

THE EXPERIENCE OF ONLINE SENSE OF COMMUNITY OF STUDENTS AND
HOW IT AFFECTS THEIR DECISION TO WITHDRAW FROM ONLINE
EDUCATION

BY

Enrique Bonilla Murillo

A dissertation submitted to City University of Seattle
in partial fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION


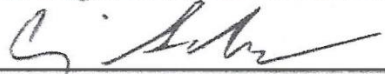


CITY UNIVERSITY OF SEATTLE

2020

© Copyright by Enrique Bonilla Murillo 2020
All Rights Reserved

SIGNATURE PAGE

This dissertation has been examined and approved.

 <u>Sher Downing, PhD, Committee Chair</u>	<u>12.23.2020</u> Date
 <u>Craig Schieber, EdD, Committee Member</u>	<u>12.23.2020</u> Date
 <u>David Pack, PhD, Committee Member</u>	<u>12.23.2020</u> Date
 <u>Vicki Butler, EdD, Dean</u>	<u>1-21-2021</u> Date

DEDICATION

This study is dedicated to my beloved wife, Nubia García, who has been always my unconditional support in this process. Also, I dedicate this study to my sons, Humberto, Enrique, and Thiago, who continue to be my inspiration, my motivation, and my will to live. I dedicate this research to my parents, Anastacio and Margarita, who have always supported me all my life. Finally, I dedicate this work to my brothers, Martin, Anastacio, and Jose, and to my favorite sister, Sugei, who are always there for me.

ACKNOWLEDGMENTS

I am sincerely grateful to all the doctoral program faculty who guided me, motivated me, and expressed words of encouragement to continue in this learning process. I would like to acknowledge my dissertation chair, Dr. Sher Downing, along with my dissertation committee members, Dr. Craig Schieber and Dr. David Pack. My sincere appreciation is expressed to my dissertation committee for their support, insight, feedback, and commitment to my research study. I am especially grateful to Dr. Pressley Rankin and Dr. Joel Domingo who were very supportive throughout the doctoral program. Finally, I thank my family, my friends, and my colleagues who have believed in me.

TABLE OF CONTENTS

DEDICATION	iv
ACKNOWLEDGMENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
ABSTRACT	x
CHAPTER 1: INTRODUCTION TO THE STUDY	1
Study Background/Foundation	3
Current State of the Field in Which the Problem Exists	5
Historical Background.....	8
Deficiencies in the Evidence	9
Problem Statement.....	11
Audience.....	12
Specific Leadership Problem.....	12
Purpose of the Study	12
Methodology and Research Design Overview	12
Research Questions.....	14
Study Limitations.....	14
Study Delimitations	15
Definitions of Key Terms.....	16
Summary	17
CHAPTER 2: LITERATURE REVIEW	18
Higher Education and Online Education Characteristics	18

Summary.....	37
CHAPTER 3: METHODOLOGY.....	39
Research Method.....	39
Research Design.....	40
Instruments	42
Participants	43
Data Analysis Methods	44
Limitations	45
Delimitations.....	46
Summary.....	46
CHAPTER 4: FINDINGS.....	48
Presentation of Findings.....	51
Summary	78
CHAPTER 5: CONCLUSIONS AND DISCUSSION.....	80
Discussion of Findings and Conclusions	81
Application of Findings and Conclusions to the Problem Statement	88
Application to Leadership	90
Recommendations for Action.....	91
Recommendations for Further Research.....	94
Concluding Statement	95
REFERENCES.....	97
APPENDIX A CityU Research Participant Informed Consent	110
APPENDIX B Research Questions	114

LIST OF TABLES

Table 1. Participant Demographic Characteristics	50
Table 2. General Codes, Themes, and Conceptual Categories	51
Table 3. Combined Related Factors in Online Student Withdrawal	69
Table 4. Online Student Withdrawal Decision Making, Related Factors.....	77

LIST OF FIGURES

- Figure 1. Online Communication Internal and External Tools..... **Error! Bookmark not defined.**
- Figure 2. Online Student Engagement and Communication Perception **Error! Bookmark not defined.**
- Figure 3. Student Interaction and Sense of Community Experience **Error! Bookmark not defined.**

ABSTRACT

Higher education leaders align their goals to meet accreditation requirements to achieve a level of quality for their programs. Educational leaders are also committed to expanding their education services and offering an education according to students' preferences and needs. Leaders have attempted to achieve these goals with the integration of information and communication technologies (ICTs); however, the diversity of the student population in terms of personal and academic characteristics and interests reduces universities' possibilities of using ICT resources effectively. The purpose of this study was to explore the characteristics of online communication that contributed to the sense of community perceived by online students and how their experience affected their decision to leave online education. I conducted a qualitative phenomenological study to explore the issue through a purposeful sampling strategy using snowball sampling. I conducted in-depth interviews to collect data. I transcribed and hand coded data in general meaning codes, selecting the units of meaning relevant to the search topic. The emergent themes from the analysis were student engagement and perception about online internal and external communication tools; student sense of community experience and the withdrawal related factors. Educational leaders could use findings from the research to impact course and instructional designers, and faculty to understand how online students perceived a sense of community and how student perceptions of online education will affect their decision to leave their education.

CHAPTER 1: INTRODUCTION TO THE STUDY

Leaders align their educational institutions' goals and strategies to meet accreditation requirements. Also, university leaders seek to meet accreditation requirements to deliver quality online education programs for a higher number of students and an increasingly diverse student population, which demands a flexible and universal education. Meeting the needs and diverse characteristics of students—such as their learning styles, personal interests, and economic status—allows universities to deliver a quality education. In an article on inclusion and equity in higher education, Clauson and McKnight (2018) stated the planning, design, and implementation of an online education program should be based on the characteristics, needs, and perceptions of the diverse population.

Online education is a selective method to deliver higher education. In a study on the integration of information and communication technologies (ICTs) in schools, González-Pérez (2017) said ICTs are resources, tools, and programs used to process and share information. Technology in education can place higher education institutions at an advantage to expand their educational services to larger and more diverse student populations. Universities have focused on using ICTs but have not taken advantage of them to provide education with coverage, relevance, and quality. Additionally, ICTs would need to be integrated in all educational dimensions, such as educational policy, infrastructure, school culture, teacher training, and pedagogy, to be effective. In research on ICT integration in universities, Gil et al. (2018) argued effective ICT integration is not consistent throughout higher education, as institutions lack strategic planning, technological leadership, faculty training, infrastructure, and economic capacity.

ICT integration in education in some dimensions is a disadvantage to educational institutions, because resources may work on different objectives. Partial integration of ICTs could limit the positive effects on higher education. On the contrary, research on online learning and student retention showed universities that integrated ICTs in education in all dimensions proved to have better experiences (Aretio, 2017; Cochran et al., 2014; Kranzow, 2013; Shaw et al., 2016). Universities need to create the proper conditions for effective ICT integration to achieve overall success and deliver online education aligned with student populations, academic needs, and personal characteristics.

Universities could integrate ICTs in the teaching and learning process supported by infrastructure, well-trained faculty, educational policy, and leadership. According to studies on emerging digital technologies and technology leadership by Cabero and Fernández (2018) and Flanagan and Jacobsen (2003), ICT integration in educational institutions, education policy, infrastructure, faculty development, instruction, curricular design, and the pedagogic dimension must transform alongside evolving student demands. Higher education leaders are increasingly adopting online education for its alleged benefits; yet, such benefits are only taken advantage by those universities leaders who have integrated technology with a holistic approach.

Higher education institutions need to consider all of the withdrawal factors that lead students to leave online education from different perspectives. Internal factors (e.g., educational institutions and their characteristics) are influential factors, as their educational and support services may directly or indirectly affect students' perceptions of the institution, which could lead to student withdrawal. External factors (e.g., work and family-related issues) could also be critical in students' decision making. Faculty

teaching is also an influencing factor, as faculty are more likely to be in contact with students than institutional leaders. Furthermore, students' personal factors (e.g., characteristics, needs, and interests) could be critical in decision making, as motivations and aspirations can greatly encourage or discourage students. Similarly, the lack of a sense of community could be a factor for student withdrawal. Universities could identify all of the factors and thus be able to meet students' needs.

Study Background/Foundation

Educational leaders have used online education to provide higher education institutions the means to offer 21st-century students with an education suited to their preferences and needs. Online education allows for flexibility with students' personal life while continuing their studies. In addition, online educational benefits include access to a variety of types of institutions. Flexibility and access have become vital both for students and higher education, permitting some educational institutions to reach their indicators in terms of relevance (i.e., employer and student satisfaction levels), coverage, and educational quality and students to have more significant and better study opportunities (Cabero & Fernández, 2018).

Through online education, educators provide universities opportunities to offer flexible educational programs supported by field experts who may teach at a distance, enriching study programs. In an article discussing the advantages and disadvantages of online learning, Arkorful and Abaidoo (2015) stated online education compensates for the shortage of academics, instructors, or laboratory technicians that could be cost effective for universities. In addition, educational leaders take advantage of online education to allow universities to use less physical infrastructure (e.g., buildings).

Similarly, in a study on the benefits of online education in higher education, Deming et al. (2015) argued, for universities, online education reduces labor costs because faculty members can serve more students. Universities benefit from online education by reaching more students at lower costs and with more dynamic student-centered pedagogies that could be suitable for students.

Online education is beneficial for higher education. Educational leaders use online education to expand and diversify educational services, both locally and globally, increasing student enrollments (Poulin & Straut, 2016). Enrolling a large number of students from diverse backgrounds, however, can create new challenges, as student populations bring varied characteristics and demands. In an article on education and technology, Black et al. (2019) argued online education has the advantage of creating equal opportunities for all students. Teaching and learning online could be an important advantage for individuals and universities.

For universities to take advantage of all of the benefits of online education, it is important for higher education leaders to know and understand students. The diversity of online students' emotions, motivations, and academic needs could play a key role in their decision to stay or withdraw from online education. In a study on sense of community and learning perception, Trespalacios and Perkins (2016) mentioned sense of community is fostered through people who feel confident in sharing ideas and experiences regardless of the environment. Studies on online program facilitation and creation of online learning communities showed, despite the influence of other factors (e.g., lack of institutional support services or job responsibilities), the sense of community students perceived plays a crucial role in withdrawal decision making (Liou et al., 2016; Mbatia & Minnaar, 2016).

Therefore, it is important to learn how students think and feel about the online learning community and how their perceptions affect the withdrawal process. It would be important to learn how the process of leaving the university impacts student life in different aspects (e.g., personal economy and future academic life).

Higher education institutions could respond to online education withdrawal by implementing study programs and courses supported by learning technologies that are more consistent with student demands. Student interaction and motivation researchers have suggested a more significant emphasis on the social rather than the technical component (Bickle & Rucker, 2018; Ransdell et al., 2018). Similarly, Zhong (2018), in their study on strategies and practices for online teaching, suggested more active participation between students and faculty, in which everyone engages socially to build meaningful knowledge and develop useful skills and values for students' and faculty's personal and professional lives. Online learning involves a constant interaction in which connections with each other generate a sense of online community that could reduce withdrawals.

Current State of the Field in Which the Problem Exists

The integration of ICTs in higher education has evolved at different levels in different contexts. Educational institutions have managed to integrate ICTs in the educational process. Such integration, however, has not been generalized in all universities or in all its dimensions, such as pedagogy, teacher training, infrastructure, strategic planning, or educational policy. González-Pérez (2017) said the integration of ICTs in all dimensions should be encouraged, since its use only occurs in some aspects of the educational process—such as instruction—and at low levels (e.g., in the presentation

of teaching material through slides). In other educational scenarios, ICT integration is limited to programs where universities are equipped with technological infrastructure, without a strategic plan or proper faculty training.

The use of ICTs is accepted as a preferred method by most educational leaders and faculty. Many educational leaders have seen the potential of ICTs when used properly; therefore, many educators attempt to integrate them into education. In an article on quality in higher education, Kilburn et al. (2017) suggested university administrators see ICTs as a requirement to expand educational offerings and be more competitive. Faculty use ICTs as creative tools to teach and be in constant communication with students. In a general sense, faculty and educational leaders have a strong predisposition toward technology, but there are still limitations in terms of its use in education.

Educational leaders integrate technology to place universities in a better position to solve their institutional challenges and in turn provide students with an education appropriate to their preferences and needs. Black et al. (2019) argued technology helps balance opportunities for universities. Specifically, online education helps higher education institutions to compete for more enrollment, better instructors, lower costs, and better quality. In an article on emerging technologies in higher education, Cabero and Fernández (2018) suggested technologies bring benefits, satisfaction, and better performance to universities and colleges. The effective use of technology in education can transform universities; however, it is necessary to understand technology's role in education. Technology would not solve educational problems on its own, because, despite its benefits, educators can also create new problems for education with educational technologies. For example, Gil et al. (2018) mentioned the unreal connection

between people despite the communication technology available. The challenges for higher education continue to be the changing situation concerning technology integration in the teaching–learning process and diverse student populations that continue to enroll in online education.

The use of technology in education could contribute to improving the educational services universities offer. Researchers have suggested the use of technologies across all dimensions—from educational policies, technological leadership, culture, and school infrastructure to faculty training. Researchers on trends in ICT in educational contexts, however, have argued the integration of technology has focused on the pedagogical dimension through the initiative of innovating faculty and leaders who promote its use in education (Escorcía-Oyola & Treviño, 2015; González-Pérez (2017). Nevertheless, Chua and Chua (2017), in their research on educational technology leadership models, suggested university leaders should change their role to technology leaders to envision, build, and align the use of technology to potentialize teaching and learning. Though some universities are examples of effective ICT integration, in an article on ICT leadership in higher education, Cifuentes and Vanderlinde (2015) stated it is essential to note ICT integration success depends on the capacity of the staff and their leadership to create the necessary conditions for students. The use of ICTs in education may be limited in different dimensions, like educational policies, technological leadership, culture, school infrastructure, and faculty training.

While some universities may have the necessary economic, technical, and academic resources, there are still students who decide to withdraw from online education. Therefore, despite having the appropriate conditions around integration of

ICTs in education, there are specific factors of the students that come into play, and students may still elect to leave educational programs. The institution and its capacity to integrate ICTs is only one of several factors that contribute to online student withdrawal. The work and family environment, faculty, a student's purpose, and their perceived sense of community play a crucial role in deciding to withdraw or stay in online programs.

Offering a quality education to diverse student populations is a challenge for higher education. Designing quality educational programs involves an in-depth analysis of student characteristics, needs, and interests; furthermore, it requires student-centered strategic planning that outlines a consistent online education model (Chua & Chua, 2017).

Historical Background

Educators considered online education beneficial for 21st-century students and for higher education. In an article on today's knowledge society, Bernabé Villodre and Cremades Andreu (2017) stated online education has been key to economic and social development. Online education has evolved along with technology, as digital tools provide better opportunities for interaction between students, peers, faculty, and learning material. The exchange of information through technology leads to more and better connections between all participants in the educational process.

Educators have used technology to create learning environments that foster communities through interactions. Constant interactions create online education communities. Social networks have the potential for creating the conditions of a community. In online education, social networks may play a key role. In an article on online learning, Queiros and Villiers (2016) mentioned social networks have been

integrated into online education by proactive faculty and leaders who value their interactive nature and consider them useful for teaching and learning. Nevertheless, the problem persists; despite the benefits of learning technologies and social networks—and their acceptance and preference by students, faculty, educational leaders and institutions—online students continue to feel disconnected from each other and even more from instructors (G. R. Berry, 2018; Foster et al., 2018; Kranzow, 2011; Mbatl & Minnaar, 2015; Moore, 2014; Zhong, 2018).

A sense of community may be crucial to reduce online education withdrawal. Studies have also shown a sense of community alone is not enough to ensure a decrease in student withdrawal from online education (Kranzow, 2013; Moore, 2014). Other factors may be related to students' emotional skills and motivations and go beyond the institution, environment, and faculty. These factors refer to students' aspirations and their emotional capacity to persist in online education despite deficiencies, lack of support, or family or work commitments.

Deficiencies in the Evidence

Researchers have studied online education in the past decades and from different perspectives; however, researchers have not sufficiently investigated the role of technology leaders in online education as critical elements in generating the right conditions for online students. In a study on leadership in distance education, Díaz et al. (2017) suggested the lack of research on instructional leadership capacity in the integration of ICT in online education specifically a lack of ICT integration in teaching. There is research evidence on the integration of ICTs, but the interactions of the actors involved in online education need to be studied. In a literature review on online

communication, Watts (2016) mentioned investigating the dynamics between students, peers, instructors, and content. Also, students' internal dialogue needs to be understood to know how they examine, think, and discuss the content with themselves, and with peers and instructors, to construct meaning.

Educational researchers have studied the sense of community in online education extensively. In a study on developing a sense of community, Moore (2014) showed a relationship between perceptions of learning and sense of community. Consequently, online students who feel more connected have a favorable perception of their learning, which derives from their sense of community; also, the connection they feel may be related to how they perceive communication in online classes, including nonverbal communication. In studies on language in online learning, Foster et al. (2018) stated how verbal and nonverbal language could inspire students to create a sense of community. Online learning engages students in a complex communication process with faculty and peers that students may misinterpret if communication strategies are lacking. Also, Ransdell et al. (2018) suggested interaction strategies that included motivation and emotion for successful online learning. Related to creating a sense of community, researchers have suggested formal and informal interaction strategies (e.g., activities that involve the exchange of personal, academic, and work experiences). Similarly, researchers have suggested ways of communicating, collaborative learning, and making connections with each other and the course content to create a sense of community (Bickle & Rucker, 2018; Foster et al., 2018; Ransdell et al., 2018).

The research did not, however, indicate how technology impacts communication and online collaboration (Covelli, 2017). More details are missing on how to create a

sense of community with specific educational approaches and technologies (Sun & Chen, 2016). Gaps also exist in how to make education more adaptable to meet the specific and individual needs of students. More research is needed on student experiences and their motivations to participate in online education (Sun & Chen, 2016).

Problem Statement

While online education programs continue to grow, the number of students withdrawing from such programs also continues to increase. In a content analysis study, Bawa (2016) found withdrawal rates were 20–30% higher in fully online programs than in face-to-face instruction. In a future analysis of educational technology, Sanders and George (2017) noted trends in distance education programs, although they also stated withdrawal is a growing problem as educational institutions lack effective ICT integration. In a study on ICT attitudes and practices, Mehboob-Ul-Hasan and Akbar (2016) suggested technology has a significant influence on all aspects of human life, including education. Students can solve problems, share ideas, and progress more quickly with the use of ICTs. Also, the use of ICTs reduces the differences between people. In an article on faculty members' digital skills, Fernández-Cruz and Fernández-Díaz (2016) stated faculty lack pedagogic and ICT skills to effectively integrate ICTs into the learning process. The sense of community helps significantly in online student retention, as interactions with content, peers, and instructors help students construct meaning and a sense of belonging (Shackelford & Maxwell, 2012; Terosky & Heasley, 2015).

