

Exploring Graduate Students' Intrinsic Motivation in Fully Online Courses: A Qualitative Study

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ABSTRACT: *Motivation in general is one of the most important components of the process of learning and teaching in any educational environment, and it can explain the success or failure of student. Therefore, using a qualitative approach, this study aimed to gain a deeper understanding of the nature of intrinsic motivation in fully online courses environment. 10 participants participated in depth interviews about their intrinsic motivation in in fully online courses. Findings uncovered a number of factors that are highly related to graduate students' intrinsic motivation in fully online courses. Findings, implications, limitations and future directions are discussed.*

KEYWORDS: online learning, intrinsic motivation, graduate students

INTRODUCTION

Nowadays, technological developments are increasingly allowing much of the work currently performed by humans to be computerized in different fields in our lives. Moreover, several advantages are behind the vast increase of online courses and their popularity among learners. Online courses provide flexibility and accessibility for students whose schedule or location makes it difficult to attend a physical class (Bouhnik & Marcus, 2006). In online courses, students are free to access the course's materials at any time that is convenient. Moreover, students who study online, compared to those in traditional classrooms, have more opportunities to express their thoughts, and ask questions, without limitations such as time and number of students (Bouhnik & Marcus, 2006). Accordingly, the development of exchange of information and experiences amongst the students in online learning is more active and efficient compared to traditional classrooms (Richardson et al., 2017).

In addition, several studies have revealed that online courses continue to experience high dropout rates that are typically 10-20% higher than face-to-face classrooms (Ali & Leeds,

Publication of the European Centre for Research Training and Development-UK 2009; Tyler-Smith, 2006). In this regard, research has highlighted that a lack of motivation can be one of the fundamental causes of student dropout and low academic performance in online learning environments (Aragon & Johnson, 2008; Durrón et al., 2002; Johnson, 2012; Kim & Frick, 2011; McGivney, 2009; Shih & Camon, 2001).

PURPOSE OF THE STUDY AND RESEARCH QUESTIONS

Despite a body of research that has linked intrinsic motivation to graduate students' academic performance (Bachman & Stewart, 2011; Hartnett, 2016; Johnson et al., 2013; Johnson et al., 2015; Martens et al., 2004; Shroff et al., 2007), the previous studies were mostly quantitative methods that do not provide a complete picture of the context and variables influential in students' intrinsic motivation in online learning. Continuously overlooking graduate students' perceptions and understanding of the phenomenon will not contribute to improving our graduate students' performance in online learning environment. It is necessary to begin to look at the phenomenon from all angles and perspectives. Therefore, this qualitative study aims to gain a deeper understanding of the nature of intrinsic motivation in online learning environment which may lead us to uncover vital information and techniques that have been absent from the literature. By investigating this problem qualitatively, this study aims to discover what activities and interaction tools and means that may potentially contribute to increase in graduate students' intrinsic motivation in online learning environment in order to have a higher level of academic performance. In addition, this study attempts to provide implications for various stakeholders invested in graduate online learning including faculty, instructional designers, and administrators of online programs. Therefore, this study seeks to contribute to creating an understanding of graduate students' intrinsic motivation in fully online courses in order to enhance the online learning environment and the quality of the outcomes of those courses by exploring the following question: How do graduate students describe their intrinsic motivation in fully online courses?

LITERATURE

Online Learning

In 2008 as a result of the enormous and rapid development of technologies, Ma et al. (2008) defined online learning as an optimal learning environment using new "means of information technology, through the effective integration of information technology and the curriculum to achieve a new learning style" (p. 54). This new method can fully reflect the main role of learners to thoroughly improve the traditional teaching style and the principle of education, to teach large numbers of high-quality personnel (Ma et al., 2008). Furthermore, Markus (2008) stated that online learning can be defined as a learning process achieved by interaction with digitally conveyed content. Online learning is any technologically facilitated learning by using computers from a distance setting (Markus, 2008). Lastly, Moore and Kearsley (2011) defined online learning as teaching and designed

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learning in which teaching normally takes place in a separate location from learning, including communication through technologies as well as specific institutional organizations.

