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Physiotherapy Undergraduates' Expectations of Online Courses: A Qualitative Study

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online course, physiotherapy undergraduates, expectations, focus group discussions

Abstract

Online learning has become an integral part of higher education, but many online courses fail to meet undergraduates' expectations, leading to high attrition rates. In this study, we explored physiotherapy undergraduates' (PTUGs) expectations of online courses. A qualitative study was conducted using purposive sampling among PTUGs from four universities. Five focus group discussions were conducted, involving 34 PTUGs. Thematic content analysis identified main themes, including motivation to complete the course, pre-course training, content delivery methods, the role of course facilitators, course communication, and evaluation strategies. PTUGs' expectations for practical topics, varied in terms of course content and delivery. They preferred online courses with multiple components tailored to their needs. The use of videos for content delivery and conventional methods for skill evaluation were the most preferred approaches. The findings of this study could inform the design and development of future online courses in physiotherapy.

Introduction

Online learning has surged in popularity in recent times, driven by the Covid-19 pandemic. An online course refers to a course where all content is delivered online. Effective online courses present an innovative solution to address challenges in physiotherapy education by enabling creative and efficient content delivery (Bojić et al., 2022). They help mitigate the shortage of qualified faculty (Yahya et al., 2019) and equip undergraduates with the necessary skills to navigate complex clinical environments (Major et al., 2020).

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A survey among physiotherapy undergraduates (PTUGs) highlighted dissatisfaction and lack of engagement with online learning (Chesterton et al., 2022). Similarly, other challenges reported in the literature include high dropout rates (Christensen & Spackman, 2017), technical difficulties (Mahyoob, 2020), poor student engagement (Khan et al., 2017), and lack of motivation (Muflih et al., 2021). The precise reasons for the above challenges in online courses were unclear but it might be that the courses do not meet the learners' needs (Ranganathan et al., 2021).

Therefore, considering students' expectations before developing an online course could be part of the solution (Bourdeaux & Schoenack, 2016; Wieser et al., 2017). This may improve students' satisfaction (Bourdeaux & Schoenack, 2016; Li et al., 2018), help achieve desired learning outcomes (Fadzil et al., 2015; Pei & Wu, 2019; Zheng et al., 2015) and reduce dropouts (Wieser et al., 2017). Understanding user expectations may also aid in developing courses tailored to the preferences and learning styles of Generation Z and digital natives (Mohd Ishak et al., 2022). A comprehensive review of online courses, including curriculum structure and design, and considering students' psychological well-being during online learning, has been recommended for effective delivery (Ghazali et al., 2022). Moreover, it has been recommended that educators consider all optimal methods of content delivery when utilising online platforms for physiotherapy students, ensuring the approach aligns with their learning needs (Chesterton et al., 2022).

Such information is crucial for developing evidence-based teaching and learning methods that could contribute to the success of online learning (Romli et al., 2022). Furthermore, the expectations of PTUGs regarding online courses have not been explored to date.

Objective and Research Questions

The objective of this study was to explore the expectations of PTUGs about online courses, focusing on motivational factors, content delivery, and evaluation methods. The research questions for this study were:

a) What factors contribute to an undergraduate's motivation to complete an online course?
b) What are the undergraduates' expectations in the pre-course training?
c) What are the undergraduates' expectations of the online course contents and delivery methods?
d) What are the undergraduates' expectations from the course facilitator (CF) in an online course?
e) What are the undergraduates' preferred course evaluation methods for an online course?

Literature Review

Students have complex, multidimensional (Henry, 2020), and high-level expectations towards online courses/learning. A study among Malaysian undergraduates of education programmes also discovered a high degree of expectations towards online learning. It was postulated that a high level of expectations would have a detrimental effect on students' satisfaction (Umbit & Taat, 2016).

With regard to students' expectations about online courses, studies have explored various aspects such as online management systems (Chaw & Tang, 2017), curriculum (Henry, 2020), course content (Bourdeaux & Schoenack, 2016), interactions with peers and facilitators (Ragusa,

2017), and motivational factors (Bovermann et al., 2018; Henry, 2020). However, information on expected motivators, pre-course training, delivery methods, course duration, mode of content delivery, and course evaluation is limited. For instance, research within Malaysian contexts has mainly relied on surveys (Mat et al., 2021), lacking the first-hand experiences of undergraduates.

There was no difference in these expectations based on gender. The students' expectations towards online learning were noted to be different during the commencement of the course and during the progression of the of the course. It must be noted that most of these studies involved university students, and their level and programme was not specified, except in a few studies (Mat et al., 2021).