Studies have shown how a sense of community online can be created through active interaction, collaborative learning, sharing resources, sharing personal experiences, and peer teaching (S. Berry, 2017; Shackelford & Maxwell, 2012; Sun & Chen, 2016;

Trespalacios & Perkins, 2016). The general problem is higher education institutions continue to face online student withdrawal issues despite the available research on how to create a sense of online community. Specifically, the problem is a lack of sufficient research to understand (a) how online education can meet individual learners' particular needs and (b) characteristics such as disabilities, gender, culture, language, and ethnicity (Sun & Chen, 2016).

Audience

The aim of this study was to provide educational leaders, course and instructional designers, and faculty with insight on (a) how perceived sense of community affects the experiences of online students, (b) how students' experiences and perceptions about the sense of online community affect their decisions to withdraw after being enrolled for a year, and (c) characteristics of perceived sense of community that may increase student retention.

Specific Leadership Problem

This study contributes to the field of online education across individual, program, course, and instructional design levels. Educational leaders may also use the study to help develop engaging interactions among students, peers, and instructors within diverse online environments. Results of the study may be of use for educational leaders to develop communication strategies in online education departments and may help in increasing online student retention rates.

Purpose of the Study

The purpose of this qualitative study was to explore online communication characteristics that contribute to students' specific needs, to students' perceived sense of

community, and to how students' experiences affect their decisions to withdraw from online education. A sense of online learning community, according to Moore (2014), is the feeling of belonging students experience in a group in which they are connected, supported, empowered, and feel safe to participate. In a study on building community, S. Berry (2017) found online students develop a sense of community when instructors engage with students through diverse technological tools and pedagogical strategies and attend to students' social and emotional needs. Understanding the characteristics of online communication in building a sense of community may help in the design and development of suitable online programs that will engage students with rich and meaningful interactions, which may lead to a decrease in withdrawals.

Understanding how students perceive sense of community and how sense of community affects their online education experiences, and the withdrawal decision-making process, would allow educational leaders, curricular and instructional designers, and online instructors to provide an adequate education for diverse students. Although the social and emotional needs of students may be diverse, pedagogical strategies implementation can impact the sense of community.

Methodology and Research Design Overview

I used a qualitative method in the study with a phenomenological approach. In an influential book on phenomenological research methods, Moustakas (1994) stated, with phenomenological designs, researchers seek to understand how a phenomenon is interpreted through the human conscience and focus on the commonality of a lived experience. In an article on generic qualitative research, Percy et al. (2015) mentioned phenomenologists study how individuals experience a particular issue. With this

approach, researchers have investigated the attitudes, beliefs, opinions, and feelings of people toward a lived experience.

First, I identified a population of online higher education students who were formerly enrolled for at least the equivalent of 1 year and pursued an online degree in educational technology at a major state university. The population also included students who recently withdrew from online higher education and were willing to share their experience. I selected a purposeful sample and scheduled the time and space for conducting semistructured interviews with participants. Once collected, I transcribed and coded the data for analysis and interpretation.

Research Questions

I framed the study with three research questions:

1. What online communication characteristics contribute to a sense of community in an online program?
2. How does the perceived sense of community in an online program affect student experience?
3. How does student experience contribute to the decision to withdraw from an online program?

Study Limitations

One of the limitations of this qualitative study was some participants were former students who withdrew from an online bachelor's degree program and may have had a negative predisposition toward the program or the institution. Another limitation may be the lack of participation of some participants because they were formerly or currently enrolled in several states around the country. To mitigate these limitations and account

for those who might not have been willing to participate, the sample consisted of 15 former students and 15 currently enrolled students, for a total of 30 participants. With a suitable sample of at least 25 participants, interviews were conducted via video calls.

Study Delimitations

The study was limited to students in an online degree in educational technology at a major state university. The study was delimited to undergraduate students who withdrew from the online program after being enrolled for a minimum of 1 year. Also, the study was limited to students who had chosen to re-enroll and to former undergraduate students who had withdrawn from the online program.

The study aimed at understanding students' experiences and decisions to withdraw from the online program from the perspective of the theories of integration and connectivism. In one analysis, Chrysikos et al. (2017) argued Tinto's (1993) theory of integration is useful in understanding how students' backgrounds and intentions are influenced by academic and social experiences and may lead to withdrawal. Furthermore, in an article on the role of the theory of connectivism, Foroughi (2015) noted it provides a framework for understanding and guiding the educational process. The theory of connectivism served as a means to understand the interactions through technology. Moreover, the theory of connectivism was useful for explaining the importance of interactions in online education. According to Siemens (2005), learning occurs through the connections people make with other individuals or communities. Tinto's theory of integration (as cited in Chrysikos et al., 2017) and the theory of connectivism provided an understanding of the issue and address the knowledge of the problem.

Definitions of Key Terms

- *External factors* are aspects related to external influences affecting online students (e.g., family or work responsibilities, lack of internet services or technical equipment; Russo-Gleicher, 2013; Simpson, 2013; Travers, 2016).
- *Faculty factors* are elements related to online instructors that contribute to student withdrawal. Online instructors' skills may play a key role in reducing student withdrawal, as their attitudes may foster a sense of online community (La Madriz, 2016; Sorensen & Donovan, 2017).
- *Information and communication technologies* (ICTs) refer to computer-based communication integrated into teaching and learning (Ghavifekr & Rosdy, 2015).
- *Internal factors* are aspects related to educational institutions that impact online students (e.g., brand, university reputation, teaching methods, support systems, educational services; Chiyaka et al., 2016).
- *A learning management system* (LMS) is an online platform to administrate digital content and students learning (Mills, 2015).
- *Perceptions* are visual information or language collected from the outside and interpreted (Oatley, 2017).
- *Retention* is the capacity of a higher education institution to maintain students enrolled in an educational program (Travers, 2016).
- *Sense of community* is the feeling of belonging students experience in a group or community in which they feel confident and have shared goals and vision (Delmas, 2017; Murdock & Williams, 2011).

- *Student factors* are individual student characteristics, interests, knowledge, skills, and attitudes that impact their performance in online classes. Some examples of these student factors are emotional skills such as self-confidence and resilience (Mills, 2015; Youngju et al., 2013).
- *Withdrawal* is the process in which a student decides to leave an online course or program (Boldt et al., 2017).

Summary

Educators consider online education an alternative delivery method for higher education because they can meet the demands of education with relevance, quality, and pertinence, and with the needs of students in mind. The challenge for higher education leaders is to provide an education for diverse student populations that enroll in online education, with their varied characteristics, interests, and needs. Educational leaders could use technology to provide tools to improve the educational process. It is still necessary to integrate technology strategically to enhance student learning and create environments appropriate to their demands.

The factors that influence students withdrawing from their studies are diverse and come from multiple dimensions, such as the institution in which they enrolled, the faculty, and their families, jobs, and characteristics. In addition, an array of factors that together provide students with experiences that could lead to withdrawal affect the sense of community students perceive in online education.

CHAPTER 2: LITERATURE REVIEW

External forces, such as the globalization of the economy, affect how universities and colleges offer educational services. In a literature review on quality assurance in higher education, Ryan (2015) noted these external forces and the challenges of higher education (e.g., financing, diverse student populations, greater demands for flexible and quality education, infrastructure, responsibility, and transparency) have led higher education institutions to look for ways to counter these challenges by offering new ways of teaching and improving learning. Online education offers an option to the challenges of higher education, providing opportunities for universities to reduce time and tuition costs while increasing mobility, accessibility, and immersive learning capabilities. Online higher education could improve individuals' learning, as educators can reach diverse student populations (Kilburn et al., 2017).

Higher Education and Online Education Characteristics

Educational leaders could empower higher education with the integration of online education in universities' cultures. Also, educators could use online education to improve individuals' learning. Moreover, with online education, leaders can foster a dynamic higher education culture.

Higher Education Culture

The culture of higher education institutions plays an essential role in student life. In a higher education culture, campus classroom students interact and connect with other students, faculty, and administrators. In an article on online and traditional universities, Witzig et al. (2017) stated higher education in the classroom allows students to share their experiences through activities, events, and study groups. Students in traditional

universities have direct contact with other students, which allows them to build confidence and become involved in university life, especially when there are support programs or trust-building activities in place. In a study on building constructivist online environments, Bryant and Bates (2015) agreed in-person students who lack the experiences Witzig et al. (2017) named are limited or hindered in developing a sense of community.

Higher education institutions create their culture naturally by the dynamics of university life, although educational leaders promote culture strategically to include all student populations. In online programs in higher education institutions, a culture also generates interactions between individuals. Unlike face-to-face university culture, the different spaces, distances, and times could be limiting factors in fomenting an institutional culture in which the diversity of students participates. The university culture, either face to face or online, is prone to student interactions, connections, and experiences (Witzig et al., 2017).

Student Diversity

Student populations in higher education are increasingly diverse. In a study on planning for diversity, inclusion, and equity, Clauson and McKnight (2018) mentioned students in higher education institutions are more diverse than ever in terms of race, religious affiliation, gender identity, sexual orientation, nationality, ethnicity, economic status, and linguistic background, and therefore have more diverse needs and interests. The diverse characteristics, needs, and interests of students require university leaders to rethink the experiences they provide. What students perceive through their interactions may play a decisive role in whether they graduate.

Student Experiences

Students are the most critical elements in the educational process. The needs and characteristics of online students should determine teaching and learning strategies; moreover, it is essential to know how they interact and what their perceptions are of communication methods in online classes. According to Witzig et al. (2017), online communities consist of individuals who achieve meaningful connections through constant interaction within a common platform. Students engaging in online communities experience unique situations. Their psychoemotional, social, and cultural background could influence how they perceive their experiences of online education. In a study on students' perceptions of motivating factors of online discussions, Lee and Martin (2017) noted students' perceptions, needs, and interests are decisive for their participation in online discussion forums. Students' perceptions contribute to the social presence of the online community in which students participate in a trusting and safe environment.

Similarly, in an analysis of students' perceptions of quality and course satisfaction, Barnes (2017) stated gender, age, and prior online experience were nonsignificant for overall student satisfaction; however, Barnes also reported learning and usefulness of online education do contribute to student satisfaction. How students perceive their experiences in online education is personal. Students' individualities and how students are involved in the dynamics of online education are common challenges both for them and for higher education institutions.

Student Success Requirements

For students to have a better experience in online education, it is important to try and provide a type of community. Student interactions and connections with peers and

facilitators allow them to foster a sense of virtual community (Lee & Martin, 2017).

Students require soft skills such as collaboration, empathy, adaptability, and creativity to participate in groups and the community. Students need to feel confident to interact with other members of the community. In general, students may trust and feel conformable in the community but may also be encouraged by peers and instructors. In research on students' perceptions about 21st-century skills, Jacobson-Lundeberg (2016) suggested motivation, enthusiasm, and friendliness help students be successful in groups and communities. Students' willingness to interact in a community may be determined by their interests and goals. In a study on student-centered education, Frasinianu and Ilie (2017) argued student aspirations and interests are requirements to be actively involved in a learning community. Therefore, having life goals could be a determining factor in the success of students. For students, having clear goals allows them to develop motivation from within. Having intrinsic motivation helps students give meaning to their interactions with others and to what they learn (Bryant & Bates, 2016; Lee & Martin, 2017).

Apart from having intrinsic motivation, it is also essential for students to be open to new experiences. In a study of first-year students and student diversity, Shim and Perez (2018) suggested having an open mind to diversity and multiculturalism helps students have more productive and meaningful experiences in school. How students relate to peers in diverse and multicultural environments depends on their level of self-knowledge. How they feel about themselves and how they perceive themselves in terms of their learning may be critical for community integration. Barnes (2017) and Frasinianu and Ilie (2017) commented that the ability to self-reflect contributes to student satisfaction; therefore, the success of students could be determined by how they think, feel, and act. The challenge

for educational institutions is to know how to serve students despite the many different backgrounds students bring to online education.

Educational Approaches

One of the common educational approaches is the student-centered approach. With this approach, students are more active in their learning, and teachers serve as facilitators of their learning. Student-centered approaches to education and the use of technology continue to play a significant role in finding innovative ways to enhance learning. According to the characteristics and needs of 21st-century students, student-centered educational approaches allow educators to train students according to their previous competencies and learning needs. Educators can offer a more progressive education with the emergence of student-centered approaches. In a study on the extent of implementation of student-centered approaches in schools, Aliusta et al. (2015) mentioned worldwide educational reforms have focused on the shift from teacher- to student-centered instruction to foster thinking, communicating, collaborating, and problem-solving skills. Student-centered approaches share specific characteristics: They are based on principles of social constructivism centered on interdependence, autonomy, leadership, networking, educational relations, and adaptation to the context (Frasineanu & Ilie, 2017). Students are held responsible for their learning under these approaches. Cooperative learning; problem-, computer-, project-, and task-based learning; and competency-based education learning have similar purposes for developing 21st-century skills (Aliusta et al., 2015). The way students communicate with peers and instructors under these student-centered educational approaches could be an issue for further exploration.

From a constructivist point of view, learning develops through significant connections between the individual and the course content. In a learner-centered pedagogy article, Moate and Cox (2015) argued, in a student-centered model, learning is not linear but multidimensional and takes place in a social context. Student-centered approaches are suitable for online education; however, in an article about online higher education, Puzziferro and Shelton (2009) argued students do not necessarily have the freedom to manage their learning because online instructors have control over the structure, the content, and the sequence of the course. The idea of student-centered learning is that learners perform activities that require interactivity and engagement to create a sense of community (Chang & Hannafin, 2015).

Advantages of Technology

Educational leaders integrate technology to provide opportunities for more dynamic, universal, and creative learning and for students and faculty to connect through constant interactions. Furthermore, technology impacts education in general as it allows educators to foster inclusion, equity, quality, pertinence, and better access (Gil et al., 2018). According to Laing and Laing (2015), technology improves quality of learning and students. Despite these benefits, online class withdrawals continue to grow—more than half of enrolled students withdraw from online education for several reasons (Kranzow, 2013). Educational leaders tend to have a positive perception of the use of ICTs in education; however, ICT integration is limited. According to Gil et al. (2018), educational institutions have not exploited the full potential of technology; for example, schools have not integrated ICTs across all dimensions (i.e., curricula and evaluation, pedagogy, organization, management, and faculty training). Despite this context, online

education continues to grow, and when integration is effective, the results surpass those in face-to-face education (Aretio, 2017).

Knowledge and understanding of student populations are needed to identify their interests and needs as 21st-century learners. In an article on online students' sociodemographic characteristics, Stoessel et al. (2015) stated technology facilities and the possibilities of flexible educational programs have led to a growing and increasingly diverse student population. Learning management systems (LMS) are conventional in higher education and are often rigid in terms of content structure; nonetheless, they could be an option for online education. An option would be to design student-centered learning activities that encourage shared responsibility among students and instructors; meaningful learning experiences; and the creation of a supportive, safe, and trusting environment (Moate & Cox, 2015).

Student Retention

Online education continues to grow; however, student withdrawals are also increasing. Cochran et al. (2014) mentioned withdrawals are 10–15% higher in online classes than in face-to-face classes. From different perspectives, other researchers have also suggested higher withdrawals in face-to-face education (Shaw et al., 2016). For instance, in their exploration of predictors for online higher education, Shaw et al. (2016) reported retention rates for face-to-face classes ranged 3–5% higher than online education. These retention indicators are essential because retention rates are indicative of quality in education.

The interaction between students, instructors, and content is critical in online education because students may feel less isolated or disconnected when they are actively

engaged. ICTs play an important role in student interactions; nevertheless, despite communication technologies, it is still a challenge for online educational instructors to generate a feeling of connectedness. In an article on asynchronous and synchronous communication, Watts (2016) considered asynchronous communication as traditional in online education because it is the typical interaction that has predominated. Discussion forums, email, and recorded video are some examples of this type of online communication. This form of communication may be preferred by some students.

Synchronous communication has increased in online education because of its advantages, such as streaming video technologies, allowing more students to engage in real-time interaction, which may be more meaningful. The use of both forms of communication is crucial because it allows students to feel more engaged and connected, providing more alternatives for student preferences. Moreover, in a study on quality in distance education, Markova et al. (2017) found students reported greater satisfaction and therefore better learning outcomes when they felt supported. For example, students attributed a higher degree of importance to how instructors communicated with them than to the content delivery media.

Online communication is essential for online students because students generate perceptions that could affect their learning. In a study on students' perceptions of online feedback, Ianos (2017) suggested communication has a powerful influence on learning and achievements. If suitable communication strategies are lacking, students may feel isolated, confused, and frustrated (Markova et al., 2017). How students perceive feedback can generate feelings of frustration or of overwhelm. Communication in online

environments plays a critical role in fostering a sense of community. Students' perceptions of communication could lead to online education withdrawals.

The lack of a sense of community could also lead to students' withdrawal from online education. The sense of community in online education is effective in keeping students, as it allows educators create learning communities with shared goals, trust, collaboration, membership, connectivity, and community boundaries (Delmas, 2017; Liu et al., 2007). There are four categories of factors affecting student retention in online education: (a) internal, (b) external, (c) faculty, and (d) student-related factors. Sense of community is affected by all of these factors.

Internal Factors

Online education depends on multiple factors. Internal (i.e., institutional) factors are critical because the data educators use to provide the structure online courses or programs need to function appropriately. Chiyaka et al. (2016) noted institutional factors such as instructional methodologies, teaching technologies, support systems, and administrative services are critical for student retention. Chiyaka et al. also argued reputation, institutional brand, and general characteristics of the university, such as type of institution, faculty-student ratio, graduation rate, enrollment, acceptance, and institutional support rates, are fundamental for online student retention. What students know, perceive, and say about their university could be a reflection of the school's institutional culture. Stoessel et al. (2015) noted institutional factors influence students' decisions to withdraw from online learning. The duration of the programs, teaching approach, learning materials and connectivity are the keys to online retention or withdrawal.