Students' Performance in Online Courses

In the literature, there is a considerable discussion about the effectiveness of online courses in comparison with face-to-face courses in term of achieving learning outcomes and educational objectives. Some studies found that there is no significant difference based on students' grades between modes of instruction whether it is online or face-to-face (Atchley et al., 2013; Bernard & Tamim, 2014; Cavanaugh & Jacquemin, 2015). For instance, Cavanaugh and Jacquemin (2015) conducted a study to investigate the performance of students taking online courses compared to face-to-face courses over a four-year period of time in a large sample with demographic and academic controls in order to avoid selectivity bias. The researchers believe that all previous studies for measuring students' performance in online courses and face-to-face courses used small samples. Cavanaugh and Jacquemin (2015) collected data from 140,444 students in 1,997 online courses and 4,015 face to face courses from a large Midwestern public university. The data used students' academic information (course type – online or face-to-face, course GPA, student credit hours, student GPA, college) and demographic (gender, minority status, age) variables. As one of the strengths of this study, the data only included courses that were delivered in both formats by the same professor. In addition, in a meta-analysis was conducted by Bernard et al. (2014) indicated that online learners and in-person learners succeed at equivalent rates on a wide variety of outcome measures. More recently, using quantitative methods, Cavanaugh and Jacquemin (2015) found that there is no significant difference in student performance between online and face-to-face courses.

On the other hand, some studies have found that online courses can have positive influences on students' performance compared to face-to-face courses (Johnson & Mejia, 2014). For example, a study was conducted by Johnson & Mejia (2014) that concentrated on the cohort of learners who primarily enrolled in one of California's community colleges during Fall 2006, and they were tracked throughout six years, through Fall term of 2012. The study showed that students who complete an online course have a tendency to have higher grades in comparison to classes they took face-to-face. However, the study only focused on the students who completed their online courses, and it overlooked investigating reasons behind students' failure in completing their online courses.

Motivation in Online Learning

Although limited research exists on the role of motivation in the online environment, motivation has been revealed to play an important role in different aspects such as determining the state of a learner's persistence in an online course, the level of engagement,

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the quality of productivity, and the level of accomplishment achieved (Ojokheta, 2010; Shih & Camon, 2001). Motivation has been found to be higher among students in online courses than among students in traditional courses (Huett et al., 2008). On the other hand, many studies have shown that low motivation may influence the learning processes in online learning environments negatively (Chen & Jang, 2010). Generally, providing freedom to engage in a task increases learners' levels of motivation which is an important feature of online learning (Schunk & Pajares, 2009). Furthermore, understanding the nature of motivation and the ways in which experiences and conditions may impact students' motivation, therefore, has important practical implications for those involved in online teaching and learning (Hartnett, 2016). Thus, student motivation is an essential factor for success in online learning environments, and it should be carefully considered (Chen & Jang, 2010; Keller, 2008).

Given the importance of motivation in relation to students' performance, several scholars have argued that developing and sustaining motivation can be a difficult task for both instructors and instructional designers in online learning environments (Huett et al., 2008; Kim & Frick, 2011). Kim and Frick (2011) noted that one of these challenges is the lack of interaction whether it is the type of interaction that occurs between learners and instructors or between learners with each other. In addition, Komarraju and Karau (2008) have discovered that motivating students in online learning can differ between students as a result of individual preferences and previous experiences. Accordingly, instructional strategies and techniques that work with students in the traditional classroom may not be appropriate for motivating students in online learning environments (Johnson, 2012; Komarraju & Karau, 2008).

Intrinsic Motivation in Online Learning

The construct of intrinsic motivation describes this natural inclination towards assimilation, mastery, spontaneous interest, and exploration that is so critical to cognitive and social change and that represents a major source of enjoyment and vitality throughout life (Csikszentmihalyi & Rathunde, 1993; Ryan, 1995). In learning, researchers have identified the importance of intrinsic motivation as a predictor of academic success in traditional classrooms (Miltiadou & Savenye, 2003). Substantial evidence has shown that self-determined students are more likely to be intrinsically motivated, persist more, and accomplish goals more than students who are less self-determined (Bachman & Stewart, 2011; Deci et al., 1991). Additionally, studies demonstrate that intrinsically motivated students have improved performance, persistence, and creativity (Deci & Ryan, 1991; Reeve et al., 2004). Other research indicates that intrinsically motivated students are more engaged (Vansteenkiste et al., 2006), and have higher accomplishment (Reeve et al., 2004), more desire to participate in learning process (Grolnick & Ryan, 1987), less attrition

Publication of the European Centre for Research Training and Development-UK (Johnson et al., 2013), enhanced concentration (Standage et al., 2005), more devoting effort (Johnson et al., 2013), and greater course satisfaction (Babb et al., 2010).