Most of the available studies inferred expectations via surveys or other quantitative methods, except for a few studies that used qualitative methods, such as in-depth interviews (Bourdeaux & Schoenack, 2016; Henry, 2020) and focus group discussions (Lin, 2022). Available studies among Malaysian students (Mat et al., 2021a) are quantitative in nature. A literature search related to PTUGs' expectations towards online courses was conducted in MEDLINE (thru PubMed), Scopus, EBSCOhost, ScienceDirect and Google Scholar. The included studies were articles published in English and during the previous five years (2019-2024). The Population Interest and Context (PICo) model for qualitative studies (Murdoch University Library, 2022) was used to formulate the strategies. However, we were unable to identify any studies that specifically explored the expectations of PTUGs regarding online courses.

Addressing and incorporating expectations during the development of online courses for undergraduates could significantly improve satisfaction and engagement, ultimately leading to higher retention rates. This concept forms the basis of the study's framework, as illustrated in Figure 1.

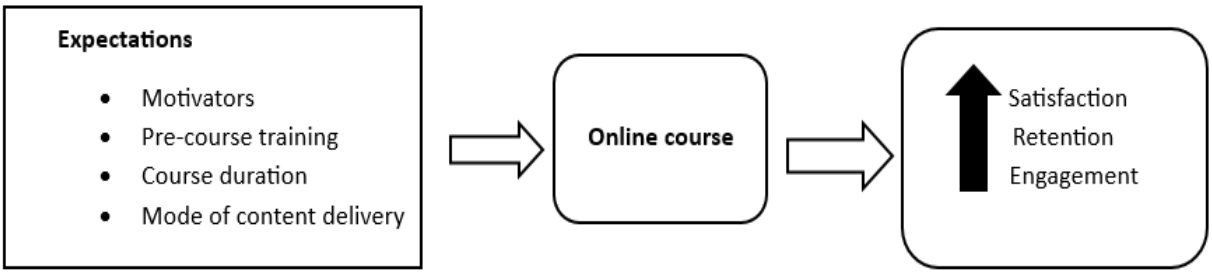

Figure 1: Conceptual framework of the study

Methods

Research Methodology

A qualitative research approach utilising focus group discussions (FGDs) was employed for this study. FGDs were chosen for their ability to capture participants' views empathetically (Hammarberg et al., 2016) and provide a comprehensive understanding (Ismiyani et al., 2024). FGDs facilitate the exploration of issues, revealing the social and interconnected nature of knowledge rather than individual narratives (Nyumba et al., 2018). The reporting of this research adhered to the consolidated criteria for reporting qualitative research (COREQ) checklist (Tong et al., 2007). The ontological stance adopted was constructionism, presupposing the existence of expectations among undergraduates regarding online course design. Similarly, the epistemological stance was interpretivism, aiming to understand undergraduates' expectations as

voiced in the group discussions (Al-Saadi, 2014). It was anticipated that undergraduates' expectations would be influenced by their learning characteristics and prior exposure to various digital teaching and learning initiatives.

Population and Sample

The sample population was comprised of PTUGs from four universities in Malaysia (two private and two public), selected through purposive sampling. The selection criteria included all PTUGs from years 2-4 who volunteered to participate in the FGDs.

Thirty-four (34) PTUGs participated in this study. The first four FGDs were conducted in each institution, and consistent findings were reported by the fourth FGD. To confirm data saturation, a fifth FGD was conducted in one of the four institutions. Participants' demographic information was descriptively analysed (Table 1).

Table 1: Undergraduates' Demographic Information Summary

	Variables	n (%)
Gender	Males	9 (27)
	Females	25 (73)
Participants based on the institution	UNIVERSITY A*	6 (18)
	UNIVERSITY B	12 (35)
	UNIVERSITY C	8 (23)
	UNIVERSITY D	8 (23)
Participants based on year of study	2	24 (70)
	3	7 (21)
	4	3(9)
No. of undergraduates participated in each FGD	FGD 1	6 (18)
	FGD 2	6 (18)
	FGD 3	6 (18)
	FGD 4	8 (23)
	FGD 5	8 (23)

**Name of the university removed to maintain anonymity.*

Instrument

A structured open-ended proforma question was developed by the first author (see Appendix 1) and reviewed by the corresponding author. Additionally, an external reviewer evaluated the proforma for further validation. To ensure that the PTUGs could comprehend the questions effectively, a pilot FGD session was conducted.

