Available online at www.ijmras.com

INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND STUDIES
ISSN: 2640 7272
Volume:07; Issue:02 (2024)
Doi: 10.33826/ijmras/v07i02.2

The attitudes and cultural norms of Hong Kong's medical students toward online education: a comprehensive study.

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Abstract

It is recommended that this study investigate how medical students in Hong Kong feel about using online courses. Several online education pilot programmes were set to begin, while others were in the planning stages. There are a number of other schools that have adopted a similar policy, so this is a good opportunity to hear students' thoughts.

To get high-validity insight into students' practises, this research presents an exploratory mixed-methods approach to examining the afore mentioned challenges. The research may be seen as having two parts: the first involves qualitative ethnographic fieldwork, while the second involves a quantitative questionnaire (Greene et al., 1989). The purpose of this collaborative research was to present a detailed portrait of how medical students feel about and approach online education. The purpose of this mixed-methods approach was to take the most useful aspects of each phases and use them together to get insight into a previously unexplained phenomenon. Triangulating the findings might be useful because we have both qualitative and quantitative data to consider.

Keyword: Mixed-Method Approach, Applying Quantitative, Techniques,

INTRODUCTION

This section introduces e-learning as a new trend in medical education that's already having an influence. This thesis and its different parts are set against the backdrop of e-problems, learning's notably those of examining outside-the-classroom activities, culture, and behaviour. After an exploratory mixed-methods research, a systematic review follows, and an in-depth examination of game-based learning follows that.

LITERATURE REVIEW

There is a growing consensus in the medical education literature that e-learning is a disruptive force, according to the researcher (Harden, 2011). This 'e-learning' phenomena encompasses a wide range of educational activities offered via digital gadget (Clark & Mayer, 2011). There are many new and growing technology techniques of learning in medical education practise.

E-learning warrants consideration from a pedagogical standpoint due to its distinctive features and their connection to underlying learning theory (Rice, 2011). A few examples are making it easier for students to work together in learning environments (Lave & Wenger, 1991), promoting peer teaching (Vygotsky, 1978), and providing rapid feedback (Webb & Choi, 2013). (Abendroth et al., 2013). Medical education may be advanced by incorporating new pedagogies into existing curriculum through the development of e-learning tools for students.

Research into e-learning in medical education is at a critical crossroads right now. In comparison to more conventional teaching techniques, technological ones have a higher initial investment in terms of both time and money, but a lower ongoing cost (Sandars, 2009a). As a result, the e-learning delivery systems have not yet been inundated with instructional content. Thus, the time is right to examine the evidence foundation supporting existing practises in the production and application of such products. E-learning tool creation may be guided, informed, and optimised through timely research.

This phrase has become interchangeable with audio e-learning, and in 2005 the New Oxford American Dictionary defined it as "A digital audio file made available on the Internet for downloading to a computer or portable media player, typically offered as part of series, new parts of which can be received automatically by subscribers" (McKean, 2005). For example, the format's ability to automate delivery of information without requiring learner input to access relevant files in a series is already highlighted in this description.

STATEMENT OF THE PROBLEM

Growing evidence shows that medical education providers and customers have different generations, and this generational divide leads to a mismatch between education delivery and intended use (Mahapatra & Leong, 2014). Medical students' behaviour outside the classroom and lecture hall can be influenced by e-learning, unlike typical curricular interventions that just substitute one type of physical learning with another (Smith et al., 2013). The time a student spends interacting with an e-learning tool is completely up to them, unlike traditional courses, lectures, and practicals (McLaughlin et al., 2013). These circumstances imply that students are developing new learning habits in locations and times that are hidden from teachers. These knowledge gaps are tough to overcome superficially, but there aren't any in-depth reports of them in the literature to inform instructors about actual student behaviours (Ramani & Mann, 2015). Many research focused on a particular facet of e-learning, but a comprehensive picture of the current student learning eco-system, which includes both digital and conventional components, is also absent. Students' selection and usage of in-class and out-of-class materials is unknown at this time due to shifting habits.

Objective of the Study

- To employ the “Qualsyst Quality Assessment” tool to appraise the quality of “**ethnographic studies in medical education**”.

Research Questions

- Is it time for more ethnographic studies in medical education?

RESEARCH METHODOLOGY

"This section lays out the research paradigm and theoretical underpinnings on which the thesis is built. The justification for using a mixed-methods approach is discussed, as well as the reasons for choosing a particular research population. The systematic review is followed by a description of the data collecting and analytic methodologies used in each research. These are followed by parts using a combination of approaches, beginning with an ethnographic investigation. In this part, the research setting will be described in depth, including the background of the candidate and the study location. The questionnaire survey approach used in the second part of the mixed-methods study will be detailed next. Finally, a research will be conducted to delve deeper into a specific topic identified during the preceding phases: a GBL study. Each research description includes a section on measuring trustworthiness and ensuring the integrity of the data."