When it comes to learning on their own in online learning environments, level of intrinsic motivation sustains the interest of the online students (Chyung et al., 2010; Firat et al., 2018; Hartnett et al., 2014). For instance, Chyung et al. (2010) argue that there is a chance that students' learning is affected by "the interaction between their intrinsic motivation and self-efficacy levels and their performance in a self-paced e-learning environment" (p. 22). Consequently, they conducted a study to discover the impact of learners' intrinsic goal orientation, self-efficacy and e-learning practice on learners' learning. Thereby, sixty-seven students enrolled the Introduction to Materials Science and Engineering class were surveyed by using the Motivational Strategies for Learning Questionnaire (MSLQ) to answer two questions: 1) What levels of intrinsic motivation and self-efficacy do students have in an introductory engineering class? and 2) What role do students' intrinsic goal orientation, self-efficacy and e-learning practice play in their learning? The study revealed that students' intrinsic goal orientation and e-learning practice were substantial components to predict students' learning.

Recently, Hartnett et al. (2014) believed that because of the fast-developing "nature of digital information and communications technology" in education, motivation is a crucial factor that contribute to learning success in digitally mediated or online learning environments (p. 31). Therefore, applying the fundamental concepts of self-determination theory, researchers conducted a qualitative case study to investigate the nature of motivation to learn of preservice learners in an online environment and discussing deeply the complex interplay of elements supporting motivation to learn. The researchers utilized mixed methods included online questionnaires and in-depth semi structured interviews with learners from a preservice teacher education program within a New Zealand tertiary institution. The study found a range of social and contextual elements affecting autonomy, competence, and relatedness in an online learning such as task relevance and meaning, clear guidelines and expectations and relationship with lecturer.

More recently, Firat et al. (2018) argue that the level of intrinsic motivation "triggers and sustains the interest of the open and distance education students when it comes to learning on their own in e-learning environments" (p. 63). Therefore, they conducted a quantitative study to examine the level of students' intrinsic motivation in online environments and to analyze these data based on the gender of the students, program structure, instruction types of programs, and academic discipline of program. The study took place at Anadolu University, Turkey with sample of 1,639 students. The researchers adopted Intrinsic Motivation in e-Learning IMeL Questionnaire which is designed to measure college students' level of intrinsic motivation in online courses through the five elements of intrinsic motivation in self-determination theory (inherent, interest, enjoyment, satisfaction, and autonomy). The study revealed that the level of intrinsic motivation of

Publication of the European Centre for Research Training and Development-UK open and distance education students is significantly high in online courses environments. In addition, the study indicated that there is no a statistically significant difference of intrinsic motivation in terms of gender, program structure (graduate/undergraduate), instruction type (distance–blended), and academic disciplines.

METHODOLOGY

Method

In this qualitative study, a phenomenological approach to inquiry was applied in order to grasp a deeper understanding of graduate students' intrinsic motivation in fully online courses (Creswell & Plano Clark, 2012). Conducting a phenomenological approach to inquiry allowed the researcher to explore what it was that participants have in common with each other as they had all lived the experience of the phenomenon (Creswell, 2013; Moustakas, 1994). A phenomenological approach to inquiry assists researchers to discover a mutual meaning of what it is like for people who experience a particular phenomenon (Creswell, 2013). The fundamental purpose of phenomenology approach is to obtain the underlying essence of the experience (Creswell, 2013; Moustakas, 1994).