Data Collection and Analysis

FGDs were conducted in private spaces within the respective institutions, moderated by the first author, with two co-moderators present. The FGDs were audio-recorded, transcribed verbatim, and analysed (see Appendix 2) using thematic content analysis (TCA) in NVivo software version

2020 (Braun & Clarke, 2006). Rigour and trustworthiness were ensured through member checking, collecting field notes, verification of transcripts, and multiple coding (see Appendix 3). Participants verified their transcripts, field notes were reviewed by participants and another co-moderator, and transcription accuracy was verified against audio recordings. Coding was deliberated among co-authors, enhancing the study's rigour (Birt et al., 2016; Kamsan et al., 2020).

Ethical Clearance

Ethical approval was obtained from the Research Ethics Committee, Universiti Kebangsaan Malaysia (UKMPPI/III/8/JEP-2019-810). Permission to conduct the study among undergraduates was obtained from the respective faculty deans. Individual consent was obtained from all participants, and participation was voluntary with confidentiality assured.

Findings

Word clouds were generated for each theme and subtheme to illustrate the findings (see Appendix 4). Main themes and subthemes inferred in the FGDs, are summarised in Table 2. The themes and subthemes were linked to the corresponding research question to which they provided relevant answers. The findings have been presented along with the subsequent research question.

Table 2: Themes, Subthemes from the FGDs and Corresponding Research Question

Themes	Subthemes	Research Question
1: Motivation to complete the online course		What factors attribute to the undergraduate's motivation to complete an online course?
2: Expectations in the pre-course training		What are the undergraduates' expectations in the pre-course training?
3: Expectations in the course contents and delivery methods	3.1: Access 3.2: Course duration 3.3: Contents and delivery methods	What are the undergraduates' expectations of the online course contents and delivery methods?
4: Expectations from the course facilitator		What are the undergraduates' expectations from the course facilitator in an online course?
5: Expectations in the course communication	5.1: With facilitators 5.2: With peers	What are the undergraduates' preferred course evaluation methods for an online course?
6: Expectations in the course evaluation	6.1: Cognitive domain 6.2: Psychomotor skills	What are the undergraduates' preferred course evaluation methods for an online course?

Theme 1: Motivation to Complete the Online Course

This theme highlights the preferred motivators aimed at enhancing undergraduates' motivation to complete an online course. The majority of undergraduates expressed a preference for extrinsic motivators, and most commonly reported was displaying each student's progression to foster healthy competition among peers, followed by rewards and the provision of course completion certificates. Other favoured extrinsic motivators included promoting student achievements on social media, enhancing profile characteristics through accumulated rewards, sending reminders, and collecting fees from students to enrol in the online course.

In terms of intrinsic motivators, undergraduates preferred the presentation of testimonials from course alumni, adequate technical support, settings to unlock new content upon completion of provided materials, and offering online courses during the break periods of regular classes:

> F3P5: If the achievements done by the students posted in the social media, then their group members will know the achievement, so they feel motivated.
>
> F3P2: May be a profile character, maybe some people want to be anonymous in the online course.

Theme 2: Expectations in the Pre-Course Training

This theme revealed the expectations of undergraduates regarding pre-course training before enrolling in an online course. Many undergraduates expressed a lack of preference for any pre-course training, suggesting their readiness and confidence to engage in online courses without additional preparation. Among those who favoured pre-course training, there was nearly equal preference for either online or face-to-face modes. Interestingly, some undergraduates indicated a preference for an active or exploratory learning approach to understand the course. Suggestions for active exploration of online courses included the provision of a pop-up box on the course website to guide users, a trial session to explore the course, and a compilation of frequently asked questions with answers about the online course:

> F1P2: May be just like a pop-up box when you open the website.
>
> F2P3: Maybe we can have a trial class or session.

Most undergraduates preferred to have a course synopsis or summary followed by methods of access or course navigation in the pre-course training. One undergraduate favoured obtaining information about the educator, whereas another undergraduate preferred details such as the time frame and course prerequisites:

> F3P5: … In the pre-course training, purpose of the course should be included.
>
> F3P6: Prerequisites or basic sciences about the topic like anatomy which we have to know to pursue the online course, can be included in the pre-course training.

Theme 3: Expectations of the Course Contents and Delivery Methods

This theme addressed undergraduates' expectations regarding the duration of course access, contents, and delivery methods. Undergraduates had many expectations regarding course content and delivery mode.

Subtheme 3.1: Course Access

The majority of students preferred to access online courses via mobile phones. At the same time, many favoured its delivery through mobile phones and desktop versions so that they could access it in both ways. Very few undergraduates favoured accessing the online course on their tablets. One undergraduate highlighted that online courses should be user-friendly in technical and content aspects:

> F2P4: Mobile is with us every time. So easier to use.
>
> F2P5: I prefer both (desktop and mobile version).

Subtheme 3.2: Course Duration

Although many undergraduates preferred a flexible duration to complete online courses, most were willing to spend a maximum of 4-6 hours per week on an online course in addition to their regular schedule.