Students' perception of the university where they study is a reflection of the services they receive. Also, these beliefs are framed by students' backgrounds. In a study on supporting online student retention, Travers (2016) noted a lack of institutional structure and the lack of teaching support from the administration contributes to online withdrawal. Online students are more likely to withdraw from their education if there is no complete integration of educational services. Moreover, in a study on factors that affect the retention of online students, Sorensen and Donovan (2017) provided insight into why students decide to withdraw from online programs, mentioning institutional support and technological infrastructure as deciding factors. Online education is dependent on technological infrastructure for educational leaders to support educational programs; without it, students' interactions—and thus, their learning—may be limited. In a study on student and faculty support services for online education, Russo-Gleicher (2013) discussed how technical support for students and faculty, as well as face-to-face guidance, could diminish students' risks of withdrawal. Online educational programs require an adequate support structure strategically aligned with students' needs that could eventually have a positive impact on students' perceptions.

Students need other institutional supports such as orientation services. A student may feel lost in online environments, but adequate educational services by the institution could provide students with direction and encouragement. In an article on the sense of isolation and alienation of online students, Laing and Laing (2015) agreed orientation, socialization, and interaction are critical to developing active online communities. It could be not all students seek guidance but are aware of where to go and whom to ask. Educational leaders could target students who may be more vulnerable than others in

terms of search and information management. For universities, it could be important to know students' weaknesses to provide them with assistance. In the same way, educational leaders could create conditions to promote social relations.

The quality indicators of an online program are essential for the institution and the students. Accreditation bodies establish quality frameworks followed by educational leaders to ensure students have quality education services. In a study on factors contributing to online student withdrawals, La Madriz (2016) said course quality and innovative learning strategies are essential to prevent withdrawal. The attention given to students through innovative teaching strategies that correspond to high-quality indicators can influence the development of more active and interactive students. In a qualitative study on faculty and student support services, Russo-Gleicher (2013) proposed ways to impact online student retention rates, mentioning student support services are underutilized, which is a disadvantage because they could contribute to lowering withdrawal rates. Institutional factors such as technical problems and lack of structure contribute to withdrawal from online courses. Support services such as counseling centers for students with psychological problems (e.g., anxiety or depression) can make a substantial difference.

It is imperative for higher education leaders to offer a quality, relevant education with broad coverage. Technology offers many opportunities for educators to reach more students and face the challenges of higher education; however, sometimes institutions lack the necessary preparation to offer well-designed online programs. Institutional vision, mission, reputation, brand, strategic planning, and operational strategies must be aligned to offer adequate educational services, combining institutional factors with other

factors. Addressing a single factor, such as student services, would be insufficient to prevent online students from leaving their education. External factors are also a fundamental part of online education.

External Factors

The ubiquity of online education is an all-around advantage for students. Many online students who work and have families may take advantage of the flexibility of online programs to assist their families, to work, and to take care of personal responsibilities. However, studies have shown external factors such as family and work responsibilities play an important role in determining whether a student stays or leaves online education (Cochran et al., 2014; Russo-Gleicher, 2013; Simpson, 2013; Stoessel et al., 2015). Illnesses and critical events like accidents or death-related issues are also a cause of withdrawals (Simpson, 2013). Any situation that affects students' education is less impactful when students have all the necessary study tools. The lack of internet access and technical problems are among the external factors that contribute to student withdrawal (Robichaud, 2016; Russo-Gleicher, 2013; Sorensen & Donovan, 2017; Travers, 2016).

Online education could be inexpensive for some universities compared to face-to-face education because students and educators circumvent the need to travel to a campus. Technology also could lower costs both for some universities and students; however, a student's financial situation is another variable that comes into play (Sorensen & Donovan, 2017). To overcome online education challenges, students must find a balance between their study time and personal commitments. They may also need to adapt their

work, study, family, and personal activities to the time zone of the university to fulfill their academic commitments (Seidel & Kutieleh, 2017; Sorensen & Donovan, 2017).

For online education to be beneficial, students need specific skills (e.g., communication, critical thinking, creativity, collaboration) that allow them to overcome difficulties that may arise outside of school. Also, locus of control, metacognitive skills, and self-confidence are skills that could determine students' success. In studying factors that determine whether a student graduates or leaves online education, Youngju et al. (2013) argued students who have more internal than external loci of control are students who attribute their success or failures to their own responsibilities. Students' abilities play a preponderant role in decision making about online education withdrawal. External factors are the least mentioned in the literature, but this fact does not suggest external factors have the least effect on online education withdrawal. To a greater or lesser extent, it is a set of factors that contributes to withdrawal from online courses. Faculty are responsible for guiding and facilitating work in online courses and therefore represents another category.

Faculty Factors

Online faculty come from different professional backgrounds, which may affect how they interact with students. The background of online instructors at a state university is diverse in terms of professional experience in the field of education, as they typically began their careers in other fields. These professionals also typically work part time as online instructors with varying availability and schedules that limit them in terms of training and preparation for online teaching. In a study on online training for educators, Goad and Jones (2017) said some instructors begin at a state university with little or no

experience as online students or instructors; also, they bring diverse philosophies, preparation, and personalities that may complicate their work as instructors. The amount and effectiveness of interaction instructors foster in online classes is related to their experience, perceptions, and skills in online teaching and learning; however, schedule constraints of online faculty at state universities diminish the opportunity to master online teaching competency. In a study on factors associated with instructor engagement, Seaton and Schwier (2014) stated online instructors bring different skills, experiences, and technology comfort levels, which determine how they interact with students. Faculty readiness is a crucial factor in promoting effective education.

A combination of elements gets students to learn. Faculty are one of the essential elements that help or hinder student performance online. Faculty are responsible for facilitating, guiding, and evaluating students and for helping them achieve their academic goals; moreover, faculty help students learn to learn. Online education requires instructors to have specific skills that allow them to interact with students in an effective manner. Unlike face-to-face education in which faculty can see students physically and detect student issues, online faculty need to consider how students respond to any message, announcement, post, or activity. The faculty's commitment, attitude, and training are critical to a successful online program. In a study on the influence of faculty leadership skills in online education, Kranzow (2013) noted the importance of instructors in creating online environments with a sense of community. Interactions between students and instructors provide that sense of community. Kranzow said although creating a sense of community online is challenging, it is possible, and they provided

some useful strategies: Telephone calls, chats, learning contracts, reflection journals, electronic portfolios, and emails can all contribute to a sense of community.

Faculty impact the retention or withdrawal of online students and therefore must act as mediators and facilitators in the teaching–learning process. For faculty to foster meaningful interactions among students, however, they must have adequate professional development on online education. Sorensen and Donovan (2017) mentioned the lack of faculty training limits the sense of community students need to feel part of the online community. Qualified online faculty need to foster peer interaction, self-reflection, and collaboration to promote student satisfaction.

Students' feelings about their experiences online may be a turning point in students' academic lives. Feeling satisfied or unsatisfied could make a difference in their decision making. Student dissatisfaction may be attributed to isolation, lack of personal attention, feelings of loss of identity, and lack of interaction; Laing and Laing (2015) and Phirangee (2016) referred these factors as alienation. In an article on online teaching, Mantravadi and Snider (2017) also argued for proper engagement to exchange ideas through interactive and meaningful activities. In a broad sense, researchers have suggested the increase in effective interactions and involvement of both faculty and students (Mantravadi & Snider, 2017). The involvement of administrators in creating policies that help create a sense of community online is also significant.

Open communication is essential to create group cohesion and a sense of community. Students need to develop critical thinking and problem-solving skills that result in new knowledge. Instructors must engage in frequent and effective interactions (Kranzow, 2013). Robichaud (2016) suggested online course instructors should have the

skills to improve the quality of interactions and relationships between faculty and students. Similarly, the recommendation was to improve evaluation, feedback, communication in general, and guiding the sense of community. Factors related to faculty in general allow educational leaders to focus on professional development, communication skills, feedback, mediation, and lack of commitment. Russo-Gleicher (2013) and La Madriz (2016) emphasized the attitudes and interpersonal skills of faculty as factors that intervene in students' decisions to leave or remain in online educational programs.

Student Factors

Students are directly responsible for their conduct in the teaching and learning process. Other factors may be influential (e.g., internal factors, external factors, and teaching). Students' attitudes, abilities, perceptions, and experiences favor or impair their performance in online classes. Cochran et al. (2014) and La Madriz (2016) showed variables that influence online withdrawal rates are students' backgrounds, ages, ethnicities, genders, and grade point averages. Among other variables are students' study habits and absenteeism (Cochran et al., 2014; La Madriz, 2016; Mills, 2015; Shaw et al., 2016).

Research showed a higher number of factors related to students characteristics and needs than to the institution, environment, and teaching. Youngju et al. (2013) found locus of control, metacognitive skills, and self-confidence are often variables for success. According to Youngju et al., students with lower loci of control are more likely to leave online courses because they attribute their behavior to external considerations and not to their responsibility. Self-confidence and metacognitive skills could also contribute to

students' success in online education. La Madriz (2016) referred to intellectual ability, adaptability, and problem-solving skills. In online education, students' ability to adapt and solve problems on their own could determine their success. Mills (2015) asserted emotional skills and resilience factors are determinants of the success or failure of online education. Likewise, these factors relate to intrinsic motivation and personality traits, which are also vital (Shaw et al., 2016; Stoessel et al., 2015; Travers, 2016). From the student's internal point of view, soft skills may affect their decision to continue in online education. Simpson (2013) mentioned other skills, such as previous online experience and technological, internet, and typing skills. Students' perceptions (e.g., lack of expectations about online courses) are also concluding factors (Mantravadi & Snider, 2017). Students' beliefs about the course content affect their motivation. Also, how students perceive themselves and their self-motivation influences their decisions to leave online learning (Kranzow, 2016).

In the learning process, interactions are imperative, and lack of interaction reduces participation and can lead students to feel isolated. Sorensen and Donovan (2017) mentioned the quality of relationships between students and faculty and in some way, relates to factors such as boredom, lack of interest, and personal commitment (Seidel & Kutieleh, 2017). A significantly higher number of factors relate to the abilities, behaviors, attitudes, and perceptions of students' online withdrawal. Though students' sociodemographic characteristics are important, more emphasis is on student interactions to feel part of the online community. Therefore, personality traits play a preponderant role. Students' resilience skills to face all the challenges of online education can make a difference.

The focus in research has been on student factors; however, improving student competencies is not the only solution to reduce online withdrawals. Gaps exist in the literature in students' experiences, specific needs, and issues regarding the use of technology to learn online. For instance, although the topic of emotional intelligence is not recurrent, soft skills, self-confidence, motivation, empathy, and locus of control are common. Online students experience similar issues regarding money, personal problems, and personal relationships; the difference lies in their resilience skills. According to Mills (2015), all students—regardless of whether they stay or leave online education—go through similar issues. Students' active engagement in online interactions may be increased by knowing their motives and soft skills. The ways students interact and how they feel in online learning could be a determinant in preventing online education withdrawal. Laing and Laing (2015) suggested additional studies are necessary on how to improve the social–emotional process of students in online education. Students' perceptions of online learning and being part of a community could provide an understanding of how they experience online education withdrawal.

Sense of Community

Online learning suggests students connect not only in the technical dimension but also in the social dimension. Students need to be connected with technology and create a feeling of being part of a group through interactions. In a study on online learning communities, Murdock and Williams (2011) mentioned sense of community is the feeling of belonging students experience in a group or community in which they feel confident and have shared goals and vision. Moreover, in an article on the creation of online learning communities, Delmas (2017) noted sense of community is one of the

recurring factors in online learning that has a significant impact on student retention. The experience of feeling part of a learning community helps students learn better and faster. Students have different perceptions of online education; however, having an objective, commitment, and shared responsibility helps with student retention. In addition, sense of community fosters collaboration and improves learning outcomes (Murdock & Williams, 2011).

Sense of community is an experience created voluntarily with the interactions of all participants within a group. In a community, participants share experiences that could create meaning. In a study on knowledge sharing, Liou et al. (2016) argued sense of community occurs when members of a community share norms, traditions, and rituals and are willing to promote community; however, sharing experiences must be authentic. In an online community students should be required to share real information about themselves. The more students interact with peers and instructors, the more learning may occur. The connections students make with instructors, peers, and content may promote a sense of community, although the promotion of a sense of community must be a strategic part of online learning programs. The design of an online course can contribute to the sense of community as well as connection, participation, security, and support. Online learning requires a constructivist approach to knowledge. Thus, the instructional design of the course is a fundamental part of creating a sense of community (Scoppio & Luyt, 2017).

Further research on the creation of a sense of community in students is required, specifically on the social interactions between students and faculty. Additional investigations of students' emotional intelligence and its relationship to online

withdrawal, as well as resilience, learning styles, and soft skills, are also needed (Laing & Laing, 2015; Mills, 2015). In conclusion, it is necessary to investigate the personal skills that motivate students to continue in online classes despite the difficulties they may encounter in the learning process.

Summary

Students' experiences, characteristics, and diversity can be decisive for success in online education. Also, educational approaches and the advantages of technology impact student withdrawal. Moreover, five topics relate to five possible online student withdrawal factors, such as internal, external, educational, student, and sense of community factors that served as the basis for this study.

The internal factors that affect students are related to educational institutions and the support services, structures, and guidance educators provide in these institutions. Also, external factors influence students' withdrawal; researchers have found factors like family, work, or illness-related events impact student performance (Seidel & Kutieleh, 2017; Sorensen & Donovan, 2017). Faculty themselves are a fundamental part of teaching and learning. Studies have shown faculty are the ones who foster a sense of community through interactions. The faculty's job is to create adequate conditions by designing strategies that foster a sense of belonging and thus avoid isolation, lack of attention, and lack of identity (Laing & Laing, 2015). The characteristics and interests of the students are vital to online education because students are the main actors in the educational process. Researchers have found student-related factors predominate, as students' abilities, motivations, and attitudes are determinants of retention (Cochran et al., 2014; La Madriz, 2016; Mills, 2015; Shaw et al., 2016).

Feeling part of an online educational program may be fostered involuntarily through constant interactions; however, research has indicated some students continue to feel left out (Delmas, 2017). A sense of online community can be strategically fostered among members of a community, although some students would still need to develop the emotional skills to enable them to participate (Liou et al., 2016).

Some gaps in the literature became apparent. More in-depth research is required on how institutional factors such as support services impact student withdrawal. Similarly, the suggestion is to conduct more research on external factors, as they are the least mentioned in the literature. Also, the recommendation is to conduct studies on the communicative process mediated by faculty and on how to improve the socioemotional process of online students. Sufficient research exists on creating and encouraging a sense of community in the online environment; however, understanding how the perceived sense of community online affects student experience is crucial.

CHAPTER 3: METHODOLOGY

The purpose of this qualitative method study was to explore how the characteristics of online communication contribute to the sense of community perceived by students and how their experiences affected their decisions to withdraw from an online program. I used a qualitative method with a phenomenological approach (Moustakas, 1994) to fill the gaps in the literature and understand the problem of student retention in online programs, using the following questions to guide the study:

1. What online communication characteristics contribute to a sense of community in an online program?
2. How does the perceived sense of community in an online program affect student experience?
3. How does student experience contribute to the decision to withdraw from an online program?

The research data were from semistructured interviews. Interviews were conducted with a sample of former and currently enrolled students of an online bachelor's degree program in educational technology at a major state university. All the interviewees were student withdrawals who had been or were enrolled for at least 1 year, equivalent to nine online courses.

Research Method

In this study, I used a qualitative method. The qualitative method was useful for this study because it provided an understanding of students' experiences during the process of withdrawing from the online program. In an article on qualitative methods and approaches, Broussard (2006) stated qualitative inquiry provides an understanding of

individuals' feelings at a deeper level. The intention of qualitative research is also to assess participants' subjectivity and multiple realities, because the method is more objective and focused on measuring results free of context. Researchers take the context into account with the qualitative method to fully understand participants' experiences (Broussard, 2006; Percy et al., 2015). Therefore, a quantitative or mixed method was not appropriate for this study because what I intended was to learn participants' internal thinking structures. Also, I intended to assess participants' subjectivity and multiple realities, which, with a quantitative or mixed method, could not be done because quantitative method researchers are more objective and focus on measuring results free of context (Creswell, 2014).

I used qualitative research for this study because the purpose was to understand how individuals or groups construct meaning by understanding how they live an experience in a particular context. In an influential book on qualitative methods, Patton (2015) noted qualitative approaches are helpful for researchers to understand the construction of meaning and interpret interviews, observations, and documents to find meaningful patterns or themes. Understanding students' attitudes, beliefs, and emotions entailed collecting data from their lived experiences.

Research Design

I used a phenomenological approach for this research. Phenomenology is a form of qualitative inquiry researchers use to study human experience (Moustakas, 1994). The phenomenological approach is useful for exploring students' lived experiences and exploring the inner dimensions, qualities, and structures of the cognitive process (Broussard, 2006; Percy et al., 2015). In an influential book on phenomenological

research methods, Moustakas (1994) mentioned phenomenology is useful for understanding the essence of the experience through the interpretation of the human conscience and by researching individuals' attitudes, beliefs, opinions, and feelings. Additionally, phenomenology was useful for exploring how participants gave meaning to what they lived. In an article about phenomenological approaches, Valentine et al. (2018) argued phenomenologists study the meanings that resides within the interconnections between people, things, and the world. The purpose of the phenomenological approach was to discover this intentionality in ongoing relationships and gain more profound knowledge of everyday experiences (Patton, 2015).

Phenomenological studies are systematic attempts to discover and describe the structures of lived experiences. In an article studying experiences with technology through a phenomenological approach, Cilesiz (2011) stated phenomenology is appropriate for understanding the deep meaning and nature of the experiences. The phenomenological approach is a reflective study of how things appear in the consciousness of people and how those things emerge over time (Patton, 2015). To better understand the phenomena, a phenomenological study was suitable for studying the lived experiences directly from the individuals involved in the process. The case study approach was not suitable for this study, because, with a case study, researchers aim to understand in depth the social reality and particularities of a population. The ethnographic approach was not suitable for this study, because, with this approach, researchers seek to understand the beliefs, ideas, knowledge, and practices of the social systems of a population. The grounded theory approach was not adequate, because, in this study, the intention was not to create a theory based on empirical data (Creswell,

2014; Patton, 2015). Instead, with a phenomenological approach, I can understand how students in this study experienced their decisions to withdraw from the online program. The study took place in a higher education institution located in Mexico and followed the institutions' educational guidelines.

