Exploring Postgraduate Students’ Lurking Behaviors During Emergency Remote Learning: A Proposed Framework

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ABSTRACT
The COVID-19 pandemic has caused colleges and universities to opt for online teaching and learning as a way to keep their faculty, staff and students safe. Lurking is one of the common activities that occur in an online learning context. The majority of the available literature on lurking in online communities in the context of education is dated, while studies on lurking during the emergency remote learning period has not been thoroughly explored. Thus, the proposed study aims to understand lurking behaviors among postgraduate students in the context of emergency remote learning. To this end, qualitative case study method will be employed to provide a rich understanding of why students lurk during online learning. This study aspires to facilitate lecturers to understand why certain students are inactive during online learning from the students’ point of view and devise ways to promote active participation from students during online learning.

Keywords: COVID-19, Lurking, Postgraduate students, Online Learning.

1. INTRODUCTION
The threat of COVID-19 has had a tremendous impact on Higher Education Institutions in the provision of teaching and learning whilst safeguarding the health of faculty and students. The pandemic has caused severe disruption to face-to-face teaching and learning, in classrooms and laboratories as well. This situation has forced Higher Education institutions to move to fully online learning [19].

Lurking is one of the common activities that occur in an online learning context. There has been a considerable number of studies conducted on lurking in an educational setting. Notable research has been carried out by Lim and Tan [34], Beaudoin [2], Sigala [67], Sun, Rau, and Ma, [71], Lee, Chen, and Jiang [32], and Dennen [12].

However, the majority of the available literature on lurking in online communities in the field of education is dated with most having been published before 2010. To date, studies on lurking during emergency remote learning have not been researched. Therefore, this study hopes to bring light to the factors behind postgraduate students’ lurking behavior during emergency remote learning.

2. RESEARCH OBJECTIVES
The primary objective of the proposed study is to understand lurking behaviors among postgraduate students in the context of emergency remote learning. The study specifically intends to explore:

a) Students’ responsibilities in online distance learning courses
b) Their expectations of online distance learning courses, and
c) The factors that lead them to perform lurking behaviors

3. SIGNIFICANCE OF THE PROPOSED STUDY

With the cessation of the face-to-face interaction, the tremendous amount of online learning using educational web platforms has become the basis of crisis response solutions. Strielkowski [70], highlights that the pandemic has started a digital transformation in higher education at a much more rapid pace with its inherent novelities that in reality would have taken numerous years. This was brought about by speedy managerial decisions that were presented and approved in days. Online learning once deemed a disruptor has now attained “messiah” status.

Technology has enabled and aided, collaborative learning to become a tool of learning and instruction to create an environment of digital learning by applying various technological and pedagogical strategies [24]. With the rampant spread of the pandemic, where Asian universities were prevented from offering face-to-face learning, alternative teaching and learning strategies such as online collaborative learning have been used. [22].

The proposed study stemmed from the need to understand students’ learning behavior, especially the non-active students within the context of online learning communities during emergency remote learning. Equally important, the prevalent use of online learning during the pandemic has readily enabled students to readily communicate with fellow students and faculty. However, producing interactive and engaging lessons, as a result of building a sense of community enabling students to know each other are some of the key issues [15].

The definition of Poster and Lurkers are the two most common categories to describe participants in online communities. The posters are those who readily share knowledge online and lurkers are those who readily read postings with no reciprocating postings [44]. Conversely, a “luker” is labelled as a participant in an online community who specifically resists participation or is silent. Being an observer is complimentary to this phenomenon, and association of being inactive or passive. Invisibility and displaying a bystander behavior is also observed. [45]. Nevertheless, the invisibility of lurkers has not been thoroughly explored in comparison to other types of learners [20].

Bozkut et al. [6] pointed out that while there has been research literature involving the MOOC and Self Determination Theory (e.g., Beaven, Codrreau, & Creuzé, [4]; Beaven, Hauck, Comas-Quinn, Lewis, & de Los Arcos, [5], studies by a number of scholars have not closely examined lurkers instead directing their focus on the active participants in learning communities. Ignoring or not closely studying lurkers in a knowledge sharing context, the connection of underpinning reasons contributing to lurking behavior is missed, the effect leading to fully understanding lurking behavior. Besides, lurkers consist of majority of online participants [44]. Furthermore, participation by individuals in online communities is mainly due to knowledge demand [61:84].