Data Collection

Participant Selection. Van Manen (1990) suggests that generalization in phenomenological research may prevent us from producing understandings that maintain focused on the distinctiveness of human experience. Instead, the purposeful sampling strategy yields insights and a profound understanding rather than empirical generalizations (Patton, 2014). Therefore, since it was not the purpose of a phenomenological approach to develop generalizable findings (Van Manen, 1990), a purposeful sampling strategy was utilized in this phase of the study for the sake of developing a deeper understanding and obtaining new knowledge of the phenomenon of intrinsic motivation in online courses environment (Patton, 2014). Each participant was selected based on certain criteria in order to ensure that each participant has experienced the same phenomenon (Maxwell, 2013). The criteria for selecting students are that they must be master's students who volunteer and were currently enrolled in fully online master's level courses in the Fall of 2020 or who have recently taken at least one fully online graduate level courses and agreed to be interviewed. Participants also had to be over the age of 18.

In terms of sample size for interviews, in the literature, there is a general agreement that a sample size in phenomenological approach usually ranges in size from 1 to 10 participants (Marshall et al., 2013). Therefore, it was with these guidelines in mind that the researcher attempted to interview a minimum of 5 and a maximum of 10 students. After reading the transcript and analyzing data, the researcher determined if he needed to interview more participants to help in understanding the phenomenon more fully and to ensure the collection of rich, descriptive data. Working on gathering more information from each

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participant was essential in understanding every aspect of intrinsic motivation in online courses so the researcher could add new and valuable contribution to the literature.

Participant Recruitment. the researcher contacted each of the participants in order to inform them that they had been chosen for this study. Initially, the researcher discussed with each of the participants their options for scheduling an interview. Every attempt was made to conduct the interviews in person, however due to COVID-19 outbreak, the researcher took advantage of alternative options to conduct the interviews. Therefore, all interview sessions were conducted via video conferencing application such as Skype and Zoom.

Interview Procedure

The researcher adopted the semi-structured method of conducting interviews (Glesne, 2016; Groenewald, 2004). Using a semi-structured interview, the researcher could change the questions or added new questions throughout the data collection and analyses (Glesne, 2016). The interview guide consists of three main sections as follows:

- 1- **Introduction:** The first part of this section was used to report general information
- 2- **List of Guiding Questions:** there were numbers of open-ended questions used to obtain in-depth descriptions from participants of their lived experience with the phenomenon under study (Moustakas, 1994; Patton, 2014). Importantly, all interview questions were developed under the supervision of three of qualitative research experts. In addition, in order to examine the validity of the interview questions, the researcher submitted the entire interview guide to two online learning experts to receive their recommendations which resulted in excluding and revising some items.
- 3- **Concluding Remarks:** This section of the interview guide contained final steps for the researcher to be taken such as thanking the interviewee for their cooperation and participation, asking the interviewee if they had any questions and then let them know how they could contact me if a question came up at a later date, and reviewing the procedures for reviewing the transcript of their interview.

Data Analysis

The researcher attempted to draw a textural description of the meanings and essences of the phenomenon (Moustakas, 1994, p. 34). To achieve this step, the researcher engaged in the process of horizontalizing. Here, the researcher identified and labeled all statements from the data set that were relevant to the research topic and question (Moustakas, 1994). the researcher coded and placed equal value on each statement and piece of data as the researcher collected and organized the data (Moustakas, 1994). Consequently, the researcher was able to eliminate repetitive, irrelevant and overlapping statements which left with horizons (Moustakas, 1994). These horizons were the fundamental parts of the

Publication of the European Centre for Research Training and Development-UK phenomenon that contain the textural meaning of the experience (Moustakas, 1994). The next step was clustering the horizons into themes. The researcher grouped the horizons together into themes with a clear definition unifying each theme (Moustakas, 1994).

RESULTS

A sample of 10 graduate students participated in a phenomenological interview in which they were asked to describe their intrinsic motivation in fully online courses. All participants' demographics are presented in Table 1.