Data were collected through interviews with students. According to Cilesiz (2011), lived experiences could be collected with interviews in phenomenological studies. For this study, the suggestion was an in-depth interview consisting of three phases. In the first phase, researchers set up the context of participants' experiences. In the second phase, researchers allow participants to reconstruct the details of their experiences. In the third phase, researchers encourage participants to reflect on the meaning of the experience (Cilesiz, 2011).

I recruited participants through the state university services office and in coordination with the university's educational program. I requested information about the students. Once I received the information, I contacted possible participants via email or phone calls to determine their willingness to participate. Upon acceptance, I informed participants about the purpose of the study. According to Creswell (2014), participants must know how the study will be carried out and what participation implies, so they can decide to take part in or leave the study at any time. Once I recruited participants, I interviewed them in depth through video calls. I conducted interviews at a time convenient for the interviewees. I recorded and then analyzed the interviews.

Instruments

I carried out the data collection through an in-depth interview. In an article on phenomenological analysis, Marí et al. (2010) mentioned this type of interview allows

researchers to gather information about events and subjective aspects of individuals' experiences. The in-depth interview is the preferred instrument for collecting data on beliefs, attitudes, opinions, values, and knowledge; therefore, it is important for the interviewer to show acknowledgment and acceptance of and empathy for the interviewees (Marí et al., 2010).

I wrote questions based on the research questions in this study. The interviews covered three basic topics: (a) communication characteristics that contribute to a sense of community in an online program, (b) how the perceived sense of community in an online program affects students' experiences, and (c) how students' experiences contribute to decisions to withdraw from an online program. Under these topics, I wrote questions as the basis for the interview. I conducted a pilot test to verify how the interview could have developed. A second step was to contact participants who were willing to share their experiences. A third step was recording and transcribing the interviews.

I digitally transcribed and stored data from the interviews—audio, digital, and paper—on an external drive. I encrypted and protected digital documents with a password. I will store all data in this study for 5 years, and then I will permanently destroy them. Creswell (2014) agreed material could be discarded 5 years after the study.

Participants

The sample for this study included former and currently enrolled undergraduate students, from an online educational technology bachelor's degree program at a major state university in Mexico, who had been enrolled at least three terms (equivalent to a total of nine courses taken in 1 year). According to Creswell (2014), a small sample size may be reasonable for a qualitative study; however, in an article on qualitative research,

Khan (2014) emphasized the representativeness of participants over the size of the sample. I used a purposeful sampling strategy—specifically, snowball sampling. In an influential book on research methods in education, Check and Schutt (2012) noted this type of sampling method enables the researcher to access hard-to-find participants who may contribute to the research through study participants' recommendations of study participants.

Participants were from diverse cities in Mexican states, had different educational levels, and had limited experience with educational technology that made it more challenging for higher education educators to provide the education these students needed. Before the interviews, participants signed consent forms that ensured the confidentiality of the information they provided. The consent form included the study purpose and an explanation about the use and collection of research information. I also provided participants with an explanation about the study and how their answers could help with understanding the topic better. At all times, I treated participants with respect and honesty.

I kept a list of possible interviewees in the event of unavailable participants at the time of the interviews. All suitable interviewees confirmed their participation in this study. I scheduled an additional session with a participant to ensure the full understanding of participant's experience.

Data Analysis Methods

I took as a reference for the analysis of the data, the phenomenological analysis proposal of Marí et al. (2010) that begins with transcribing the discourse of the interviewees. The analysis was followed by delineating codes of general meaning,

selecting units of meaning relevant to the research topic, grouping the units of relevant meaning based on common aspects or characteristics, and, finally, summarizing the personal data of the interviewees, including comments and nonverbal aspects that might contribute to the investigation. From the data analysis, I deduced, classified, and codified significant elements to understand the interviewees lived experiences.

I took measures to ensure the reliability of the study. In an influential book on qualitative inquiry, Lincoln and Guba (1985) proposed establishing credibility, transferability, dependability, and confirmability as criteria. In an article on qualitative analysis, Leech and Onwuegbuzie (2007) noted the member-checking technique is useful to assess accuracy in participants' findings or interpretations. The member-checking technique was used to measure credibility and allow participants to check the accuracy of the data that emerged from interviews. For this study the transferability, dependability, or confirmability was not required because it is only sought to understand the topic.

Limitations

The limitations of the study were to former and currently enrolled (at the time of the study) students who withdrew from an online bachelor's degree program in educational technology at a major state university. Former students were challenging to contact, as their contact information changed. Also, former students had a negative predisposition toward the program or the institution. Former and currently enrolled students were from different states around Mexico and had busy schedules that included the online program, work, and family responsibilities, making it difficult for them to participate in the interviews.

The sample consisted of 30 participants. The interviews were conducted through video calls. I set up flexible schedules to accommodate participants' needs to mitigate time constraints.

Delimitations

The study was delimited to students from an online degree program in educational technology at a major state university. It was delimited to undergraduate students who withdrew from the online program after being enrolled for a minimum of 1 year. Also, the study was delimited to students who had chosen to re-enroll and to former students who had withdrawn from the program. The study was delimited to these participants to understand how the characteristics of online communication and their sense of community affected their decisions to withdraw from the online program.

Summary

The purpose of this qualitative study was to explore how characteristics of online communication contribute to the sense of community students perceived and how their experiences affected their decisions to withdraw from an online program. I used a phenomenological approach to understand the subjective aspects of the experiences students lived; thus, I better understand their beliefs, attitudes, opinions, values, and knowledge about this phenomenon. I conducted an in-depth interview, and then I classified and encoded the data for analysis to explore the details; thus, I discovered the meaning students gave to experiences.

Findings from the research may provide understanding to educational leaders, course and instructional designers, and faculty on how perceived sense of community affects the experiences of online students, how students' experiences and perceptions of

sense of community affect their decisions to withdraw after being enrolled for 1 year, and how characteristics of the perceived sense of community may increase student retention. The following chapter includes an overview of derived findings from the transcripts and an analysis resulting from the interviews of 30 former and enrolled students.

CHAPTER 4: FINDINGS

The purpose of this qualitative phenomenological study was to explore online communication characteristics that contribute to students' specific needs and a sense of community as perceived by students, and how their experiences affected their decisions to withdraw from online education. Participants were undergraduate students of an online bachelor's degree program in educational technology at a major state university. Participants were former students who were enrolled for at least 1 year, equivalent to nine online courses, and enrolled students who had stopped out at some point. The presentation of findings are according to (a) the emerged themes and categories under the codes of general meaning from the hand-coding process and (b) the data analysis that led to the units of meaning and relevant codes of meaning.

Participants were former and enrolled undergraduate students of an online bachelor's degree program in educational technology at a major state university. These participants were chosen due to their characteristics as former and enrolled students who decided to stop or drop out of online education. I recruited participants through the office of the director of the online educational technology program. Once the program director identified participants, a total of 30 interviews were conducted through video calls. The research concluded in the spring of 2020. The supporting documents used to recruit participants are included in Appendix A.

I selected participants according to their characteristics and situation as student withdrawals to explore their experiences in the online educational technology program. I used purposeful snowball sampling because some participants were challenging to contact and recruit, as some of them changed contact information, and I contacted them

through other participants. The program director who collected the updated contact details first contacted participants via a phone call; then, I continued with the recruitment process and scheduled calls according to participants' availability.

Participants included 10 men and 20 women between the ages of 18 and 65. Three participants had master's degrees, nine had bachelor's degrees, and the rest earned high school diplomas prior to their enrollment in the educational technology program. Five participants had some level of online learning experience while the rest had no experience. Study participants were from diverse cities and states. Some participants lived in the same cities and knew each other personally. Also, participants lived in both urban and rural cities and towns. Participants' demographic data were not part of the data analysis. Table 1 shows a detailed description of participants.

I used pseudonyms to ensure participant anonymity. Creswell (2014) recommended the disassociation of names to protect identity in qualitative research. The pseudonym assignment was password protected, and I stored it in an external drive along with the electronic information and audio files derived from the interviews.

The analysis consisted of transcribing the data, which were formatted into tables. The first version of the transcribed data was in Spanish; once completed, I sent it for translation from Spanish to English and then back into Spanish for data comparison and validation. Once I validated the English version, I formatted the data table with columns for codes and my notes, and the hand-coding process began. The analysis of the data was a phenomenological analysis, which consists of transcription of the discourse derived from interviews. I then delineated general meaning codes, selected meaning units, and grouped relevant meaning units (Marí et al., 2010). Finally, I summarized personal data.

Table 1*Participant Demographic Characteristics*

Pseudonym	Gender	Age	Previous education	Online experience
Albert	Man	32–42	High school	Yes
Ana	Woman	43–53	High school	No
Clara	Woman	32–42	Bachelor’s degree	Yes
Eden	Man	43–53	Bachelor’s degree	Yes
Eugenio	Man	43–53	High school	No
Franco	Man	32–42	Bachelor’s degree	Yes
Hana	Woman	21–31	High school	No
Irina	Woman	43–53	High school	No
Javier	Man	54–65	Master’s degree	Yes
Karen	Woman	32–42	High school	No
Kenia	Woman	32–42	High school	No
Lara	Woman	32–42	High school	No
Leidy	Woman	43–53	Bachelor’s degree	No
Lu	Woman	32–42	High school	No
Magaly	Woman	43–53	Bachelor’s degree	No
Maria	Woman	21–31	High school	No
Marlen	Woman	18–21	High school	No
Marta	Woman	54–65	High school	Yes
Miguel	Man	54–65	Bachelor’s degree	No
Monica	Woman	32–42	High school	Yes
Rachel	Woman	32–42	High school	No
Ramiro	Man	43–53	Master’s degree	Yes
Raul	Man	54–65	Bachelor’s degree	No
Rene	Man	43–53	Bachelor’s degree	No
Rose	Woman	32–42	High school	No
Samuel	Man	43–53	Master’s degree	Yes
Sara	Woman	43–53	Bachelor’s degree	Yes
Sofia	Woman	43–53	High school	Yes
Sugei	Woman	54–65	High school	Yes
Victoria	Woman	32–42	High school	No

During the reading data process, I identified line-by-line codes that showed the specific ideas of the experiences. Categories or focused codes were derived from line-by-line codes, and from these focused codes, I derived the conceptual categories. I made annotations and summaries of the themes that emerged to later classify them into three main themes related to the research questions to better understand participants’ lived experiences. After reading and classifying the topics derived from the coding, I created tables and figures to graphically represent the results.

Presentation of Findings

I will present general findings in tables and figures to show the significant aspects of participants' lived experiences. Appendix B shows the semistructured questions I asked during the in-depth interviews. The interviews addressed three basic topics: (a) communication characteristics, (b) experience of a sense of community, and (c) the withdrawal decision. Themes that emerged from the analysis of the data overlapped at different points, because, when recalling an experience, interviewees sometimes repeated information or had given more elaborate answers to previous interview questions.

To explore and better understand the experiences, I classified conceptual codes within the themes. Although participants provided other useful data (e.g., suggestions for program improvement), findings only represent aspects of the essence of their experience, including beliefs, feelings, and attitudes (Moustakas, 1994). Table 2 shows the general codes, themes, and conceptual categories that appeared from the data analysis process.

Table 2

General Codes, Themes, and Conceptual Categories

General codes	Themes	Conceptual categories
Communication characteristics	Online communication tools	Internal tools External tools Student engagement
	Student engagement and communication	Communication perception Discussion board
Sense of community experience	Community experience	Sense of community experience
Withdrawal decision	Withdrawal-related factors	Combined factors
		Student factors

Communication Characteristics

Participants' responses to characteristics of online communication focused on tools they used to communicate. Communication tools are internal to the LMS platform, and communication tools such as social networks, email, and phone calls are external tools. Another communication characteristic was how students engaged with the program director, fellow students, and instructors, and how they perceived online communication in the program.

Online Communication Tools

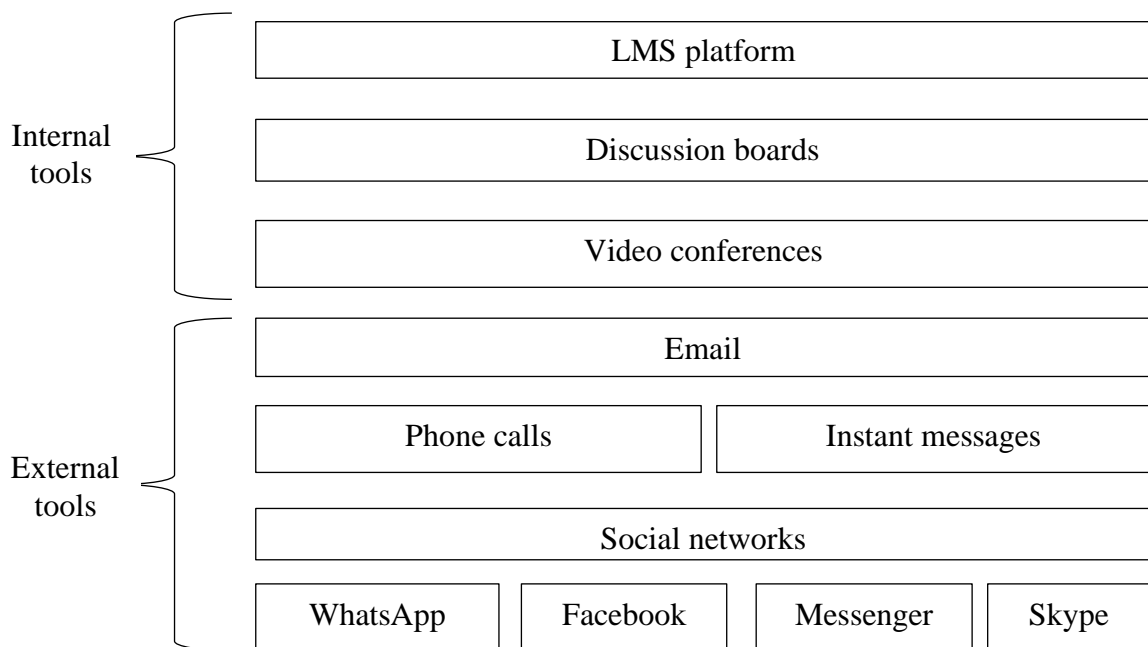
Participants' responses showed they used diverse tools to communicate. They had different communication tool preferences they chose according to their needs and instructors' suggestions. Irina mentioned, "Well, with the teachers, sometimes it was by video conference, by email. With fellow students, it was by Messenger . . . sometimes it was by phone call. Those were the media we most used." Franco, for instance, stated the communication tools he used were "email and the discussion forum . . . at one time, with some teachers, it was through a WhatsApp group." Other participants—like Albert, Karen, Lu, Marlen, Miguel, Ramiro, Rose, Rachel, Samuel, and Victoria—also mentioned the use of email, WhatsApp, and Messenger to communicate. However, Lu stated, "When [we] had more confidence [we used] WhatsApp . . . when we got to know the teacher or fellow students better." Also speaking about the use of WhatsApp, Victoria said, "Just with some close companions I added them to WhatsApp and Facebook." Only one participant noted she never used WhatsApp. Kenia said, "I was never in contact with anyone by WhatsApp or mobile."

Ana, Franco, Leidy, Magaly, Miguel, Rachel, Rene, and Sugei focused on other communication tools, such as videoconferences, phone calls, email, and the LMS platform discussion board. As an example, when asked about the tools used in the program Miguel said, “Mainly, the Blackboard platform, the forum that . . . the majority of us used . . . but most are people from other parts from outside my city. The most common is email and WhatsApp.” Only Leidy mentioned the use of other communication tools like Skype. Leidy responded, “We could participate in the forum, the video conference and, well, obviously the mail. I think more than phone calls we used Skype and WhatsApp.”

The use of communication tools in the program was diverse. The online communication tools were internal and external to the study program. Figure 1 shows the main online communication tools students, instructors, and the program director used.

Figure 1

Online Communication Internal and External Tools



Student Engagement and Communication

Participants' responses focused on how they engaged with the program director, instructors, and fellow students. Participants also explained how they perceived communication with them. Participants' engagement was mainly with instructors, the program director, and less with fellow students. For instance, Maria commented:

I communicated only with my professors, with my fellow students it became quite cool and it was just to start conversations. After that, we didn't pay any attention to the platform because . . . we added ourselves on Facebook and gave ourselves likes, so like we didn't use the platform so much to communicate, with the professor yes, they always responded promptly and appropriately . . . the [program director], an excellent person, always on hand.

Another participant, Magaly, mentioned:

I think that I communicated more with the academic community, with my teachers it was through the platform, and with fellow students, it was very rare for us to communicate through Blackboard. We looked for the way to communicate by telephone or Facebook or as in my case, I had fellow students that I knew in person.

Evidently, Magaly engaged with students more through external communication tools, but, in Hana's case, her engagement was focused on the program director and instructors. Hana said, "I feel that it's just teacher–student and sometimes I don't have communication with my fellow students." Meanwhile, Sugei also mentioned, "We don't have much communication with fellow students. The time we have for work and for studying are very different."

Participants noted the individuals with whom they engaged, either through a combination of internal or external communication tools. Also, participants noted their perceptions of communication with fellow students, instructors, and the program director. Leidy said communication was "fluid, quite participative both with the students and teachers." Leidy continued, "I don't think I ever had a communication problem. . . .

Specifically, working in a team or participating in the forums . . . really efficient.” Rachel said, for her, “it has been, it was all very good.” Marlen said communication was “good because it wasn’t all work and you could talk with them about anything.” For some participants, communication perception was positive; for others, like Hana, communication was “not having real communication with my fellow students.” For Albert, communication “was understandable since we were in constant communication whether I called [them] or they called me.”

Figure 2 shows the engagement that occurred between students, instructors, and the program director. It also shows how participants perceived communication with other program participants. Communication perception seemed slightly divided.

Sense of Community Experience

Participants’ responses to the sense of community experience questions focused on (a) what they experienced when interacting through the discussion board and (b) the sense of community they experienced in general. Moreover, participants’ answers related to social learning and sharing. Responses also concentrated on how they experienced presence, guidance, and support, either from fellow students, instructors, or the program director.