Subtheme 3.3: Expectations in Course Contents and Delivery Methods

There were diverse expectations regarding course contents. Many preferred to have recent evidence-based information and sources provided in an online course, along with simple, easy, and concise content. However, a few preferred the inclusion of games, tutorials, quizzes, and shortcut tips to help memorise crucial points in the course contents:

> F3P2: What I expect from the online course is the up-to-date evidence-based between 3 to 5 years and unbiased, because some time it may be biased thru personal preference.
>
> F4P6: For me I think the format of the content should be simplified and it should lead us to the 'Read more' for detailed information.

Videos were the most preferred mode of content delivery, followed by multimodal presentations and pictures:

> F5P5: I want both video and words, but it cannot be lengthy sentences like essay. It should be in points.

Videos have been identified as the preferred mode of content delivery for skill-based (practical) topics. However, additional requirements for videos include interactivity and clear views for therapist hand placements. Other preferences for content delivery for skill-based topics include online video demonstrations and step-by-step flow charts. One undergraduate favoured case studies, while another preferred periodic face-to-face demonstrations for content delivery. Simultaneously, some undergraduates emphasised the inclusion of standardised techniques and unique exercises for practical topics.

> F2P1: I prefer two-way interactive video, that is after video we have video conferencing sessions to correct their mistakes and clarify the doubt.
>
> F4P4: I think it is better to give in the flow charts because if I am looking into the video, I may miss some certain step. if I read the step-by-step flow chart can get confident.

Theme 4: Expectations from the Course Facilitator

This theme elucidated the diverse expectations of the undergraduates towards the CF in an online course. This ranged from major to minor roles. Most of the undergraduates expected the CF to clarify their doubts in the online course. Other expectations included checking their progress, providing feedback, demonstrating practical skills, and revising completed topics. Being a friendly person and a subject expert was also highlighted. Some of the undergraduates stressed that the CF should be available at all times and provide fast responses. However, one undergraduate preferred the CF to be available during dedicated times:

> F5P6: The facilitator can available 24 hours.
>
> F4P5: …He should be the subject expert to answer our skill-based questions.

Theme 5: Expectations in the Course Communication

This theme summarises undergraduates' expectations regarding the mode of communication with peers and their CF in the online course. They prefered to contact the CF through a multiple chat system. Additionally, some undergraduates also preferred live online interaction and email communication with the CF. Conversely, most of the undergraduates voiced their preferences towards online chat boxes/forums to communicate with peer members. Very few undergraduates preferred WhatsApp group chat, Facebook, and video chat to communicate with peers:

> F4P4: I prefer chat room with facility to message, voice and video call with classmates and facilitator.
>
> F2P1: For me a two-way conference but the conference via Facebook or any social media like any forum or platform to communicate in two ways.

Theme 6: Expectations in the Course Evaluation

This theme uncovered the undergraduates' expectations for course evaluation in the online course for the cognitive and psychomotor domains.

Subtheme 6.1: Expectations in the Evaluation of the Cognitive Domain

Most of the undergraduates preferred online-based tests for knowledge (cognitive domain) evaluation. Very few undergraduates preferred face-to-face exams for the same. There was more inclination towards multiple-choice questions (MCQ). Some of the undergraduates suggested having an MCQ quiz after each topic and a major MCQ quiz at the end of the course:

> F3P3: I prefer MCQ quiz because if we write our own answer, the moderator cannot understand our answer.
>
> F3P2: I prefer a quiz after every lesson.

Subtheme 6.2: Expectations in the Evaluation of Psychomotor Skills

More than three-fourths of the undergraduates preferred a conventional objective structured practical examination (OSPE) or objective structured clinical examination (OSCE) for psychomotor skills evaluation. They claimed that a conventional OSPE/OSCE provides instant feedback and that online skills evaluation might lack real experience. Conversely, approximately one-fourth of them preferred the online mode of skills evaluation.

F3P4: May be with more technology (like Virtual Reality mode) we can conduct practical exam online. But with this technology we have now, it is better to do traditionally.

F2P1: I prefer online mode as it is less stressful.

The summary of the PTUGs' expectations of online courses in our study is outlined in Figure 2.