Many studies, for instance, Copeland et al. [10] and Fawaz et al. [14] who studied the relationship of COVID-19 impact on college students mental and possibly their coping mechanisms. Carter et al. [9], who explored students’ self-regulation strategies, Suryaman et al. [72] looked into how learning occurred at home during the pandemic. Kapasia et al. [26] investigated how lockdown impacts students' learning performance. These researchers have looked at the impact emergency remote learning had on undergraduate students or the university student body as a whole.

Although some studies have been conducted on the lurking behavior of postgraduate students, for instance, Beaudoin [2] and Dennen [12], these studies were conducted before the COVID-19 pandemic. Conversely, few studies have on postgraduate student perception of the impact of emergency remote learning. Review of recent literature on the same topic with particular emphasis on postgraduate students, Nasir, et al. [43] examined the impact of academic survival amongst postgraduate students in Malaysia, and similarly, Singh et al. [68] investigated postgraduate student perceptions during the Covid 19 pandemic.

Given the above justifications, the proposed study has the potential to deepen current knowledge and understandings of adult students’ lurking behavior specifically in the context of emergency remote learning. It will provide insights into the nature of lurking especially related to students' understanding of their responsibilities in the online learning community, their expectations and factors that underpin their lurking behavior. This study is significant to the current education climate whereby online distance learning has become the new norm to almost the majority of the higher learning institutions all over the world.

More importantly, Bozkurt and Sharma [6] postulate that emergency remote teaching is not an option, but an obligation, wherein the students are compelled to learn online and with limited contact with faculty and peers. The clarity of thought in educators’ minds has to be that this form of learning is here to stay for the foreseeable future.
In designing educational content, it must be noted that learning takes place with the aid of technology and not learning from technology. Herein lies the challenge for content developers, community managers and educators, that appropriate strategies need to be in place to encourage learners to utilise, make new knowledge and share. These desired learning activities over some time help in the evolutionary development into a community of learning, encouraged by participation in community settings and lowering the incidence of lurking behavior.

4. CONTEXT OF STUDY

This study will be carried out at Brittany Universite' (BU), a degree conferring institution approved for 100% Online delivery and Blended Learning. It is based in Paris, France with an international marketing office based in the UK. It is a private university that is recognised by the Ministry of Higher Education, Research, and Innovation, France, and an approved training provider under the authority of the Department for supervision for vocational training of iie-de-France. BU offers programs at the undergraduate, master, and doctoral levels.

These varying levels of programs are designed to have either dual or triple awards in collaboration with Vern University-Croatia and Universidad Catolica San Antonio de Murcia (UCAM)-Spain, in addition to an award from BU. This awards structure makes BU unique in Europe and in other parts of the world it has a presence.

The entry requirement for master’s degrees’ entry, students require a recognise Bachelor degree or equivalent professional qualifications. Those without the above qualifications can be accepted onto the programme through the open mature entry route with several years of working experience at supervisory and managerial levels.

Master students will be assigned a supervisor to guide them to the completion and production of a 10,000 written Research Project. All taught modules and the Research Project are subject to a rigorous quality assurance process for assessment with first and second marking by BU and moderation by an appointed External Examiner as well as by partner awarding universities. Quality assurance practices relating to assessment for the master programmes are in a place wherein students submit a 10,000 to 12,000-word Work Based Project.

All lectures are recorded and uploaded to the Learning Management System for future use and reference. BU uses Classe 365 Unified University Management System (UUMS). UUMS consists of Student Information System, an integrated cloud-based Learning Management System, and a Customer Relationship Management system. The UUMS is also linked to the Library Information and Resources Network (LIRN). It is a non-profit library service and content provider.

5. REVIEW OF RELATED LITERATURE

5.1. What Is Lurking

Previous studies for instance, Kankanhalli, et al. [25] and Wasko and Faraj [77] have tried to understand individual participating activities and also how well to sustain online communities. Likewise, classifying participants on online communities, therefore, has been a subject of few studies [21;73]

Moreover, some individuals are called or termed as “lurkers”. Studies suggest that this label is not appropriate in many contexts; also individuals do participate in certain and important activities in online communities. There is limited evidence of research on lurkers, considering they make up a large proportion of participants in some communities [36; 47].