Table 1. Participants Demographics

Participant	Sex	Age range	Registration status	Employment status	Experience with fully online courses
Student 1	Female	26 to 30	Part time	Full time	5+
Student 2	Female	22 to 25	Full time	Part time	5+
Student 3	Female	26 to 30	Part time	Full time	5+
Student 4	Female	36 to 40	Part time	Part time	5+
Student 5	Female	26 to 30	Part time	Full time	5+
Student 6	Female	46 to 50	Part time	Part time	5+
Student 7	Female	22 to 25	Part time	Full time	2
Student 8	Female	26 to 30	Part time	Part time	5+
Student 9	Male	36 to 40	Part time	Full time	2
Student10	Male	36 to 40	Full time	Full time	3

Themes and Textual Description

Based on the data analysis plan and during the stage of phenomenological reduction, five distinct themes emerged are presented in Table 2.

Table 2. Themes and Central Statements

Themes	Central statement
Clear expectation and guidance	Clear expectation increases level of engagement Difficulties in instructor guidance
Feedback	The role of regular feedback Lack of feedback and instructor interaction
Flexibility and control	Learning on their pace and any place Opportunity for personal control Need for individualized study
Interaction and collaboration	Opportunity for interacting with graduate students from different backgrounds Small groups discussion facilitates better learning experiences Discussion boards are overwhelming and lack depth Collaboration is challenging in fully online courses
Relevant content	Importance of the relevance of content Applicability of coursework and materials

Clear Expectation and Guidance

Throughout the interviews, participants had a lot to say about the clarity of course expectations and guidance. Several participants extremely stressed on the positive impact of providing clear and specific instructions throughout their fully online courses. Participants reported instances in which their instructors provided clear expectations and guidance resulted in increasing their sense of engagement and improving their learning experience. For example, Student 1 noted that there are certain instructors that have really developed online learning and made the layout of the course very clear and have set high “attainable” expectations. She cited an example of how her discussion boards experience was beneficial as a result of “explicitly communicated instructor expectations”.

I like knowing what is coming and having the ability to plan my schedule out way in advance. I also look forward to clearly defined schedules and rubrics, so I can be prepared for the whole semester... I have enjoyed working with classmates... but as you know the interactions do not always prove particularly constructive. I’ve only had one course thus far where I felt I really was benefitting from the feedback of my peers, and I believe that was due to a combination of content and explicitly communicated instructor expectations. In this class the instructor made a video in which he clearly laid out that discussion board commentary should be challenging without hostility. He made it clear that it was a place for meaning-making and that we should utilize it to build on each other’s ideas and would be graded on that basis.

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With that knowledge we really worked to challenge and further develop each other's ideas... it was a course that was more directly applicable to my interests, so I think the intersection of these 2 dimensions made it the best discussion experience I've had.

Noting the importance of the clarity of course expectations, Student 1 added: "I'm looking forward to discussion boards if I feel the rubric and instructor expectations make me feel that it will be productive and not surface-level contributions and that's not to disparage my peers."

Feedback

Regular feedback, according to participants in this study, was an important factor in encouraging them to remain motivated and involved in the course. Participants clearly stated that professor feedback helped them master course concepts and increased their sense of engagement and improved their learning experience. Participants, in fact, found professor feedback extremely valuable in their learning process. For example, Student 1 explained how professor immediate feedback on the "micro-level" objects while building her entire course was very useful in engaging her with the material. Student 1 stated:

I've most enjoyed assembling large scale projects gradually over the course of the semester. I had a class where I built out an entire Civics course in Moodle bit by bit, receiving relatively immediate feedback (usually 1-2 days upon submission) as I went. The final project involved me assembling the parts into a polished whole, but I was very proud of the accomplishment and felt that I had received useful and practical guidance on minute factors I might not have asked about if I had only been expected to put forward a large project. I believe that receiving feedback on the micro-level objects was very useful to me in my job and engaged me with the material more since I felt as though I was on top of things.

Similarly, Student 2 and 7 added that prompt feedback gave them the sense that their "growth is being achieved". Student 2 stated that, "prompt instructor feedback and the ability to learn on my own schedule is a great feature of online courses". Student 7 added that, "I appreciate thorough instructor feedback. That is a critical component for me. The timeliness and depth of instructor feedback generally impact my perception of a course greatly. Guidance and critical feedback help me to feel that growth is being achieved." Citing the importance of prompt feedback, Student 6 said "As a student, I would love to have prompt and continuous feedback throughout my online course."