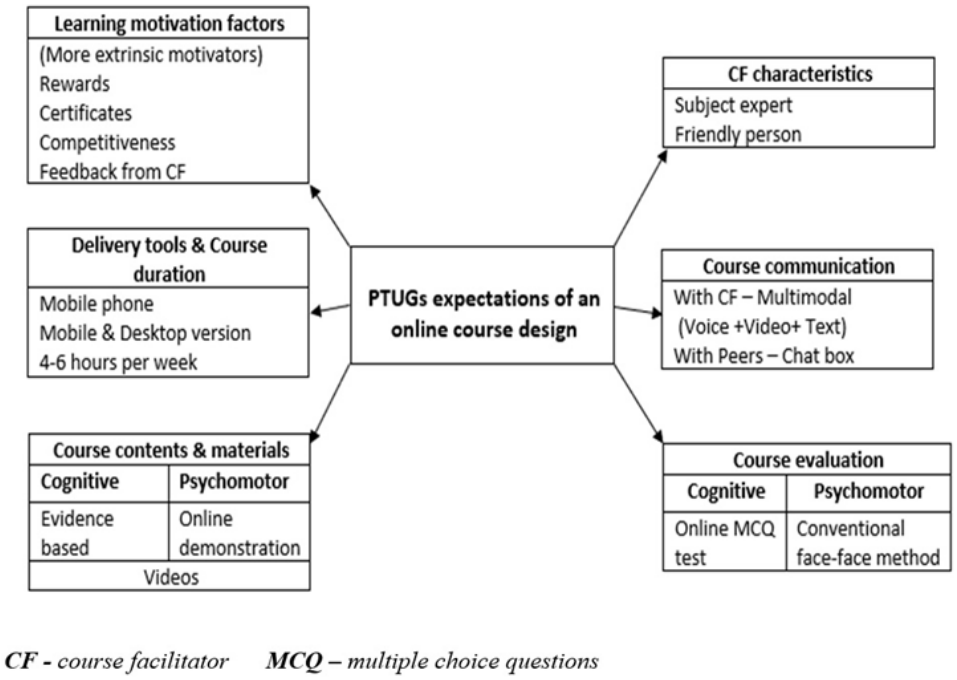

Figure 2: PTUGs' expectations of online courses

Discussion and Implications

The results of this study could be valuable for physiotherapy education stakeholders as they navigate course design and development. In this research, we aimed to explore PTUGs' expectations about online courses. Undergraduates in our study were noted to be prone towards extrinsic motivators. These findings are consistent with a recent study that identified extrinsic motivation as a predominant type of academic motivation among PTUGs (Selvakumar et al., 2022). Similar results were demonstrated among postgraduates in Turkey (Selvi, 2010) and the United States (Lee & Martin, 2017). The above finding clearly indicates the need for more inclusion of extrinsic motivators for undergraduates involved in online courses (Gonța & Tripon, 2021).

However, a survey among public university physiotherapy and rehabilitation students in Turkey notably reported that 21.5% of students lacked intrinsic motivation towards online learning (Dogru et al., 2022). This clearly implicates that there is a need for intrinsic motivators as well. Offering a combination of intrinsic and extrinsic motivators in online courses is recommended. This recommendation is based on the understanding that individuals may struggle to sustain motivation with only one type, as various factors such as time and situation can influence an individual's motivation (Ramalingam & Kee Jiar, 2022). Pre-course training prior to

an online course was not a necessity, as echoed by the undergraduates in our study. This is probably due to their moderate to higher levels of readiness towards online learning (Ranganathan et al., 2021). Moreover, these undergraduates were categorised as Gen Z, who are digital natives (Prensky, 2001) and, hence, may perceive that they are confident in easily navigating online platforms (Mosca et al., 2019).

The preferred tools to access the online course among our participants were mobile phones. Similar results were reported in a previous study in India (Muthuprasad et al., 2021). This is supported by the fact that most of the undergraduates used smart phones to complete their learning tasks (Tang & Lim, 2013). Interestingly, there was also a preference for both desktop and mobile versions of online courses among undergraduates This would be for sequential or simultaneous use of multiple devices (Shaw, 2017). Regarding the duration of the online course, the majority of the undergraduates supported a maximum of 4-6 hours per week. This is likely because students might have had other courses that they needed to complete as part of their programme of study. Moreover, a longer duration of an online course has been reported to be one of the reasons for non-success in terms of academic grades (Fetzner, 2013). In addition, avoiding longer duration online classes could enhance learners' productivity (Muthuprasad et al., 2021).

Other findings from our study included higher expectations for course content delivery, which, in line with previous reports (Casanova & Paguia, 2021; Li et al., 2018), indicated a preference for videos, multimodal methods, and various other methods. A correlation between students' expectations, and course structure (Gray & DiLoreto, 2016) has been highlighted previously. Thus, catering to undergraduates' expectations could lead to overall satisfaction with the course content. Undergraduates in our study preferred information that was supported by current research evidence. This is important, as evidence-based health care learning can assist in consolidating and applying skills and knowledge (Schoonees et al., 2017) as well as evidence-based practice (Mwololo et al., 2021).