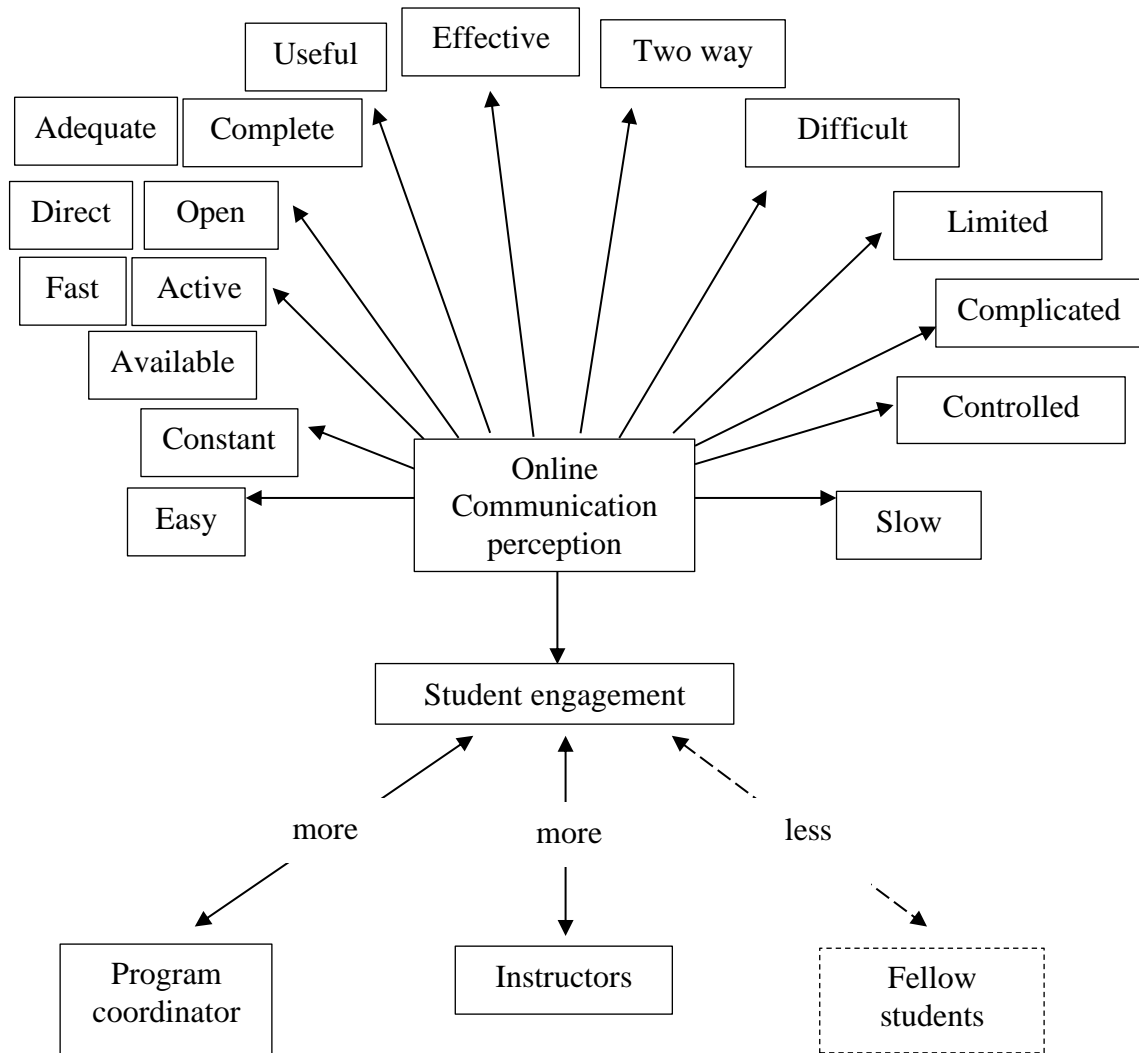
Community Experience

Participants’ responses to the online community experience related to the discussion board. Ana stated, “It was good because we could interact in the forums with the other students exchanging ideas and above all well, learning . . . things I didn’t know.” Other examples of online community experience related to the discussion board are responses from Marta, Rose, Monica, Eugenio, Sugei, and Miguel. Rose commented,

“I really loved the group activities, that we were all participating at the same time answering each other, the platform is excellent.” Monica said, “It was very good really, we exchanged ideas in forums, [and] by email. It was very intuitive, especially in the forums if we managed to give each other feedback.”

Figure 2

Online Student Engagement and Communication Perception



Participants expressed other ideas about how they experienced the online community on the discussion board. Sara mentioned, “When I interacted very deeply,

that was always an observation I made in the forums. I always observed little willingness or little analysis from the majority of fellow students.” Kenia said, “When . . . we had to share a certain activity and we had to comment to three other students . . . that’s when you feel you are integrated.” For Sara and Kenia, the community experience appeared opposite.

Participants’ community experiences were related to social learning, and sharing information and content, through the discussion board and other communication tools.

Participant Irina said, “As far as studying, we had people who . . . liked sharing information, they helped you, it was good.” Meanwhile, Eden responded:

I think more than anything [I liked] sharing information because we all worked at our own pace right, in our own time and we’d agree on a certain time to exchange, to complement and well, basically I think a bit more was to share information.

Apart from sharing information, several participants—like Leidy, Rachel, Sugei, and Miguel—said they shared to increase knowledge. Leidy spoke about working in teams and increasing knowledge. She said, “Teamwork, yes of course. . . . I think I’ve always liked to share [information] and between everyone increase it. Rachel mentioned:

Receiving information is very interesting and . . . sharing it. And many times, what happened was that one shared, for example, the work they asked us for, and one could see the opinions of the others and then we got to have a better opinion. Both things are good.

Sugei noted, “I like to receive because I can understand things and share to broaden the concept.” Miguel responded he prefers “to receive information, but also to broaden knowledge [he] would like to forward information to the others.” Community experience is based on how participants interacted with others in the discussion board and through other media. Participant community experience is related to social learning and sharing,

as well as presence, guidance, and support from fellow students, instructors, and the program director. Samuel responded:

In the forums, the discussion forums, they took your opinions a lot, very much into account . . . usually, if you had a question you'd say—send me an email . . . they answered, they gave us the answer or cleared up the query.

On one occasion during the interview, Eden commented about his interactions with others, mentioning, “All the time, I think there wasn't any time of the day when I couldn't connect or chat with any of the teachers or students. It was very easy to be able to interact with them.” Rose also told of how supported she felt: “With the support of each one of the teachers, we managed to do new things. . . . The teachers were always mindful of us and with [an] excellent disposition.” Rachel gave a similar response when she said, “It's good because they respond to you and immediately. Well, it all depends as much on the tutor as you as a student.” Marta and Sara mentioned how they felt supported by instructors or the combination of instructors and students. Marta responded:

I never felt out of it because the teachers were always watching for me handing in my homework, giving feedback, I was always in contact with the teachers . . . and well with fellow students with their contributions I also always felt very integrated. . . . In everything, every time I connected and was online, I always felt very involved, the teachers always encouraged us a lot to participate.

Sara said, “It's very effective as long as one is giving you continuity in following up. In this case, from tutor [instructor] to student it was very effective.” Several participants—like Rachel, Sara, and Marta—said feeling a sense of community experience depended on them as students, but instructor feedback was also necessary.

Participants also experienced presence, guidance, and support—specifically from fellow students. Monica mentioned having external contact with other students “in the teamwork.” She also shared, “There were some students with whom I did work very well,

and afterward, I would stick to them to work with them.” Other participants like Maria, Javier, Albert, and Hana responded that their support was directly from the program director. Maria mentioned, “With the [program director], my communication was very close, it was mostly by email and I only had communication with two or three fellow students, about queries.” Javier also said he had more communication with the program director; he stated, “I had more communication . . . by phone call. But it wasn’t like academic support.” Like Maria and Javier, Albert responded that even though he had contact with instructors, he found support with the program director. Albert said, “With the majority of the teachers we were in contact because either by video call or [the program director], she advised me a lot, any question I had got resolved.” Hana responded that she was supported by the program director when she needed nonacademic support: “I spoke with the teacher . . . by phone call. What happened is that I studied two courses, I called to see if they could revalidate subjects.” Evidently, several participants looked to the program director for their main support.

Several participants responded how they experienced a lack of support from students and instructors. Franco, Sara, Magaly, Clara, Sofia, Kenia, and Victoria had related responses. Franco mentioned:

I got to feel a bit excluded when we had to see more practical cases when they were no longer so theoretical. That’s when I think I got lost because I didn’t find the support I think I needed at that time.

Meanwhile, Sara expressed, “There was resistance from my fellow students and there was no quick response when one put forward an opinion, an activity or particular topic to perform some activities; in some cases, they didn’t lend themselves to sharing.” There were diverse responses on how they experienced support in learning activities. Magaly

stated, “[The] teacher gave me no feedback about why to change what was wrong. So that did make me uncomfortable.” Participant Clara said, “With the teachers, [communication] was good, but with fellow students it was poor, because I remember we had a WhatsApp group . . . and there was very little communication.” Sofia also noted, “If you have a question you send the email and sometimes they don’t answer you. That’s when one feels alone and less involved, or also when the tutor doesn’t send you feedback.” Kenia also mentioned, “When I had questions they didn’t answer me or they answered me, but then it was too late.” Like Kenia, Marlen described how support was delayed:

There was one person who contacted me when I dropped out of the course and told me that they had gotten worried, they told me that I was very smart and that I could achieve whatever I wanted in life and that made me feel good. . . . They told me that when I had already left.

Participants Franco, Sara, Magaly, Clara, Sofía, Kenia, and Victoria experienced several situations where they lacked support either from students or instructors. According to several of these participants, some fellow students’ communication was “poor” and instructor feedback either delayed or absent. Also, fellow students resisted sharing, as Sara mentioned when she said fellow students “didn’t lend themselves to sharing.”

Participants’ responses on the sense of community experience related to satisfaction, belonging, perceptions, commitment, and significant learning. Eden mentioned, “It was exciting because they were things I hadn’t experienced before. I studied another degree course for a while, but I never had the opportunity to interact in the way I did.” Franco also expressed satisfaction. He said:

Being able to set yourself up in a pleasant, comfortable manner, although I can say that’s not the reason I am on hold, I’m not disheartened . . . but a good environment does add a lot to the continuity of the mood of the groups.

Leidy, however, mentioned, “[The experience] made me grow as a person, grow professionally as well, and, well obviously, [is] enriching in all aspects.” For Miguel, it was satisfying; he stated, “It was a great satisfaction, primarily because I have acquired this knowledge for my work environment, which has made my administrative job easier. That has led to another level in which we can do things much better.” For other participants like Ana, Eden, Monica, Clara, Sofia, and Rene, the experience of sense of community was about belonging, participating, and collaborating. Ana mentioned:

Participating in the activities we did in each one of the courses. . . . I mean exchanging ideas as well, that for me was feeling part of it. . . . It allowed me to meet and share ideas with other students and strengthen my learning.

Eden described how he felt about the sense of community:

It engages you, it makes you feel like an important piece within the program, of the activities, because if you don’t do your homework the teamwork doesn’t work. They make you feel important because they call you, they’re looking out for you all the time.

Monica responded, “It was just when we had teamwork. The teachers and the community always made me feel part of it.” Sofia said:

Feeling part of the community makes you feel useful and knowing that someone exists who is doing the same as you, that shares the same experiences, makes you feel you’re not alone, that you have people who are close to you at all times and can help you with whatever concern you have.

Rene said, “When I open the computer and I see the content I have to do, what I have to study. I feel that there is someone waiting at 100%. That’s when I feel part of the community.” Several participants like Sandra and Karen spoke of how they experienced a sense of community. Sandra responded:

Those young people were in their first initial program, I mean, they graduated from high school and went into higher education, so it’s when it’s hard for us because now we’re enrolled in a more serious environment.

Karen described her experience, saying, “When you’re in constant communication and you’re up to date with your activities, because for those issues I got behind and for those issues, I couldn’t continue anymore, well because of the college fees as well.” Eugenio responded how he experienced a sense of community, comparing it with social media:

Like Facebook when we uploaded a photo . . . like I was now accustomed to doing in the forums to comment when somebody commented on me and such. I began to notice that the scope that my publications now had was greater than previous publications. I think it did have a lot to do with it, it helped me a lot.

Marlen described how she experienced a sense of community based on her job responsibilities. She stated:

Well, not being on par, when I stop researching, I feel that when I fall behind I’m not forming part of the community. One of the things that takes up my time is work. I left that job and now I’ve found another to continue with the degree and have a good community.

The experience of a sense of community also related to participants’ commitments. Rachel and Rose provided examples. Rachel mentioned, “For me it was very good and . . . very interesting because . . . you can improve yourself; one adapts to the schedules and one can have the joy of communicating. Rose said:

I wasn’t prepared for so much technology and suddenly I don’t know at what point I learned so many things, we were making so much progress. You were getting involved in so many videos and tutorials that I didn’t know in what moment I learned so many things that I had never done in my life.

Participants like Ramiro, Marta, Kenia, Sugei, and Miguel based their responses on the significance of learning in an online community. Ramiro stated, “For me it meant something good, because although I already had knowledge about these tools, well, the level of study and type of research they asked of us it was interesting and different to what I had used before.” For Marta, the experience was “enriching.” She stated, “From

the start until I had to leave. . . . It gave me many tools for my teaching job.” Kenia replied, “It was something positive something new that left me with new teachings because there are things I didn’t know. They helped me to apply them in my job.” Sugei explained:

For me it was a dream come true. I had to work my whole life to maintain my family and well, I always wanted to study a degree. For me it was super enriching, I learned so many things. I loved it.

For Miguel, his experience was about professional growth; he said, “Growth has been gradual because it has allowed me to put it into practice at work.” The community experience was related to how participants learned and shared on the discussion boards and how they experienced the presence, guidance, and support of the program director, instructors, and fellow students. Figure 3 shows participant interaction and sense of community experience.

Withdrawal Decision

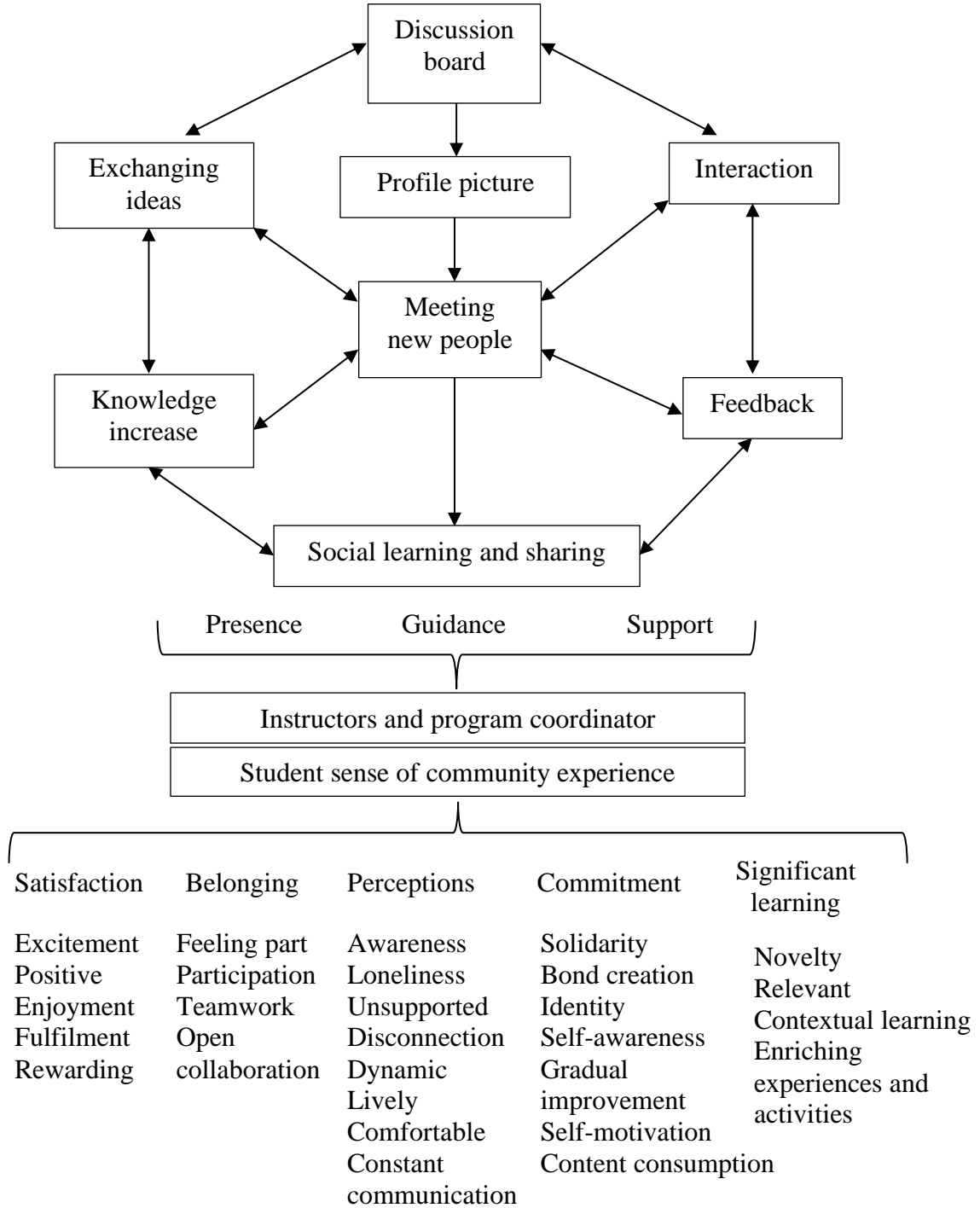
The decision to withdraw from online education appears to come from a combination of factors. Participants’ responses were related to skills, responsibilities, preparedness, and instructor experience. Also, participants’ replies related to specific, individual factors, such as emotional skills and issues, perceptions, and leadership.

Withdrawal-Related Factors

The withdrawal-related factors and student factors all impact students’ withdrawal decisions. The combined factors relate to internal, external, faculty, and student factors. The student factors relate to student personal soft skills.

Figure 3

Student Interaction and Sense of Community Experiences



Combined Factors

Participants' responses to withdrawal-related factors focused on time management skills and managing diverse roles. Samuel responded, "Sometimes I had 2, 3 days without going onto the platform . . . when I didn't give myself time to connect with my fellow students was when I most didn't feel part of it." Franco responded:

The fact that the program is, to a certain point, very formal and sometimes the fact that you don't have a routine to follow all the protocols, in some you would get lost and others would make progress and I think that without realizing it, the teacher and the student end up lagging behind and you can no longer add to the group.

Javier also noted, "I haven't been able to . . . organize time well for my activities." Lara stated, "Maybe I needed to have a schedule, I don't know, to dedicate certain time to school. That's why I had to drop out." Lu commented on her lack of time due to family responsibilities. She said, "It was the children's activities that took up too much time, the two children. It wasn't the same anymore, I wasn't concentrating the same." Marta also commented on not finishing the online program. She stated, "It was a goal I wanted to set for myself, but it wasn't possible because of the schedules." Another response came from participant Clara, who said, "It's a good teaching-learning system. I think that anyone who knows how to exploit it gets a lot of learning out of it, anyone who gives it time, in my case I didn't."