A lurker exemplifies as someone who is involved in the activity of observation, silence, inactivity/passivity, invisibility, or bystander behavior and is known not to participate. Edelmann [44]. Also, Nonnecke and Preece [46], define the term lurker as “One of the ‘silent majority’ in an electronic forum; one who posts occasionally or not at all but is known to read the group’s postings regularly.

Additionally, Honeychurch et al. [20] state “Lurkers are like stars; not always seen, but always there”, therefore, lurkers within a group of learners can be considered as elusive, demonstrated by their lack of visibility, also a greater difficulty to track and identify.

Lurkers are, consequently in referred to literature with other names or labels attached, which includes free-riders, vicarious learners, browsers, witness learners, read-only participants, non-public participants, observers, or invisible learners [20].

In exploring for suitable definitions of lurking, Stegbauer and Rausch [69], stated that yet “it is not even clear what lurking means.” This is one of the many challenges in studying lurking, as there are many definitions, and researchers often develop new definitions. Customarily in literature lurkers are mysterious in contrast to other types of learners given their invisibility [20].

For that reason, lurking behavior is actually a complex fluid state. Community members can interchangeably lurk in one community and be an active participant in another or as stated by Hagel and Arthur [16], over time lurkers can become active participants. Therefore, lurkers are the “silent groups” in online...
communities who usually are the majority of community members.

Further, in previous studies Mason & Dicks [36] and Preece et al. [57], historically, the primary focus has been on active participants who are involved in answering questions or contributing content to online communities, however, there is limited evidence of established terminologies for describing participants who contribute in other forms (e.g., making comments, providing feedback) [79]. Based on findings by numerous scholars, there are different types of lurkers. As identified by Dennen [12] there are four different types of lurkers, 1) individuals who do not post anything; 2) individuals who read but do not post in a given discussion; 3) individuals who are new and not ready to post; 4) individuals who never want to post, in the past, new participants to online communities were treated as lurkers in the past given that they were not ready to post. For almost all participants who had become familiar with the online community, there was every likelihood that they will contribute useful information in their posts.

Usually, online communities enable participants to post feedback, opinions and personal information, termed as user-generated content (UGC), consequently there is also information exchange with others whom they may never meet, hence Nonnecke and Preece [46] assert lurking is a popular activity among online users, made possible by technology to enable users to have access without any visibility or public participation and leaving no traces.

More importantly, a pejorative shadow has been cast on people, who are not active posters in an online community, with the use of the term “lurking”. Most early studies have focused only on active posters and they were deemed to be “the community” [3; 28; 52]. As a result, a review of literature has shown that researchers studying online communities have shown little interest in lurkers. Furthermore, some took the view, the communities social capital was drained by lurkers, who merely took and gave nothing back in return. For that reason, they were also known as free-riders. [47].

There is limited evidence in cited literature as to why lurkers are involved in the behavior of lurking. For that reason, lurking cannot be dismissed or ignored. The effect of misunderstanding lurking impacts on our knowledge of life online, and consequently leading to inappropriate design of online environments. [46]. This view is also supported by Edelmann [45] who suggests that an understanding of lurkers is important lest there be “misunderstanding of the online environment”.

5.2. Underpinning Theory

Conventionally, a conceptual framework can be defined as “the system of concepts, assumptions, expectations, beliefs, and theories that supports and informs…research” [37]. It functions as a “tentative theory” [38] that informs researchers’ thinking and understanding of a phenomenon as well as the relationships that exist within the phenomenon under investigation) [37]. The proposed study will use The Four-Dimensional Model of Lurking [44].

![Figure 1 The Four-Dimensional Model of Lurking](image)

The Four-Dimensional Model was formulated by TM. Nyugen of Griffith University, Australia and illustrated above. This researcher has written to the author and has obtained written permission to use this model in this study. In short, this model which has been categorised into four groups, namely; Individual, Social, Technological and Organisational has never been used as a framework to show what influences lurking behavior amongst postgraduate students in an emergency remote learning situation.

For that reason, a four-dimensional model is used to elaborate on the additional reasons behind lurking behavior. Therefore, the individual factors are the link to the individual characteristics supporting the explanation as to why different people behave differently in the same situation. Consequently, the relationship of social, organizational, and technological factors demonstrates the individual response under the influences of external determinants [44].