There was a higher preference for videos in the delivery of online course content for both general content and skill-based topics. Videos are superior for psychomotor skills, as their speed can be slowed for detailed and repeated viewing, in addition to having the option to pause for individual needs (Brecht, 2012).

Regarding the role of the CF, the majority of the undergraduates agreed that the CF should only have a minor to moderate role but should be a subject expert. This suggests undergraduates are confident in online self-learning and might only need support for subject-related queries. Encouraging self-directed learning among students is vital to travel on the wave of Education 4.0 (Wai Yee & Cheng Ean, 2020). Conversely, a survey among undergraduates in Malaysia relayed higher expectations from the CF in addition to providing motivation for online courses (Harun et al., 2012). The shift for support pertaining to the subject matter rather than technical guidance can be supported by previous studies showing online learning readiness and internet self-efficacy among students (Asfar & Zainuddin, 2015; Chung et al., 2020). Similarly, a survey among college students in China also reported their preference for the CF to be knowledgeable in the subject matter (Lin, 2022). A survey among physiotherapy students in Jordan inferred CF support as one of the influencing factors for their satisfaction in distance learning mode (Etoom et al., 2023), hence the above expectations towards CF have to be diligently considered when designing an online course.

It is noteworthy that different modes of communication requests were shown with CF and peers. Undergraduates preferred multimodal chat systems to communicate with the CF. Although

peer interaction was reported to be lacking during online learning (Harithasan et al., 2022), an online chat box to communicate with peers was considered sufficient in our study. Similar findings were reported in the literature (Martin et al., 2020). In addition, the undergraduates expected the CF to be easily reachable online, which is similar to the findings of a previous study among Malaysian undergraduates, who expected quick responses to their queries (Nafrees, 2021). This may suggest that undergraduates perceive that good communication with the CF is crucial in the online learning environment, which is similar to the findings of a study among Malaysian students (Mokhtar et al., 2020).

The findings also indicate that undergraduates preferred conventional OSPE or OSCE in a face-to-face mode for practical skills evaluation. This might be due to opportunities for instant feedback and lack of experience in an online environment for practical exams. However, the online mode was favoured and perceived to be less stressful for the evaluation of knowledge. This contradicts the findings from a recent study among first-year medical students, where the traditional mode of assessment was preferred for knowledge assessment. However, the participants in that study reported that the online mode of examination lessened examination-related anxiety (Ghosh & Sarkar, 2022). Similarly, in another study among undergraduates in Malaysia, it was reported that the online mode enhanced confidence during the presentation, especially among students with low self-esteem (Nasiha et al., 2021). Further studies are required to explore the psychological benefits of online compared to face-to-face modes of evaluation in the future.

It is believed that if the expectations expressed by the PTUGs have been addressed appropriately, it could enhance their satisfaction and completion rate of online courses. Consequently, it would reduce the differences in physiotherapy practice and improve the quality of physiotherapy practice. Some of the expectations inferred in this qualitative study can also be used in the courses designed for continuous professional development activities involving physiotherapists. All the participants in this study belonged to Generation Z, hence, knowing their expectations in the online learning mode could aid physiotherapists in adopting specific strategies to educate their clients who belong to Generation Z, especially when incorporating telerehabilitation

Limitations

This study was limited to undergraduates from four Malaysian institutions, although both public and private universities were represented. Data were collected through 35 PTUGs and five FGDs, which enabled in-depth exploration of expectations. While FGDs are a common qualitative method, they may constrain open expression due to potential disagreement among peers (Kamsan et al., 2020). To address this, ground rules emphasising equal participation were established, and sessions were facilitated by external moderators to enhance objectivity. Another limitation is that the study was conducted prior to the Covid-19 pandemic; the subsequent transition to online learning may have influenced students' perspectives. Nonetheless, as online learning is now embedded in higher education, the findings remain relevant.

Future studies comparing pre- and post-pandemic expectations could provide valuable additional insights (Ødegaard et al., 2024) on how the shifts in online learning have reshaped students' expectations and engagement. This would strengthen the evidence base and provide timely insights for curriculum development and educational policy.

Conclusion

The findings of our study highlight the varied expectations of PTUGs regarding online courses. The key preferences identified include extrinsic motivators, accessibility via mobile phones and laptops, a weekly duration of 4-6 hours, evidence-based content, video-based delivery, subject experts as course facilitators (CFs), multimodal communication with CFs, online MCQ assessments for cognitive evaluation, and traditional methods for psychomotor skills assessment. It is recommended that online courses incorporate these diverse components to meet the needs of undergraduates and enhance their satisfaction, as aligned with previous research on improving online learning experiences.