Managing diverse roles is also a skill mentioned in participants' responses. Ana stated, "I work and I'm also a homemaker, so when I started my housework, I went onto the platform to do my homework, answer the forums. So, to me, it was very practical." Rachel mentioned, "I want to finish it, because I really like it. It's just that it's difficult playing the role of mom and dad at the same time." Rose gave another example: "I

couldn't finish on-site school, and well since I was a student, homemaker, employee it was something surprising and really it was very satisfactory.”

Family, job responsibilities, finances, health, and death burdens were recurrent themes in participants' responses. Ana commented, “For me it's not having managed to keep on studying, because of responsibilities of my job; at that time, the reason I dropped out of my studies was because I had a union position.” Samuel noted the economic burden, saying, “Above all, the economic issue because at that time, my youngest daughter was about to be born and well, you know, late nights, time, expenses and all those kinds of things didn't let me continue.”

Participant Maria described diverse job and school-related responsibilities. She commented, “I changed the company I worked for and started to go to school . . . then the school, the courses I had to take, all in English, so everything got much more complicated.” Leidy, Albert, and Rachel's responses were about family responsibilities, health, and death issues. Leidy shared:

I dropped out . . . because that month my mom started to have hemodialysis, so I am responsible for two of my granddaughters and my mom, so it's no longer possible between work and my mom's health activities, I can't devote enough time to it.

Albert also shared about his health issues:

It was when I was diagnosed with a disease that drew me away a bit from being in, from finishing, because you have to realize that I fell into a depression, that I thought I wouldn't be able to move forward, but I did achieve it.

Other participants like Rachel and Magaly talked about death-related issues. Rachel mentioned:

The loss of my brother, that's when trying to do work was really difficult for me. I didn't feel sure about what I was doing because I had missed a lot of classes, a lot of videos and a lot of conferences and well, I was lost.

Participant Magaly said, “My father died, and I couldn’t get into the subjects. I still have the ninth [period] outstanding.” Participants also spoke about their preparedness for online learning, which included technical issues, equipment requirements, internet connections, and proper documentation.

Participants also mentioned instructor experience, lack of feedback, feedback delays, instructional design, and unclear instructions. Samuel and Karen gave similar responses on the lack of proper equipment or internet connection. Samuel said, “I had a problem because the equipment I was using was not very good, very sophisticated equipment.” Karen mentioned, “The issues I had with my poor communication, lack of tools in this case my laptop, which well, it’s not the same and my internet.” Marta commented on technical issues, saying, “When we had videoconferences, the connection failed a lot, but the teachers were always mindful, they gave us a lot of remote support.” There were more issues related to enrollment documentation. Monica explained about lacking proper enrollment papers, noting, “I started in 2017 and I got as far as 2018 . . . because there was some issue with the certificate.” Irina and Franco’s responses were about their instructors’ experience. Irina said:

I did feel part of it, depending. It has a lot to do with the teacher of the subject. There were some that made you feel part of it, and you could get along very well. And there were others that didn’t.”

Participant Franco mentioned, “I consider the one who is most affected of all is the student, because if the teacher doesn’t have experience at least in some way he’s involved.” Lu, Kenia, and Karen commented on prompt feedback, feedback delays, and unclear assignment instructions. Lu said, “It didn’t go beyond the same day [for instructors] to answer the questions we had, we sent the question and in 1 or 2 hours or

the next day they responded to us.” Kenia stated, “It seemed a bit slow, because there were times when I had some questions, some research became difficult. I sent email, I sent a message on the blog and well sometimes they didn’t respond in due time.” Karen noted, “We used the platform . . . we followed the sequence and for some things we used WhatsApp for any doubt we still had.”

Franco, Lara, Sara, Monica, and Sugei referred to instructional design. Franco commented, “What I’m saying is that it wasn’t so practical it was theoretical, so it lent itself more to conversation between people.” Lara also mentioned instructional design: “They sent you how to do it, but they didn’t give any kind of explanation they just sent it like that, do this and do that, it was like very confusing.” Sara’s response focused on the skills and purpose of the discussion board: “The tutor should go even deeper so that one can strengthen competence, that it’s obvious what competence we are forming. Questions [should be] more critical. [We need] more critical analysis.” Monica noted she felt engaged in the discussion board: “Whether you want to or not it makes you feel more involved because of the times you have to complete the work, the forums [discussion board], feedback, read what your fellow students and the teachers have to say.” Sugei made suggestions about communication with fellow students, saying, “It would impact me more having better communication with my fellow students. Perhaps some kind of activity to unify the group would be fabulous.”

Participants’ responses related to a combination of student, faculty, and external factors. Internal factors such as brand, university reputation, teaching method, support systems, and educational services were missing in participants’ responses because I

oriented the research to participants’ online sense of community experiences. Table 3 shows a summary of combined related factors in online student withdrawal.

Table 3

Combined Related Factors in Online Student Withdrawal

Skills	Burdens	Preparedness	Instructors
Time management	Family	Technical issues	Lack of feedback
Managing diverse roles	Health	Equipment requirements	Feedback delays
	Death	Internet connection	Instructional design
	Job	Proper documentation	Unclear instructions
	Financial	Writing skills	

Note. Skills relate to student factors. Preparedness and burdens relate to external factors. Instructors professional experience relates to faculty factors.

Student Factors

Participants also commented on other factors related to the withdrawal decision. These factors concerned emotional skills, emotional issues, perceptions about age, grades, communication and teamwork, and leadership. Participants like Ramiro, Lara, Rachel, Rose, Sara, Karen, Albert, and Sugei gave examples of self-confidence. For example, Ramiro talked about feeling less involved:

When we had to do an activity as a team, and I struggled to contact my fellow students, or they took a long time to respond to me. . . . I thought that if they didn’t respond to me I would do the activity by myself. I think encouraging this type of interaction more both with the students and the professors for the queries we have.

Ramiro described how he struggled to connect with other students to do teamwork, but his self-confidence encouraged him to continue to do the activity. Lara responded, “I really didn’t feel I had the confidence to be asking them or talking to them.” Other participants said they lacked self-confidence at the beginning of the online program.

Rachel said:

At first it was really difficult, because it's the first time I had studied online and all that about having to go on the platform and do homework and upload it, it was really difficult, but then afterwards, step by step I began to understand.

Rachel, Rose, and Sugei had similar experiences building self-confidence. Rose explained:

I never imagined that it would be that way. At the start, I found it quite difficult, I thought I wouldn't be able to do it, but as the days went by I felt very comfortable, the work [was] difficult, but very comfortable, nothing we couldn't manage to do.

Sugei also mentioned how she felt about fellow students having more technological knowledge than she did and how she increased her self-confidence by studying:

My fellow students were way ahead of me in technological knowledge, so I had to study a lot until I thought we were on the same level. I felt very good. And right now that I have to work online it has helped me more than I can say. It was super important.

Though Rachel, Rose, and Sugei built self-confidence while they were studying in the program, Karen developed self-confidence in previous experiences. Karen responded:

I have worked in different institutions where I had to use the tools I learned in online education. A little while ago, I was an advisor and it helped me in the practice of video calls, so it gave me confidence to do things.

Karen's work experience provided her with self-confidence. Participants like Sara also drew on previous experiences for self-confidence. Sara mentioned she "already manage[s] these competencies." Participants like Albert noted they lacked the self-confidence to interact with instructors and fellow students. However, he did say he felt confident with the program director:

I had more confidence with the [program director] and well I mentioned that sometimes the professors asked me why I wasn't progressing with the work and things like that, and then I asked the [program director] to understand because I was in a difficult situation.

Other participants, like Kenia and Victoria, spoke of deeper confidence issues in communicating with others. Kenia stated:

I felt that I could get a word wrong, I couldn't really express what I was going to say and well, that inhibited me, maybe I'm not going to make myself understood and I was afraid of being wrong and criticized or something.

Victoria described how she felt at the prospect of video communication: "I was really self-conscious; I'm going to look weird and [what] if they ask me something and I make a mistake." Kenia and Victoria seemed concerned about their performance.

Participants also spoke about how they coped with emotional issues. Irina, Monica, and Marta gave examples of their coping skills. Irina described how she managed interactions on the discussion board:

It didn't affect me, well not very much. It was like a challenge, if they didn't follow up on my topic, I had to find out more about the topic. But not feel bad, it was like, they didn't follow up on my topic so in the next one I'm going to improve.

Participants like Monica described their awareness about being self-disciplined. Monica mentioned, "Online education is very beneficial especially for people who work. There is also a detail in terms of the sense of self-regulation, being disciplined." Like Monica, Marta also showed awareness of her responsibility to engage with fellow students. Marta stated, "I feel a bit responsible in that respect because I didn't really seek much communication with them. The few times I tried to start up communication with them it was very difficult because they weren't very open either."

Participants spoke about emotional skills like self-confidence and coping. Ramiro, Lara, Marta, and Sara mentioned how they felt in different situations in their online learning experience. Ramiro said with deep despair, "I am a student who didn't finish the course, the program." He noted, "What I want is to finish it." Lara expressed a similar

emotion: “It affected me in that, well I didn’t continue with the degree course, for not being in contact with fellow students.” Marta responded, “Honestly it made me very sad to leave it. I was very happy; I did everything I could to continue. The teachers were always looking out for me. It was very frustrating for me.” Marta, Lara, and Ramiro seemed overwhelmed by their experiences. Respondents also touched on the emotional issues that impacted them. Sara, for example, commented on her experience in the discussion board: “I did get exasperated that when I participated, there wasn’t much response from my fellow students.”

Rachel and Miguel commented on depression and isolation, respectively. Rachel described how she felt when her brother died: “I did do the work and tried to do my best. It was just that, afterwards, for personal reasons I went down, but I went down because I lost interest because I couldn’t deal with it all.” Miguel said, “It feels a bit lonely. It feels as if we are talking to a machine when in reality we are expressing our concerns to the [instructor].”

Participants Sara, Javier, Eugenio, and Miguel commented on perceptions about age. Sara explained how she saw her academic experience and skills in comparison to concerning fellow students. She said, “The exasperation was because in reality we already probably had several years before entering the program . . . managing professional learning communities.” Javier also described his experience with younger fellow students: “I could sometimes chat with them . . . we chatted sometimes, but it wasn’t easy for me.” Like Javier, Eugenio responded similarly about his perception of being knowledgeable about digital technologies: “There are circumstances when they ask you for a job [assignment] and like in spite of us being digital natives . . . we don’t have

the experience, it gets complicated.” Participant Miguel talked about his age perception and his face-to-face academic experience:

I think sometimes I feel alone, because first I see the way I was taught where I had a physical person explaining, and it’s not the same as the way I’m in now. Maybe it’s also to my way of thinking, you have to look for the teacher, for the tutor, so that communication happens.

Miguel, Sara, Javier, and Eugenio provided answers related to perception of age.

Other participants like Marlen talked about their perception of grades and how grades impacted their motivation to continue in the program. Marlen, in particular, said:

I always used to have poor grades and suddenly my grades began to go up, so I suppose that when something went wrong I felt I was going to go back to that point at which I was just going to go down.

Marlen seemed overwhelmed by her grades and appeared aware of her emotional reaction to them.

Perceptions about communication and teamwork also surfaced in participants’ responses. Irina, Franco, Leidy, Rose, and Hana’s responses related to their communication perceptions. Irina also mentioned her perception of online learning and fellow students’ academic levels and their interactions in the discussion board. Irina stated:

When they don’t follow up on what you post, they don’t give it importance. . . . We don’t all have the same preparation, so we don’t give them cause to follow up on our topic. . . . That is what made me feel a bit less involved, but it’s part of the teaching of this online method.

Franco noted his perception of the lack of a “culturalization” to communicate within the online program. He spoke of “the lack of culturalization, in the online communication approach. I think that it’s often limited for many because of lack of knowledge of the parameter of what online communication is.” Leidy also noted her perception of the

challenge to communicate in a large online community. Leidy described a past online learning experience:

I come from another online university, where I didn't feel included or adapted and I think the experience was totally different. We were groups of between 60 and 180, depending on the subject, per group, so communication was very difficult.

Rose described her perception of communication in the online program: "Apart from the close communication that we had, like companionship with the teachers, like in the family. Sometimes I didn't even imagine that I was online, it felt like they were actually there." Hana also said, "When teachers respond to the activities, when they give me a grade and they make a note or an observation, I say, 'Wow!' They did sit down to read what I wrote, and they gave me a contribution."

Javier, Marta, Monica, Karen, and Albert each seemed to have different conceptions about teamwork, they mentioned how they perceived teamwork. Javier stated:

I haven't been able to contact them. I have had some communication with some of them, before I dropped out the first time, but we couldn't really have a good relationship, any type of relationship to do any type of work. Seriously, it was hard for me.

As for Marta, she mentioned, "They left us a lot of activities in which we had to do work with other students. I didn't go any deeper with them and the few times, well, I didn't get very good responses." Monica recalled the challenges of teamwork:

Maybe when we had to do teamwork because it was a bit different in that sometimes not everyone was available at certain times. Some didn't have the discipline to send the work or maybe they didn't have the know-how. That was difficult in the teamwork.

Karen responded, "Activities that were done as a team, that you had to do part yourself and part your fellow students, the teacher sent your grade based on what you

contributed.” Albert mentioned, “It helped me quite a lot, because of my work I didn’t have time to be present in a classroom and I concentrated in my free time and started doing the work I was assigned.”

Participants also shared responses related to student factors related to leadership. Javier, Lara, Marta, Sara, Magaly, Kenia, Marlen, Irina, Albert, Rene, and Hana spoke of purpose and life goals. Javier said, “The experience is useful; it opens new options for you. It does impact me positively.” Lara also mentioned her purpose and life goals, stating she wanted “to have a career . . . to continue with my studies.” For Javier and Lara, it seemed a realizable goal, but Marta responded it was

a huge goal. I think you’ll realize that I’m not a young woman, so given my activities and my age, it was very complicated getting to the semester I got to. I had to cut it short because of projects I had here [in the online program] in the family, and I would have liked to take it up again, but I think that at this stage, there’s no point.

Participants’ responses about expectations and motivations were diverse. Monica stated, “The course that I had chosen is something I like, it was very gratifying to study something that pleased me.” Like Monica, Sara, Magaly, and Albert described what they expected and what studying meant for them. Sara described “being able to strengthen some learning in this field.” She continued, “I had already had some certifications.” Magaly responded studying is “an opportunity to have a new professional title, an opportunity to enrich my career development, I’m a high school teacher.” Albert agreed, “It did help me quite a lot. I could move up in my personal life and in my working life.”

Participants Kenia, Marlen, and Irina’s responses were related to personal goals. Kenia mentioned, “I do feel bad having left something half done and besides, I’m interested in finishing for my job. I couldn’t communicate with the teacher anymore, but

it's my decision." Marlen stated, "I guess hearing my fellow students talking and encouraging each other and all that. I came into the course for different reasons, this wasn't the course I wanted to do. I felt I lacked the passion that they had." Like Kenia and Marlen, Irina mentioned:

It was important at the time, it meant . . . I don't know . . . it was . . . I can't explain it. It was one of my goals, right, at the time it meant quite a lot, maybe now it doesn't have the same importance. But at the time it was very useful.

Other participants' responses were about motivation and plans. Rene said, "I feel committed to be better every day and to be able to be part of the teaching faculty in distance education." He added:

It impacted me very strongly because I get up thinking that obviously, you have to do something different. It's a challenge every day to be able to do new things, new subjects, new exercises. It's something that motivates me a lot.

Hana agreed: "I feel the impact is huge, because I do feel very well, but it does drive me crazy doing these two courses together." Rene and Hana seemed to be aware of the challenges to achieve their goals. Participants like Samuel, Leidy, and Lu commented on the challenges of being in the online program and goal setting. Samuel mentioned:

It wasn't anything that had to do with the program. I had to start to choose to leave it aside and put it on hold. Nothing, I can't say that anything in the program made me feel out of it. I couldn't tell you that to be honest.

Leidy described how she changed her academic goals:

I was taking four courses there, the furthest I got was to a trimester, that was in biotechnology but for the same feeling of being alone between all the subjects and well I was going from one course to another and I didn't get established. Yes, exactly. I felt very alone as far as, well they were the courses I liked, but, in the first where I lasted longest, I had no knowledge of the environment, so I jumped into administration, which is what I do now, but well, it wasn't what I wanted, it wasn't what I expected.

Lu described her academic goal priorities:

I have my son who's about to start elementary school. It's going to be a new experience for him. I don't think this year, maybe, later on, I'd like to finish them, because then I would be almost finished because I would be months or years away from finishing the degree.

Participants like Ana, Maria, and Rose described their motivation. Ana said, "It motivates me to move forward and keep learning. The experience for me was good, I did like it, above all well, learning more and moving up another step in my life." Maria also showed her enthusiasm:

I was just missing one subject, entrepreneurship. I sent in my project, made a dissertation. I sent it in and everything, I just needed the professor's grade but that was that. I learned a lot . . . it was nice to discover that, although I wasn't present I had the ability and demonstrate that you can get ahead.

Rose shared Maria's sentiment:

I never felt less involved. The thing is, because of my job it was difficult to be going back to the platform all the time. But I never felt uninvolved, rather I always did feel involved. I never dropped out, I didn't manage to finish it, but I'm already in the process . . . I want to get up to date.

Clara was the only participant who mentioned the word leadership when she referred to student engagement. She said:

In the teamwork. Usually, there's always a leader but since there wasn't that . . . that fit, that part of [a] team. It was all like, by email, none of that I'll call you or you'll call me, no video calls. I feel like it lacked that something extra from the students.

Withdrawal decision factors that relate to student factors are summarized in Table 4.

Table 4

Online Student Withdrawal Decision Making and Related Factors

Emotional skills	Emotional issues	Perceptions	Leadership
Self-confidence	Despair	Age	Purpose
Self-esteem	Depression	Grades	Life goals
Coping skills	Isolation	Communication	Goal setting
		Teamwork	Intrinsic motivation

Note. Emotional skills, emotional issues, perceptions, and leadership are student-related factors. Under these categories, there are specific areas related to student factors.