Flexibility and Control

According to participants in this study, the flexibility of fully online courses was a major advantage of this format. Several participants emphasized that the flexibility of learning online helped them to have a reasonable balance between their academic, professional, and

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personal lives. For instance, Student 3 described how being able to complete her courses at her own pace and under her own circumstances was a decisive factor in getting her a graduate degree. She stated:

Fully online courses provide the ability to further one's education no matter where you live. I live in a very rural area with little to no access to any sort of graduate work in an in-class setting. I would never get a graduate degree, which I should/must do to continue to teach, if I had to drive to Albany or Binghamton. Or elsewhere. I think it is more affordable than going to a campus, but neither choice is inexpensive.

Explaining how online courses served her needs of self-directed/paced learning, Student 3 went on to add “I can work all night and into the early mornings if I wanted to. Learning is not restricted to certain hours and when I am in a vibe- I just go... go... go and learn as much as I want.”

Similarly, Student 6, 7 and 10 noted their appreciation for the flexibility of online courses where student 7 believes that her pursuit of studding would not have been possible without a mostly online environment offered in ETAP. She said that “the freedom to be at home with my family is fantastic. It allows me study even though I have two small children and a husband who works full-time.” Student 6 added that “I do not have to be on campus and I can learn basically at my own pace, in a way.”

Interaction and Collaboration

One of the most appreciated aspects of fully online courses, according to participants in this study, was the ability to interact with and learn from their peers. Several participants reported that fully online courses gave them the opportunity to have such a diverse community where they can interact and share their ideas with peers from different backgrounds, ages, and interests. For example, for Student 2, it was a great opportunity for her to interact with peers from different disciplines contribute to building her knowledge in the field of teaching. She stated:

Because there is a certain amount of anonymity in the virtual world, I feel that I have the opportunity to communicate with more students. Everyone is responsible for a weekly post which creates dialogue. I also appreciate the dialogue that gets started among classmates who are from different regions and subjects. I used to think that I wouldn't have something different to offer, or that a classmate might have a similar answer to me within discussion posts, but that's almost never the case because we are from different disciplines and at different points in our teaching careers...I also think it benefits the learning environment to not just answer posed discussion questions, but to ensure the thought process or discussion continues, by asking my own discussion questions to my classmates.

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Furthermore, interaction with different students was the most positive aspect of fully online courses for Student 5 as it gave her an opportunity to see how others think and express themselves. She noted that she copied a couple of students' answers as guide to help her answer her own discussion posts. Student 3 also enjoyed the opportunity to be in a classroom with a "diverse student group" sharing their personal experiences; whether it was their ethnicity or the socio-economical environments they taught. She added "students in the graduate program are at very different stages in their lives, have varied backgrounds and ages. I realized that I am part of that group and participate as well as I can."

Relevant Content

The importance of the relevance of course content was brought up several times by the participants during the interviews. Participants highly emphasized that relevance is an essential aspect of their online courses in order to drive their interest in the material. They also believed that the relevance of course content played an important role in motivating them to engage in the learning process. For instance, Student 2 talked about how she appreciated the relevance of her two courses on introduction to online teaching and introduction to distance education, she stated:

This past summer I was able to take introduction to online teaching and introduction to distance education. Both classes were designed by Instructor B and relevant to current events regarding Covid-19 and virtual learning I was experiencing as a teacher since March. I registered for these classes in February, so this was just good timing to have these classes available to fulfill my CDIT requirements. The classes were very relevant to how I was teaching, even over the summer. The classes were based in online learning theory and each class' final project was a direct application of such theory.

Similarly, Student 9 and 10 noted that each course experience is different and to similar degree as face-to-face courses, they were " beholden to the quality of the course design for shaping the context of the experience". Therefore, Student 10 believed that online courses would be motivating "when course materials were relatable and grounded in real life experiences.

DISCUSSION

Many education leaders and students are worried about the performance of students in online education methods which provide a completely new environment of learning where students' success can be heavily affected by their ability to actively engage in the learning process in this new learning environment (Cavanaugh & Jacquemin, 2015; Wang et al., 2013). Although research regarding online learning has been increasing, there is a lack of depth in the research regarding the role of intrinsic motivation in online learning compared to the traditional classroom environment (Bekele, 2010; Hartnett, 2016; Jones & Issroff,

Publication of the European Centre for Research Training and Development-UK 2005). Therefore, this qualitative study was conducted to gain a deeper understanding of the nature of graduate students' intrinsic motivation in online learning environment.