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Appendices

Appendix 1

FOCUS GROUP DISCUSSION PROFORMA

PROJECT TITLE

Development and Evaluation of an Online course for Non-Specific Low Back Pain Among Physiotherapy Undergraduates.

WELCOME NOTE

We would like to thank all of you for dedicating your time to share your expectations towards online course. Before proceeding, we would like you to read and sign the informed consent document that you have received. This is a voluntary process, so please feel free to leave at any time if you are not comfortable in participating and pass on any question that you would prefer not to answer. Please be assured that your views will be kept confidential.

INTRODUCTION

My name is Harikrishnan, PhD student under the physiotherapy program, Faculty of Health Sciences, University Kebangsaan Malaysia. I am doing my PhD under the guidance of Assoc. Prof. Dr. Devinder Kaur Ajit Singh. I am the moderator for this focus group discussion today, and Ms. Kamali will be the co-moderator for this session.

PURPOSE OF THE GROUP DISCUSSION

We are developing an online course for physiotherapy undergraduates. Hence, the reason that we gathered here today is to have a focus group discussion to understand the expectations of physiotherapy undergraduates towards online course. We will report the significant comments and suggestions, but we will not refer it to any individual. The outcome of the focus group discussion will be utilized in developing the online course. Once the online course is developed, we will provide this course to the undergraduates without any additional cost. This is to enable us to compare the effectiveness of the online and traditional course. This course is also not going to replace your current teaching and learning methodology at your university. Kindly permit us to record this session. Please highlight if anyone has any concerns with recording this session?

PARTICIPANT INTRODUCTION:

Could we begin with everyone introducing yourselves?

GROUND RULES

- Before we start, we would like to highlight a few ground rules for this discussion.
- We request you to kindly change your hand phone to silent mode.
- We have placed name cards in front of you. Please provide a pseudonym that will help us to communicate with each other.
- We request that only one person speaks at a time.
- There are no right or wrong answers.
- You do not have to speak in any order.
- When you have something to say, please do so. It is important that we obtain the views of everyone.
- You do not have to agree with the views of other people in the group.
- We are just interested in positive comments and negative comments.
- Does anyone have any questions? (Answers).

OK, let's begin

BACKGROUND INFORMATION

Q1. Understanding about the online course

What is your understanding about online course?

Follow up: Can you explain further. Please elaborate.

(Let us sum up what is online course in this study perspective. "A course in which all contents are delivered in an online mode is referred to as an online course")

CONTENTS

Q2. General expectations for a new online course:

Could you please share your general expectations of an online course?

Q3. Enhancement of psychological factors in online learning:

Could you please suggest some methods to increase your motivation to complete an online course?

What would be the challenges or barriers for you to pursue an online course?

Please suggest some measures to overcome these challenges or barriers.

Q4. Preferences for pre-course training:

Is there any prior preparation that you think will be helpful to you to do the online course more effectively?

Please suggest any specific contents to be included in the pre-training/workshop.

Q5. Preferences in content delivery:

Please share your preferred gadget to access an online course.

Follow up: Please give reasons for your preferences.

We understand all of you have your regular classes and other schedules. Based on your schedule, please suggest what would be the maximum duration you can spend in a week for an online course apart from your regular classes?

Could you please share the preferred method or types of content delivery for the online course you would want? Follow up: Tell me the reasons please.

What are your expectations in regard to the course materials in an online course?

Could you please suggest to us the preferred methods to deliver contents in an online course for practical or skill-based topics?

Q6. Expectations from course facilitator:

Course facilitator is the one who moderates and supports the students in an online course.

What would be your expectations from the course facilitator in an online course?

Please suggest what kind of role would you like your course facilitator to undertake in the online course.

How much involvement would you expect from the course facilitator?

Please suggest some preferred modes of communication with the facilitator with reasons for this preference.

For example, chat, mail, voice call or video call?

Q7. Communication with course mates:

In an online course there will be online communication or interaction between your course mates. What is your preferred mode of communication or interaction with your course mates?

Q8. Online course evaluation:

What methods do you prefer to evaluate your knowledge and skills after an online learning course involvement? Why, please provide reasons.

Follow up: Thank you once again.

COMPLETION OF DISCUSSION

I request the co-moderator to summarize the key points from our discussion.

Please share, is there anything else that you think is important for us to know about student expectation towards an online course?

Have we missed anything?

We will send you the soft copy of the transcript and we will request you to kindly check it out and provide your feedback.

Thank you for taking the time to participate in this discussion!!