RESEARCH DESIGN

Data was mostly gathered through ethnographic participant observation as the primary data collection method. This was based on the applicant being familiar with the subjects' surroundings. In addition, the applicant had to be more than just there; he had to be an active participant in the group and win the approval of people he wanted to research (Creswell & Miller, 2000). Depending on the course, it might take as long as a semester to complete it.)

The study was done in a variety of places, including, but not limited to the following:

- Attendance at seminars in which the entire group participates.
- Participation in workshops or subgroup classes, as authorised.
- Involvement in a PBL tutoring session.

Study groups, lunch breaks, library study sessions, transport to and from medical school, and after-school events such as hall activities are examples of non-timetabled activities that are authorised.

Consent from the group was critical in these situations for the success of participant observation. As a result, the study's timeline could not be prepared in advance because the applicant could not know what the participants would allow with their permission. In addition to attending medical school, the applicant also resided in a student residence hall to improve his relationships with fellow students and gain a better understanding of the local culture.

DATA ANALYSIS

Qualitative analysis software (Nvivo version 10, QSR) was used to enter all data, including visual data from images taken throughout the ethnographic study. Audio recordings were transcribed word-for-word, with attention paid to tone, hesitations, and other minor conversational components that may have shed light on the informants' emotions.

The information was then analysed using an open-coding method, which entailed a thorough examination of the text line by line and the distillation of key ideas into codes. It has been argued that a single coder/analyst can get the job done just fine when analysing qualitative data (Bradley et al., 2007). Contradictory writers, however, suggest that dual-coding of data involving others with distinct expertise might increase its "quality and reliability" (Patton, 1999). When doing a qualitative analysis, it may be beneficial to incorporate the thoughts and ideas of others to increase the scope and depth of the study and the quality of the resulting findings. Thirty percent of the data set was coded twice, once by the candidate and once by a research assistant experienced in qualitative research and analysis. It was programmed entirely by the contender for the remaining 30%. Disagreements and confusions over coding differences were addressed. The iterative analysis also benefited from the candidate's conversations with their supervisors at scheduled meetings both during and after the ethnographic research phase. The culmination of these analytical procedures was the reduction of data to codes, from which a coding tree was constructed (Appendix I).

Themes were extracted from the data through iterative cycles of analysis by comparing interview transcripts with other data sources and analysing the degree to which informants' beliefs, cultural practises, and attitudes were similar to or different from one another (Glaser, 1965). Then, using quotes and examples to help illustrate the points, a story was told about them. Due to the mixed-methods nature of the research, these themes also served as the basis for the exploratory hypotheses that would be explored in the subsequent quantitative study. In the next part, the construct of the questionnaire research is discussed, along with its distinctive influence and domains.

CONCLUSION

In this article, we take a look at how various groups of medical students are utilising online education. Both proponents and detractors of online education were vocal, and the selected model was ultimately based on considerations of convenience and consensus. The abundance of available online materials, as well as concerns about their quality and suitability to local needs, were identified as significant barriers to the widespread use of e-learning. It was proposed that in the future, e-learning choices such recorded lectures and the development of GBL tools may be used to meet the needs of students.

LIMITATIONS OF THE STUDY

It's true that qualitative research methodologies are limited in what they can achieve. According to an AMEE handbook on qualitative approaches in medical education research, the most common data gathering techniques include open-ended surveys, individual interviews, and focus groups (Tavakol & Sandars, 2014). Recall bias is arguably the most significant of the numerous biases to which these approaches are subjected. The above methods of gathering data are essentially an oral or written report on the students' feelings, thoughts, and behaviours. When data is gathered months or years after the occurrence, memory problems are compounded (Corbin & Strauss, 2014).

An observational qualitative study might be used if researchers want to know what students did rather than what they say they did. It employs observations as a type of data gathering, usually

as a diary in the field, and puts the researcher as a participant within a group under study (Atkinson & Pugsley, 2005). When used correctly, this technique can capture learning processes in real time. Being an observer in a learning setting at all times has an invasiveness that might lead to Hawthorne effects, changing the behaviour of the students (Adair et al., 1989). This complicates the evaluation of new and brief innovations in medical education since there is limited room to include extended wash-out intervals or to precede the activity with long rapport-building activities in order to minimise these impacts. Non-ethnographic approaches like simple observation by an observer rather than a participant may prove this even more (Leung, 2002).

There are distinct advantages and drawbacks to doing investigations only using quantitative methods. These investigations vary from correlational types such as case series, cohort studies, case-control studies, and cross-sectional studies to interventional designs up to and including randomised controlled trials (RCTs) in the biomedical research field (Mann, 2003). (Concato et al., 2000). Unlike qualitative investigations, they can be replicated and generalised more easily thanks to their capacity to test predetermined hypotheses while also correcting for bias (Kleinbaum et al., 1982). However, applying them to new or extremely complicated events is challenging (Mertens, 2014). Additionally, while the findings are generalizable and provide conceptual breadth, they may not provide the same depth of insight that more specialised research would do (van der Vleuten, 2014). It is becoming increasingly apparent in medical education research that a purely quantitative methodology is unable to answer some of the research questions that have been asked (Krupat, 2010).

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