In particular, such frameworks facilitate the formulation of a clear and relevant research question(s); expound on what researchers presume to know or already know about the phenomenon; and assist in the interpretation and presentation of findings in a convincing manner [37; 59]. From an educational perspective, a conceptual framework helps researchers build on understanding to inform and deconstruct practice [38].
6. PROPOSED RESEARCH METHODOLOGY

This study’s primary purpose is concerned with exploring lurking behavior amongst postgraduate students during emergency remote learning, as such this is a qualitative research approach using an explanatory case study. A qualitative methodology is selected because it will provide opportunities for participants to identify and share their feelings, perceptions, and experiences [1; 63; 65].

For that reason, qualitative research can be characterized as an interpretative paradigm, which emphasizes subjective experiences and the meanings they have for an individual. It can be said the subjective views of a researcher in a particular situation play a vital part in the study results, [76]. Leedy and Ormrod [33] indicate that qualitative research “is definitely not the approach to take if you are looking for quick results and easy answers”.

According to Savenye and Robinson [64], “research questions and methods that might once have been deemed unacceptable are gaining acceptability; studies using a variety of qualitative methods and based on alternate paradigms may now be published”

7. TYPE OF RESEARCH: QUALITATIVE CASE STUDY

Case studies are one of the first types of research to be used in the field of qualitative methodology, Merriam (1998) [41], Cronin (2014) [11] observed that customarily a case study research method enables researchers to more fully observe and understand the lived experiences of the test subjects. [7] earlier, in the review of cited literature of qualitative studies on distance education between the years of 2009 and 2013, 66% were case studies

Furthermore, [83] resolved that case study research was superior for exploring current events since the case study itself was dependent upon “many of the same techniques as a history, but it adds the sources of evidence not usually included in the historian’s repertoire: direct observation of the events being studied in interviews of the persons involved in the events” (p. 11).

8. SOURCES OF DATA

8.1. Data Collection Method

Customarily, interviews are one of the most used techniques to collect information, in qualitative research. The primary data for the study was collected through the use of semi-structured interviews using the virtual meetings modality. This will be done using either Microsoft Teams or Zoom software for these virtual meetings. Conventionally, an interview is a conversation where questions are asked to collect the information or data [81]. Furthermore, Merriam [41], asserted interviewing is the most common data collection method in educational qualitative research.

Furthermore, In the proposed study, the researcher will be the primary data collection and analysis instrument. Furthermore, with the primary purpose of the study, being exploring lurking behavior amongst post-graduate students during emergency remote learning, a human instrument is deemed the best suited to collect data because it would respond and adapt to information being provided immediately [40].

8.2. Semi-Structured Interviews with Master Students

The researcher chooses to collect data through semi-structured interviews because they will guide data collection and allow for flexibility. Therefore, in the semi-structured approach, a standard set of questions will be asked by researcher to collect data. Besides, it will allow flexibility to the researcher to ask additional questions if an interesting or new line of inquiry develops during the interview process [85].

For this study, each interviewee will be interviewed once and the duration of the interview will last between 45-60 minutes. The flow of the interview will be guided by a prepared interview guide. This will enable the interviewee to get acquainted with the topics on hand, namely; factors leading to lurking behavior responsibilities and expectations of Online learning programs and ensures the pertinent areas of study are adequately covered.

Commonly used virtual meeting software like Google Meet, Zoom and Microsoft Teams will be used to conduct the interviews. An interview schedule with agreed dates and times convenient to the interviews will be prepared to ensure that the interviews are conducted promptly.

8.3. Selection of Participants

The population for this study will be MBA students currently enrolled with Brittany Universite (France). They are part-time mature working adults who are pursuing this program intending to upskill themselves or seek an additional academic qualification.

8.4. Sampling

Purposeful sampling will be utilised in the current study to ensure that participants will be able to provide rich and descriptive data. Purposeful sampling is defined as “strategically selecting information-rich cases to
study, cases that by their nature and substance will illuminate the inquiry question being investigated” [54]. Therefore in the current study, 12 willing and consenting participants will be selected to carry out the interviews.

8.5. Data Analysis Procedure

Analysis of the data collected will be analysed through the thematic analysis method [8] using NVivo 11.0 qualitative analysis software. This methodology was deemed most suitable for researchers to identify patterns of meaning i.e., themes and sub-themes with a rich dataset.

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