Summary

I developed the following general codes and themes from this phenomenological study. I included transcripts of interviews conducted with 30 current and former students in an online higher education program in educational technology. The general codes and themes were characteristics of communication, experience of a sense of community, and withdrawal decision. I carried out a phenomenological analysis consisting of the transcription of interviews, delineation of codes of meaning, selection of units of meaning, and grouping of units of relevant meaning to later make summaries of personal data. Participants' responses overlapped in different themes and categories; thus, I presented findings according to the themes and categories under the three basic research questions:

1. What online communication characteristics contribute to a sense of community in an online program?
2. How does the perceived sense of community in an online program affect student experience?
3. How does student experience contribute to the decision to withdraw from an online program?

The following chapter focuses on research conclusions and a discussion of findings. I will present findings according to the problem statement, the research questions, and research on the characteristics of online communication that contribute to sense of community and withdrawal decisions. Chapter 5 also includes application of the study's findings for educational leaders to develop communication strategies in online

education to help increase online student retention rates. I also detailed recommendations for actions and future research.

CHAPTER 5: CONCLUSIONS AND DISCUSSION

The purpose of this study was to explore characteristics of online communication that contribute to a sense of community as perceived by online students and how their experiences affect their decisions to leave online education. I used a qualitative method with a phenomenological approach to seek and learn how students experienced the phenomenon. I used purposeful snowball sampling to obtain participants. Participants included 30 former and currently enrolled online students of an online degree program in educational technology at a major state university. I conducted in-depth interviews to collect data; I subsequently transcribed and hand-coded the interviews for general meaning and selected units of meaning relevant to the research topic. I framed the study with three research questions:

1. What online communication characteristics contribute to a sense of community in an online program?
2. How does the perceived sense of community in an online program affect student experience?
3. How does student experience contribute to the decision to withdraw from an online program?

Limitations of the study included contacting participants, because several potential participants commented they lacked time for interviews. Other participants said they had no internet connection. Some participants repeatedly postponed the interview date. Many others canceled the interview for unexplained reasons.

The study was limited to students from an online degree program in educational technology at a major state university. It was limited to undergraduate students who (a)

withdrew and re-enrolled and (b) were former students of the program. Findings presented in Chapter 4 showed online communication characteristics, online communication tools, and student engagement and communication in the online program and how these affect their experience and their decision to leave online education. Additionally, I described findings about the community experience and factors related to students' withdrawal decisions.

Chapter 5 includes a discussion of key findings and conclusions related to the three research questions that framed the study. It also addresses application of the findings and conclusions to the problem statement, as well as application of the findings to leadership, recommendations for action, and recommendations for further research.

Discussion of Findings and Conclusions

Findings derived from the research are related to communication characteristics, specifically the online communication tools study participants used. Participants responded that they used internal tools related to the LMS platform and external tools such as email, phone calls, instant messages, and social networks. Findings also showed how and with whom participants engaged and how they perceived online communication. Moreover, participants described their community experience; how they experienced community in the discussion board; how they shared and learned socially; and how they experienced presence, guidance, and support from students, instructors, and the program director. Findings showed how participants experienced a sense of community through different aspects such as satisfaction, belonging, perception, commitment, and learning.

Findings also revealed the factors that influenced participants' withdrawal decisions. Participants' responses focused on a combination of internal, external, faculty,

and student factors. The combined factors related to skills, burdens, preparedness, and instructor experience. Student factors speak to personal issues and soft skills such as emotional skills, emotional issues, perceptions, and student leadership.

Communication Characteristics

Findings related to communication characteristics provides understanding about the research question: What characteristics of online communication contribute to the sense of community in an online program? Online students use internal tools of the LMS platform, specifically the discussion board, and video conferences when required by instructors. The used internal tools are basic for the online program, but students prefer more immediate tools such as social networks. The LMS platform provides a content structure for students; however, their engagement through the platform is limited. Even though students are required to attend video conferences within the LMS platform, some prefer other communication tools based on their personal and academic needs. Research has shown technology allows for more real-time interaction through synchronous communication (Watts, 2016); however, this type of communication is meaningful only for certain students who have specific communication skills and perceptions (Markova et al., 2016).

The contributing factor to the sense of community in online learning is not the communication tools students use but their perceptions of engagement in online learning. Student engagement and communication are diverse in terms of the tools used and also with whom students interact. Students' perceptions of communication determines their feelings about the individuals with whom they engage, whether it be the program director, selected instructors, fellow students, or a combination. Findings showed students

in this study interacted more with the program director and instructors and less with fellow students. Witzig et al. (2017) suggested learning communities should be in a common platform to create a sense of community. Although findings showed online students in this study may have felt part of the community with the use of diverse communication tools and with selected individuals in the online program, participants struggled to engage meaningfully and decided to move to social networks to find the support and sense of belonging in small groups or with an instructor through phone calls, email, or a social network.

Findings showed the discussion board as a communication tool does contribute to a sense of community if the instructional design is student centered and if instructors provide prompt and effective feedback. Instructors can also provide a sense of community with a discussion board; however, students' expectations and perceptions of how online communication works decreases their interactions, as they believe the instructor's role is to provide knowledge and not necessarily to facilitate their learning.

Sense of Community Experience

Findings related to a sense of community experience provided an answer for the research question: How does the sense of community students perceived in an online program affect student experiences? Students' experienced sense of community was related to students' perceptions about communication. For some students, communication was—in students' words— effective, direct, open, and constant, while for others it was complicated, controlled, slow, and limited. These perceptions influenced how and with whom students in this study engaged in the discussion board or other communication tools. Findings showed students in this study experienced a sense of community,

primarily in the discussion board, as a space where they could share and learn socially with the presence, guidance, and support of instructors and the program director.

Nevertheless, engagement with fellow students was limited.

Students' perceptions about the sense of community in the online program was determined by who they believed could provide them with guidance and support. Students' sense of community experience in the online program was based on their interactions and connections, mostly with instructors and the program director; however, research has suggested a sense of community is fostered when there are shared objectives, goals, and vision (Murdock & Williams, 2011). The sense of community is developed when there is direct contact with all participants in a community to build trust. Students also need to be in contact with other students to build confidence and develop a sense of community in an online program (Witzig et al., 2017).

Students' sense of community experience was related to students' satisfaction in the online program. Findings showed students felt excitement and had a rewarding experience in the online program. Students valued the sense of belonging in teamwork and the commitment to share and learn together. For other online students, the experience was about discomfort, disconnection, and loneliness. Students' diverse individual perceptions, needs, and characteristics as higher education online students impact how they perceived the sense of community (Clauson & McKnight, 2018).

Withdrawal Decision

Findings related to the decision to withdraw from the online education program specifically showed understanding of the research question: How does student experience contribute to the decision to leave an online program? Findings showed a combination of

factors that contributed to students' decisions to leave the online program. These were a combination of internal, external, faculty, and student factors. Students' skills were a determinant in their ability to stay in online learning. Time management was a recurrent theme among participants as a skill they lacked for organizing how they studied, worked, and managed their issues. The possession or lack of time management skills impacted their experiences and success in the online program (La Madriz, 2016). In addition, students' experiences were affected by their ability to manage the diverse roles they played. Time management and managing diverse roles while studying online was a major challenge for students because it changed their perceptions of how they communicated and their sense of community.

Online students' responsibilities and burdens (e.g., family, health, job, and issues related to death) also contributed to their decision to leave online education. Findings showed how students are often overwhelmed by such issues, which impacts their performance in online education. There is significant research that supports how external factors like family, work, illnesses, or other family-related issues are determinant in student withdrawals (Cochran et al., 2014; Russo-Gleicher, 2013; Simpson, 2013; Stoessel et al., 2015).

Students' experiences are also affected by their preparedness for online education and are related to student withdrawal. Technical issues, equipment requirements, and internet connections are contributing factors for online learning withdrawal (Robichaud, 2016; Russo-Gleicher, 2013; Sorensen & Donovan, 2017; Travers, 2016). Findings also showed students in this study lacked proper documentation for enrollment and had limited writing skills.

Other factors—such as instructors’ online teaching experience—impact the student experience. Findings showed lack of feedback or feedback delays can create a sense of isolation in an online community. Instructors’ readiness contributes to students’ online experiences and how they engage with them (Seaton & Schwier, 2014). In addition, faculty factors, instructional design, and unclear instructions affect students’ experiences and are related to their decisions to leave online programs.

Students’ online experiences are driven by a combination of internal, external, and faculty factors. Moreover, student factors are critical to students’ online experiences (Youngju et al., 2013). Findings demonstrate students’ emotional skills (e.g., self-confidence, self-esteem, and coping skills) are decisive factors in how students experience online education. Emotional issues—including despair, depression, and isolation—contribute to students’ withdrawal from online learning. Although perceptions about age and previous online experience are nonsignificant for overall student satisfaction and retention (Barnes, 2017), findings showed students’ perceptions of fellow students’ ages determined the extent of their engagement on the discussion board or social networks. Online students’ perceptions of course grades, communication, and teamwork also impacted their interactions with fellow students and instructors.

Student leadership characteristics contribute to their experiences and to their decisions to leave an online program. Having a life purpose and goals allows students to gain intrinsic motivation to be active in a learning community (Frasineanu & Ilie, 2017). Findings showed lacking the ability to set goals or intrinsic motivation limited students’ capacity to be resilient and accomplish their academic and personal goals.

Students' perceptions of online communication contribute to a sense of community regardless of the communication tools used. Findings demonstrated effective interactions with the program director, instructors, and fellow students contributed to educators creating a sense of community in the online program. However, the sense of community was not consistent among all participants, because their interaction was limited to some instructors and the program director and less with fellow students.

The experiences students have in an online program affect the sense of community they perceive. Interactions in the program determines what they believe, think, and do in the program. Their perceptions of a sense of community is focused on limited small groups; it does not include all of the members of the educational process. Although they find discussion boards to be useful tools for social learning and sharing, they experience a sense of community through a diversity of external tools (e.g., email, social media, instant messages, phone calls). Furthermore, for students in this study, perceived sense of community related mainly to the presence, guidance, and support of some instructors and the program director.

Students' online experiences contributed to their decision to abandon online education due to a combination of internal, external, faculty, and student factors. However, factors related to individual student abilities (e.g., leadership and emotional skills) had a direct impact on decisions to leave online education. Findings showed some online students lacked purpose and life goals to incite intrinsic motivation. Student motivation appears to be more extrinsic; therefore, the absence of a solid communication structure in a program and the lack of a sense of community leads students to leave the online program.

Application of Findings and Conclusions to the Problem Statement

Higher education institutions continue to have online student withdrawal issues despite the existing body of research on creating a sense of community. There are gaps in the available research on how to meet individual learners' specific needs and characteristics. Educators can apply these findings from this study to these issues of online student withdrawal.

Students prefer external communication to an LMS platform when they do not find the presence, guidance, and support of instructors. To prevent students resorting to a variety of other communication tools, the platform and institutional mail could serve as the main and official communication tool. Findings showed students chose communication tools and with whom to interact based on their perceptions and skills. Knowing why students in this study preferred to interact more with the program director and certain instructors can provide an understanding of other students' needs according to particular characteristics; thus, educators can offer them more effective guidance and support.

Findings showed online students have diverse perceptions of teamwork, the instructor's role, and the age, grades, skills, and knowledge of fellow students. Understanding what online students think about these issues provides deep knowledge of how to meet learners' particular needs. Findings also showed online students' communication perceptions impacted their levels of engagement with instructors, the program director, and fellow students. Knowing what students believe, feel, and think about what online communication is supposed to be can help educational leaders create a

sense of community by implementing a specific communication strategy that includes training, orientation, and evaluation.

Findings also highlighted the combination of internal, external, faculty, and student factors that contribute to a sense of community and thus prevent withdrawal. Previous research has demonstrated all of these factors, but there are still gaps in the literature, specifically related to student emotions and leadership factors, which can be filled with the results of this study. Specifically, findings suggested some online students lack a life purpose that generates the intrinsic motivation to complete academic and personal goals. Findings also showed students with emotional issues (e.g., depression) have difficulty setting goals. Having an understanding of students' emotional needs can guide educators in the instructional design of an online program, where students can develop leadership skills transversally in the educational technology program.

What seems surprising to me about the findings and the existing research is the emotional state and the social and cultural status of online students. Findings showed participants faced emotional challenges in dealing with personal and academic issues. Participants' emotional, social, and cultural backgrounds influenced how they experienced online education (Lee & Martin, 2017). Findings also revealed participants lacked leadership skills. The word leadership was mentioned just once among participants' answers, which evidenced their background on this topic. Frasinianu and Ilie (2017) argued about students' aspirations and interests and the need for a paradigmatic change in student-centered education. Findings in this study showed participants considered themselves to be passive in the learning and teaching process and expected instructors to answer their questions and address their concerns.

Online students require self-knowledge, recognition of their interests, and self-understanding of what motivates them to succeed in an online program; in addition to knowing themselves, they need an open mind to interact with students of diverse characteristics, interests, and needs, thus helping to create meaningful environments for sharing and learning (Shim & Perez, 2018).

Application to Leadership

Educational leaders can apply the results of this study to improve leadership, because the development of a sense of community both online and in person involves factors such as effective communication, the use of communication tools, interaction, teamwork, and developing and sharing knowledge. Communities require a common culture in which community members share a vision, objectives, and a set of values to guide their behavior (Delmas, 2017). The members of the community are aware of their skills, knowledge, and values; they are also aware of their role in the community and how to play it. Members of the community need self-knowledge, a personal vision, and a grasp of how they can impact the community globally to help them collaborate, share, and improve their environment.

Leadership is improved upon the realization of educators that the message is more important than the way instructors convey it. Because even though technological tools are the medium as such, by using a great variety of technologies, the instructors communicate that institutions lack an effective communication strategy. If the institution's leaders intended message is to facilitate learning, create a sense of online community, share knowledge, and collaborate and develop 21st-century skills, leaders should foster authentic communication. Also, educators communicate a lack of an

effective communication strategy, if whether interaction is with more individuals through a specific technology or with a few individuals through many communication tools.

Knowledge of who engages in the communication process and why can provide leaders a clear vision to help create a sense of community. As in online learning communities, any other group of individuals requires the presence, guidance, and support of leadership to foster open communication and create an environment for sharing and learning.

Educational leaders can use findings from this research to understand the importance of self, organizational, and global awareness for leaders to facilitate in others the opportunities to develop as leaders. New members in a community require a well-structured environment where they can integrate with others even though they may lack self-structure; the new environment can provide the stability for them to develop and become active leaders. As in online education, students require an adequate, well-structured education program aligned with an institutional philosophy where they can progressively experience a sense of community.

Recommendations for Action

Educational leaders, program directors, course and instructional designers, instructors, and educational technology students can use the findings from this study to improve online educational programs and student experiences. Educational leaders in strategic positions should pay attention to the findings. I propose actions on communication, educational approaches, and student development to foster and create a sense of community with the goal to reduce online student withdrawals. I propose seven actions for increasing and diversifying interaction between students, instructors, program directors, and other key individuals in a program.

The first action is to define the roles within the educational program. Program directors perform functions beyond their responsibilities. Constant interaction with students is positive because it encourages the confidence to connect and seek support; however, online students also require other exclusive, specialist figures for psychological and emotional online support. It is important for educational leaders to define the functions of instructors as facilitators of the learning process to help students build knowledge, develop skills, and foster values through learning technologies (Seaton & Schwier, 2014). Students also need to know their role in an online program and should take responsibility for their own learning (Aliusta et al., 2015). Findings demonstrated students expected instructors and the program director to clarify academic, administrative, or personal questions or issues, rather than the students themselves seeking answers through research or self-reflection.

The second action is for educators to implement a message- rather than a technology-based communication strategy. To create a sense of community, communication must be on a specific platform (Witzig et al., 2017). Using a diversity of tools distorts communication between students and instructors. I recommend educational leaders create a communication plan appropriate to the needs of students and instructors with existing technology to deliver more effective communication.

The third action is to conduct regular evaluations and feedback on student satisfaction. The satisfaction students reported contributes to the sense of community; therefore, it is valuable to know how students feel, think, and act in online education. To reduce student withdrawals, knowledge of their personal, academic, and professional experiences is required to offer a more well-informed orientation based on ethics.

The fourth action is to redefine the educational focus of the program with regard to the instructional design. Findings suggested learning activities encouraged individuals more effectively than collaborative work. An online educational program by its nature tends to be student-centered, as instructors offer students some flexibility to carry out learning activities individually or collaboratively (Moate & Cox, 2015). More specifically, I recommend educators integrate learning activities into the instructional design to promote teamwork, collaborative learning, cocreation, and the contextual application of knowledge; these learning activities might include problem-based learning and cocurricular online learning events, courses, and content sharing.

The fifth recommendation also concerns instructional design, but this recommendation is focused on faculty leadership development. The recommendation is a cross-sectional integration of leadership skills in teaching and learning activities. For students to develop leadership skills, faculty must also develop and demonstrate these skills, as they come into direct contact with students and can foster a sense of community (Mantravadi & Snider, 2017). I recommend providing instructors with opportunities for leadership development and engagement in the online program from a leadership perspective.

The sixth recommendation is for educational leaders to target more challenged students. I recommend identifying students based on their profile, respecting ethical considerations in the treatment of their personal information and background. Educational services (e.g., counseling and guidance) could have a positive impact on retention (Russo-Gleicher, 2013).

The seventh recommendation is for educational leaders to address the personal development of online students. Based on the findings in this study, students could benefit from developing skills such as self-awareness, strategic thinking, leadership, and time management. I propose this type of training be offered by educators to students before and during enrollment in the online program so they can face challenges in their personal, academic, and—potentially—professional lives. Students who show a high internal locus of control, metacognitive skills, and self-confidence are more likely to be successful in online education (Youngju et al., 2013). Educational leaders can accomplish a more effective impact on student retention with the introduction of personal development programs for students online, whether integrated into the instructional design or extracurricular.

Recommendations for Further Research

The topics from this study that require closer examination concern communication between students and instructors in student-centered educational approaches. Moreover, it is important to learn how students engage with online learning content and how they socialize content with instructors and fellow students. Engagement between students, content, and instructors is key in creating a sense of community (Scoppio & Luyt, 2017). Also in need of further study is the level of interaction between students and instructors, and student engagement preferences, in online learning.

Researchers could focus more deeply on future studies on how students' self-knowledge affects their performance in online education, because the sense of community required can be fostered as long as students are open to new experiences. Also, researchers in future studies may explore students' online experiences concerning

leadership, understanding from a cultural perspective how different leadership roles influence students and how that impacts their success or failure in education.