Appendix 2

STEPS INVOLVED IN DATA ANALYSIS (Braun & Clarke 2006)

No	Steps	Process involved
1.	Familiarization with the data	Repeated active reading of the transcript was done by the first researcher to understand the FGD statements.
2.	Generation of initial codes	Each transcript is read completely. The first researcher tagged the statements linked to research questions into codes and the codes were verified by another researcher in the team.
3.	Searching for themes	The various codes were organised into potential themes and sub-themes.
4.	Review of themes	Themes are verified in relation to codes and deliberated among research team members. This review involved 2 levels: Level 1: Coherence between the codes and theme was verified. Level 2: Validation of themes with entire data set was performed. A thematic map was also devised in this phase.
5.	Defining and naming the themes	Themes were vividly defined, and the names of the themes amended accordingly.
6.	Generation of report	The findings were compiled, and the report was developed. The key extracts for each theme were included.

Appendix 3

CODES, THEMES AND SUBTHEMESs

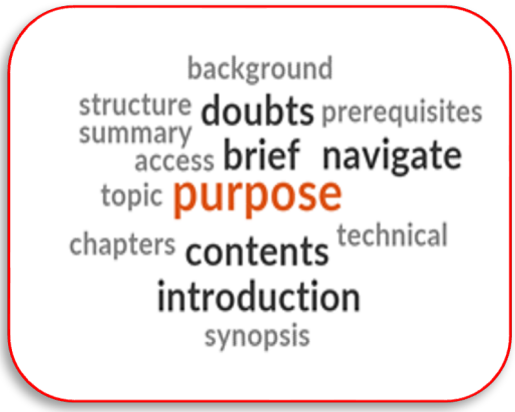
No.	Themes	Subthemes	Codes
1.	Expectations to increase motivation to complete the online course		13
2.	Expectations in the pre-course training		16
3.	Expectations in the course contents and delivery methods	Subtheme 3.1: Course access Subtheme 3.2: Course duration Subtheme 3.3: Course contents and delivery methods	51
4.	Expectations from the course facilitator		12
5.	Expectations in the course communication	Subtheme 5.1: With course facilitator Subtheme 5.2: With peers	17
6.	Expectations in the course evaluation:	Subthemes 6.1: Evaluation of the cognitive domain Subtheme 6.2: Evaluation of the psychomotor skills	7

Appendix 4

WORD CLOUDS

THEME 1: Expectations to increase motivation to complete the online course

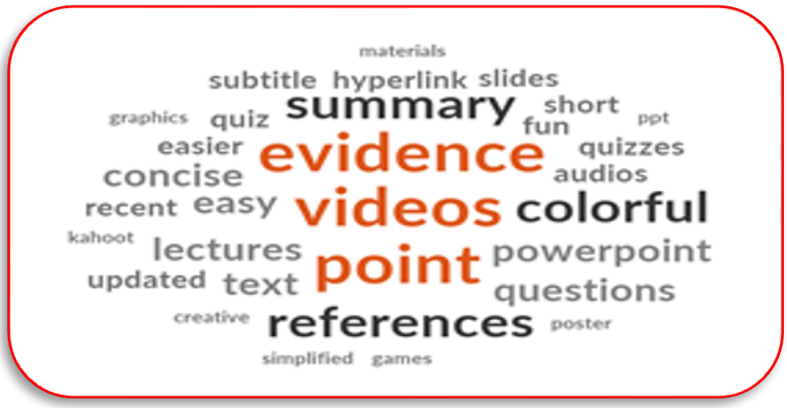
THEME 2: Expectations in the pre-course training



THEME 3: Expectations in the course contents and delivery methods

Subtheme 3.1: Course access

Subtheme 3.2: Course contents for theory topics



Subtheme 3.3: Course contents for practical topics

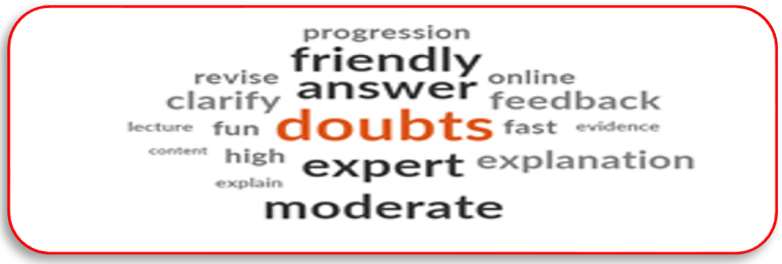
Theme 4: Expectations from the course facilitator

Theme 5: Expectations in the course communication

Subthem 5.1: With course facilitators

Subtheme 5.2: With peers

Theme 6: Expectations in the course evaluation



Subtheme 6.1: Evaluation of the cognitive domain

Subtheme 6.2: Evaluation of the skills