In this study a phenomenological approach to inquiry was applied. Therefore, a sample of 10 fully online graduate students participated in in-depth interviews in order to describe their intrinsic motivation in fully online courses. As a result of this process, the study revealed a number of factors that were cited by graduate students as having been influential in their intrinsic motivation in fully online courses. Those factors are clear expectation and guidance, feedback, flexibility and control, interaction and collaboration and relevant content. In addition, these factors are discussed in relation to the existing literature in the following section.

Factors Related to Intrinsic Motivation in Fully Online Courses

In literature, it has been emphasized that the provision of instructor positive feedback facilitates individual's intrinsic motivation (Pittman et al., 1980). Commonly, students need engaging learning environments that promote direct interaction between instructors and learners, and immediate feedback (Clayton et al., 2010). With regards to the importance of instructor feedback, the current study findings are consistent with past research indicating that in online learning environment, graduate students need timely and meaningful feedback to be more intrinsically motivated (Hartnett et al., 2014; Lee, 2014; Shroff & Deneen, 2011). Shroff and Deneen (2011) found that provision of immediate feedback to students has a direct impact on online graduate students' intrinsic motivation. In addition, Lee (2014) concluded that students in online courses noted that constructive and clear feedback on their coursework was needed in order to enhance their learning experience. More than 95% of students agreed or strongly agreed that the professor's prompt and detailed feedback on their work was valuable to their academic progress (Lee, 2014).

Another factor related to graduate students' intrinsic motivation in fully online courses was relevance and applicability. This study showed that graduate students were intrinsically motivated to engage in the learning process when course materials were related to the student's current or future career. Participants highly emphasized that incorporating their relevant experience into the course is an essential element of their online courses for driving their interest in the material. These findings are supported by research conducted by Grant and Thornton (2007) who found that by relating online course materials to real world situations, learners are more motivated to engage in their learning as students can see interesting and relevant topics and connections to their eventual professions.

Another factor that participants had cited as a contributing to their intrinsic motivation in fully online courses was the clarity of course expectations and guidance. Participants in this study emphasized that their learning experiences and sense of engagement in coursework was highly affected by the provision of clear and specific instructions

Publication of the European Centre for Research Training and Development-UK throughout their fully online courses. In this regard, the findings of this study align with previous studies demonstrating online learners are motivated when they have clear guidance and expectations about course goals, requirements, and policies of communication throughout their courses (Kim et al., 2014; Stanford-Bowers, 2008).

A final factor that impacted the graduate students' intrinsic motivation in this study was the opportunity to interact with their peers. Participants in this study stressed that the level of active interaction between students from different backgrounds and interests has fostered a truly inspirational community of practice. Furthermore, this study revealed that collaboration in fully online courses environment impeded graduate students' intrinsic motivation. Participants reported that they were not motivated to work collaboratively as a result of the nature of fully online courses. The results of this study contrasted with the existing literature in regards to collaboration in online courses environment showing that learners enjoy the opportunity to collaborate with others in working on class projects and believe that collaboration is beneficial to their learning (Chen, 2007; Kim et al., 2014).

Limitations and Future Research

In regards to courses selection, there was a lack of diversity where the fully online courses used in this study were only ETAP master's courses. Given that, it is possible that this study may not have addressed all potential factors that may influence graduate students' intrinsic motivation as other colleges and departments might use different instructional design and integrate various motivational tools. Another potential limitation is the lack of gender diversity in the sample which was predominantly female. Therefore, it is difficult to generalize results to both male and female students.

In addition, as result of the complexity of the nature of motivation (Bachman & Stewart, 2011; Chang, 2005; Chyung et al., 2010), investigating intrinsic motivation from qualitative approach angel is still a challenge. Therefore, it is recommended that future qualitative researchers should consider investigating students' intrinsic motivation over a semester by interviewing students several times throughout their courses in order to track learners' intrinsic motivation.

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