching styles enhanced my learning?
Q5	What are the hampering factors in online learning environment of CHPE?
Q6	What were the enhancing factors in online learning environment of CHPE?
Q7	Are you satisfied with the online learning session of CHPE?
Q8	What are the future suggestions for improving online learning environment?

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