Researchers can carry out future studies with in-depth interviews in person, thus mitigating the difficulties of conducting interviews through video conferences, because participants may have predispositions that limit contact through technology. A better option would be to carry out data collection directly, face to face with participants.

Some unexpected findings showed student perceptions about fellow students age determines their interaction in online learning. Also, participants beliefs about their role in online learning limits or enables their interactions. Researchers in the future can focus on exploring student perceptions about their roles in online learning and student perceptions about fellow student age differences. Also, future studies can be done through a face to face interview because a limitation of the study was students perceptions about online learning and their willingness and ability to interact. A face to face interview with participants may mitigate their possible discomfort of interacting through technology.

Concluding Statement

Educational leaders face the challenge of online education student withdrawals. Despite the existing technology to promote contact and interactivity among participants in the educational process, students continue to face online environments where the quality of engagement with course content, administrators, instructors, and fellow students determines their learning experiences and successes. Findings of this study showed the communication tools students use online and with whom they use them contribute to the sense of community they experience in online education. Likewise,

students' perceptions of the sense of community contribute to their decisions to withdraw from online education. The main goal for the research was to explore online students' characteristics, such as emotions, motivations, and academic needs, and how they experienced a sense of community in an online program. The COVID-19 pandemic was a limitation for interviewing participants in person. The interviews were conducted by video conferences and demonstrated the diverse emotions, motivations, and academic needs online students have. Interaction through technological tools was determined by students' emotions, motivations, academic needs, and perceptions of online education. Participants' experiences of interacting or not was determined by their decision to withdraw or stay in education online.

These findings are valuable because they showed a student without a solid personal structure will face failure in such a way that their personal, academic, and professional lives become a major challenge. Also, educators should use online education to provide an environment in which students with diverse characteristics and needs can find a space to develop personally, academically, and professionally through well-structured programs aligned to institutional philosophy. Furthermore, these findings are important since students are the most valuable piece in the educational process; their individuality and well-being should be part of educational leaders' intrinsic motivation.

REFERENCES

- Aliusta, G., Özer, B., & Kan, A. (2015). Student-centered learning (SCL) in schools in north Cyprus: Teachers' opinions and problems. The implementation of student-centered instructional strategies in schools in north Cyprus. *Egitim Ve Bilim*, 40(181), 77–91. <https://doi.org/10.15390/EB.2015.2822>
- Aretio, L. G. (2017). Educación a distancia y virtual: Calidad, disrupción, aprendizajes adaptativo y móvil [Distance and virtual education: Quality, disruption, adaptive learning and mobile learning]. *Revista Iberoamericana de Educación a Distancia*, 20(2), 9–25. <https://doi.org/10.5944/ried.20.2.18737>
- Arkorful, V., & Abaidoo, N. (2015). The role of e-learning, advantages and disadvantages of its adoption in higher education. *Instructional Technology*, 12(1) 29-42. https://www.itdl.org/Journal/Jan_15/Jan15.pdf
- Barnes, C. (2017). An analysis of student perceptions of the quality and course satisfaction of online courses. *Journal of Higher Education Theory and Practice*, 17(6), 92–98. <https://articlegateway.com/index.php/JHETP/article/view/1530>
- Bawa, P. (2016). Retention in online courses: Exploring issues and solutions—A literature review. *Sage Open*, 6(1). <https://doi.org/10.1177/2158244015621777>
- Bernabé Villodre, M. del M., & Cremades Andreu, R. (2017). Sociedad del conocimiento, capital intelectual y educación musical en el siglo XXI [Knowledge society, intellectual capital and music education in the XXI century]. *Revista Electrónica Complutense de Investigación en Educación Musical*, 14, 47–59. <https://doi.org/10.5209/RECIEM.53380>

- Berry, G. R. (2018). Learning from the learners: Student perception of the online classroom. *Quarterly Review of Distance Education, 19*(3), 39–56.
- Berry, S. (2017). Building community in online doctoral classrooms: Instructor practices that support community. *Online Learning, 21*(2), 42–63.
<https://doi.org/10.24059/olj.v21i2.875>
- Bickle, M. C., & Rucker, R. (2018). Student-to-student interaction: Humanizing the online classroom using technology and group assignments. *Quarterly Review of Distance Education, 19*(1), 1–56.
- Black, D., Bissessar, C., & Boolaky, M. (2019). Online education as an opportunity equalizer: The changing canvas of online education. *Interchange, 50*(3), 423–443.
<https://doi.org/10.1007/s10780-019-09358-0>
- Boldt, D. J., Kassis, M. M., & Smith, W. J. (2017). Factors impacting the likelihood of student withdrawals in core business classes. *Journal of College Student Retention: Research, Theory & Practice, 18*(4), 415–430.
<https://doi.org/10.1177/1521025115606452>
- Broussard, L. (2006). Understanding qualitative research: A school nurse perspective. *The Journal of School Nursing, 22*(4), 212–218.
<https://doi.org/10.1177/2F10598405050220040501>
- Bryant, J., & Bates, A. J. (2015). Creating a constructivist online instructional environment. *TechTrends, 59*(2), 17–22. <https://doi.org/10.1007/s11528-015-0834-1>

- Cabero, J. A., & Fernández, B., R (2018). Las tecnologías digitales emergentes entran en la universidad: RA y RV [Emerging digital technologies come into the university: AR and VR]. *Revista Iberoamericana De Educación a Distancia*, 21(2), 119–138. <https://doi.org/10.5944/ried.21.2.20094>
- Chang, Y., & Hannafin, M. J. (2015). The uses (and misuses) of collaborative distance education technologies: Implications for the debate on transience in technology. *Quarterly Review of Distance Education*, 16(2), 77–92.
- Check, J., & Schutt, R. K. (2012). *Research methods in education*. SAGE Publications.
- Chiyaka, E. T., Sithole, A., Manyanga, F., McCarthy, P., & Bucklein, B. K. (2016). Institutional characteristics and student retention: What integrated postsecondary education data reveals about online learning. *Online Journal of Distance Learning Administration*, 19(2), 1–9. http://www.westga.edu/~distance/ojdla/summer192/chiyaka_sithole_manyanga_mccarthy_bucklein192.html
- Chrysikos, A., Ahmed, E., & Ward, R. (2017). Analysis of Tinto's student integration theory in first-year undergraduate computing students of a UK higher education institution. *International Journal of Comparative Education and Development*, 19(2), 97–121. <https://doi.org/10.1108/IJCED-10-2016-0019>
- Chua, Y. P., & Chua, Y. P. (2017). Developing a grounded model for educational technology leadership practices. *Egitim Ve Bilim*, 42(189), 73–84. <https://doi.org/10.15390/EB.2017.6705>

- Cifuentes, G., & Vanderlinde, R. (2015). Liderazgo de las TIC en educación superior: Estudio de caso múltiple en Colombia [ICT leadership in higher education: A multiple case study in Colombia]. *Comunicar*, 23(45), 133–142.
<https://doi.org/10.3916/C45-2015-14>
- Cilesiz, S. (2011). A phenomenological approach to experiences with technology: Current state, promise, and future directions for research. *Educational Technology, Research and Development*, 59(4), 487–510.
<https://doi.org/10.1007/s11423-010-9173-2>
- Clauson, C., & McKnight, J. (2018). Welcome to campus: Planning for diversity, inclusion, and equity. *Planning for Higher Education*, 47(1), 39–48.
- Cochran, J. D., Campbell, S. M., Baker, H. M., & Leeds, E. M. (2014). The role of student characteristics in predicting retention in online courses. *Research in Higher Education*, 55(1), 27–48. <https://doi.org/10.1007/s11162-013-9305-8>
- Covelli, B. J. (2017). Online discussion boards: The practice of building community for adult learners. *Journal of Continuing Higher Education*, 65(2), 139–145.
<https://doi.org/10.1080/07377363.2017.1274616>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.
- Delmas, P. M. (2017). Using VoiceThread to create community in online learning. *TechTrends*, 61(6), 595–602. <https://doi.org/10.1007/s11528-017-0195-z>
- Deming, D. J., Goldin, C., Katz, L. F., & Yuchtman, N. (2015). Can online learning bend the higher education cost curve? *American Economic Review*, 105(5), 496–501.
<https://doi.org/10.1257/aer.p20151024>

- Díaz, Y. E., Rochín, C. A. F., Encinas, K. L. P., Vega, J. E. P., & Rodríguez, J. A. S. (2017). Liderazgo directivo para impulsar iniciativas de educación a distancia [Management leadership to promote distance education initiatives]. *Revista Iberoamericana de Producción Académica y Gestión Educativa*, 4(8), 1-23. <https://www.pag.org.mx/index.php/PAG/article/view/704>
- Escorcía-Oyola, L., & de Triviño, C. J. (2015). Tendencias de uso de las TIC en el contexto escolar a partir de las experiencias de los docentes [Trends in ITC use in a school context, based on teachers' experiences]. *Educación y Educadores*, 18(1), 137–152. <https://doi.org/10.5294/edu.2015.18.1.8>
- Fernández-Cruz, F., & Fernández-Díaz, M. (2016). Los docentes de la generación Z y sus competencias digitales [Generation Z's teachers and their digital skills]. *Comunicar*, 24(46), 97–105. <https://doi.org/10.3916/C46-2016-10>
- Flanagan, L., & Jacobsen, M. (2003). Technology leadership for the twenty-first century principal. *Journal of Educational Administration*, 41(2), 124–142. <https://doi.org/10.1108/09578230310464648>
- Foroughi, A. (2015). The theory of connectivism: Can it explain and guide learning in the digital age? *Journal of Higher Education Theory and Practice*, 15(5), 11–26.
- Foster, L., Neuer Colburn, A., & Briggs, C. (2018). Language & online learning: Inform, inspire, and engage virtual learning communities. *The Journal of Counselor Preparation and Supervision*, 11(1), Article 6. <https://repository.wcsu.edu/jcps/vol11/iss1/6>
- Frasineanu, E. S., & Ilie, V. (2017). Student-centered education and paradigmatic changes. *Revista De Stiinte Politice*, 54, 104–117.

- Ghavifekr, S., & Rosdy, W.A.W. (2015). Teaching and learning with technology: Effectiveness of ICT integration in schools. *International Journal of Research in Education and Science*, 1(2), 175–191.
<https://www.ijres.net/index.php/ijres/article/view/79>
- Gil, J. M. S., Ornellas, A., & Carballo, J. A. (2018). La situación cambiante de la universidad en la era digital [The changing situation of university in the digital age]. *Revista Iberoamericana De Educación a Distancia*, 21(2), 31–49.
<https://doi.org/10.5944/ried.21.2.20673>
- Goad, T., & Jones, E. (2017). Training online physical educators: A phenomenological case study. *Education Research International*, 2017, 1–12.
<https://doi.org/10.1155/2017/3757489>
- González-Pérez, A. (2017). Dinamización tecnológica de la escuela a través del liderazgo del coordinador TIC [Technological dynamism of school through the leadership of the ICT coordinator]. *Estudios Pedagógicos (Valdivia)*, 43(2), 115–125.
<https://doi.org/10.4067/S0718-07052017000200006>
- Ianos, M. G. (2017). Online feedback in learning. Students' perceptions. *eLearning & Software for Education*, 2, 371–378. <https://doi.org/10.12753/2066-026X-17-138>
- Jacobson-Lundeberg, V. (2016). Pedagogical implementation of 21st-century skills. *Educational Leadership and Administration*, 27, 82-100.
<https://files.eric.ed.gov/fulltext/EJ1094407.pdf>
- Khan, S. N. (2014). Qualitative research method-phenomenology. *Asian Social Science*, 10(21), 298–310. <https://doi.org/10.5539/ass.v10n21p298>

- Kilburn, A., Kilburn, B., & Hammond, K. (2017). The role of quality in online higher education. *Journal of Higher Education Theory and Practice*, 17(7), 80–86.
<https://www.articlegateway.com/index.php/JHETP/article/view/1469>
- Kranzow, J. (2013). Faculty leadership in online education: Structuring courses to impact student satisfaction and persistence. *Journal of Online Learning and Teaching*, 9(1), 131–139. https://jolt.merlot.org/vol9no1/kranzow_0313.pdf
- Laing, C. L., & Laing, G. K. (2015). A conceptual framework for evaluating attrition in online courses. *The e-Journal of Business Education & Scholarship of Teaching*, 9(2), 39–55. <https://files.eric.ed.gov/fulltext/EJ1167354.pdf>
- La Madriz, J. (2016). Factores que promueven la deserción del aula virtual [Factors that promote the defection of the virtual classroom]. *Revista Orbis*, 12(35), 18–40.
<http://www.revistaorbis.org/pdf/35/art2.pdf>
- Lee, J., & Martin, L. (2017). Investigating students' perceptions of motivating factors of online class discussions. *International Review of Research in Open and Distance Learning*, 18(5), 148–172. <https://doi.org/10.19173/irrodl.v18i5.2883>
- Leech, N. L., & Onwuegbuzie, A. J. (2007). An array of qualitative data analysis tools: A call for data analysis triangulation. *School Psychology Quarterly*, 22(4), 557–584. <https://doi.org/10.1037/1045-3830.22.4.557>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. SAGE Publications.
- Liou, D., Chih, W., Yuan, C., & Lin, C. (2016). The study of the antecedents of knowledge sharing behavior. *Internet Research*, 26(4), 845–868.
<https://doi.org/10.1108/IntR-10-2014-0256>

- Liu, X., Magjuka, R. J., Bonk, C. J., & Lee, S. (2007). Does sense of community matter? An examination of participants' perceptions of building learning communities in online courses. *Quarterly Review of Distance Education*, 8(1), 9–24, 87–88.
- Mantravadi, S., & Snider, D. (2017). Online teaching overview and misconceptions: Two keys of sustainability in online courses and tools. *Journal of Higher Education Theory and Practice*, 17(7), 106–110.
<https://www.articlegateway.com/index.php/JHETP/article/view/1472>
- Marí, R., Bo, R. M., & Climent, C. I. (2010). Propuesta de análisis fenomenológico de los datos obtenidos en la entrevista [Proposed phenomenological analysis of data obtained in the interview]. *Ciències de l'Educació*, 1(7), 113–132.
<https://doi.org/10.17345/ute.2010.1.643>
- Markova, T., Glazkova, I., & Zaborova, E. (2017). Quality issues of online distance learning. *Procedia-Social and Behavioral Sciences*, 237, 685–691.
<https://doi.org/10.1016/j.sbspro.2017.02.043>
- Mbati, L., & Minnaar, A. (2015). Guidelines towards the facilitation of interactive online learning programmes in higher education. *International Review of Research in Open & Distance Learning*, 16(2), 272–287.
<https://doi.org/10.19173/irrodl.v16i2.2019>
- Mehboob-Ul-Hassan, & Akbar, R. A. (2016). Attitudes and practices of secondary school students about information communication technology: A comparison by gender, locale and subjects of study. *Journal of Educational Research*, 19(1), 24–38.
<https://prdb.pk/article/attitudes-and-practices-of-secondary-school-students-about-i-3398>

- Mills, J. D. (2015). Learning management systems must evolve to curb student attrition. *Journal of Applied Learning Technology*, 5(4), 41–45.
- Moate, R. M., & Cox, J. A. (2015). Learner-centered pedagogy: Considerations for application in a didactic course. *The Professional Counselor*, 5(3), 379–389.
<https://doi.org/10.15241/rmm.5.3.379>
- Moore, R. (2014). Importance of developing community in distance education courses. *TechTrends: Linking Research & Practice to Improve Learning*, 58(2), 20–24.
<https://doi.org/10.1007/s11528-014-0733-x>
- Moustakas, C. (1994). *Phenomenological research methods*. SAGE Publications.
<https://doi.org/10.4135/9781412995658>
- Murdock, J. L., & Williams, A. M. (2011). Creating an online learning community: Is it possible? *Innovative Higher Education*, 36(5), 305–315.
<https://doi.org/10.1007/s10755-011-9188-6>
- Oatley, K. (2017). *Perceptions and representations: The theoretical bases of brain research and psychology*. Routledge.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods: Integrating theory and practice* (4th ed.). SAGE Publications.
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20(2), 76–85.
<https://nsuworks.nova.edu/tqr/vol20/iss2/7>
- Phirangee, K. (2016). Students' perceptions of learner-learner interactions that weaken a sense of community in an online learning environment. *Online Learning*, 20(4), 13–33. <https://files.eric.ed.gov/fulltext/EJ1124630.pdf>

- Poulin, R., & Straut, T. (2016). *WCET Distance Education Enrollment Report 2016*.
<http://wcet.wiche.edu/initiatives/research/WCET-Distance-Education-Enrollment-Report-2016>
- Puzziferro, M., & Shelton, K. (2009). Challenging our assumptions about online learning: A vision for the next generation of online higher education. *Distance Learning*, 6(4), 9–20.
- Queiros, D. R., & de Villiers, M. R. (2016). Online learning in a South African higher education institution: Determining the right connections for the student. *International Review of Research in Open and Distance Learning*, 17(5), 165–185. <https://doi.org/10.19173/irrodl.v17i5.2552>
- Ransdell, S., Borrer, J., & Su, H. F. (2018). Users not watchers: Motivation and the use of discussion boards in online learning. *Distance Learning*, 15(2), 35–39.
<https://nsuworks.nova.edu/fdla-journal/vol3/iss1/4>
- Robichaud, W. (2016). Orientation programs to increase retention in online community college courses. *Distance Learning*, 13(2), 57–64.
- Russo-Gleicher, R. J. (2013). Qualitative insights into faculty use of student support services with online students at risk: Implications for student retention. *Journal of Educators Online*, 10(1), 1–32. <https://files.eric.ed.gov/fulltext/EJ1004894.pdf>
- Ryan, T. (2015). Quality assurance in higher education: A review of literature. *Higher Learning Research Communications*, 5(4), 1–12.
<https://doi.org/10.18870/hlrc.v5i4.257>

- Sanders, M., & George, A. (2017). Viewing the changing world of educational technology from a different perspective: Present realities, past lessons, and future possibilities. *Education and Information Technologies*, 22(6), 2915–2933. <https://doi.org/10.1007/s10639-017-9604-3>
- Scoppio, G., & Luyt, I. (2017). Mind the gap: Enabling online faculty and instructional designers in mapping new models for quality online courses. *Education and Information Technologies*, 22(3), 725–746. <https://doi.org/10.1007/s10639-015-9452-y>
- Seaton, J. X., & Schwier, R. (2014). An exploratory case study of online instructors: Factors associated with instructor engagement. *Journal of Distance Education*, 29(1), 1–16. <http://ijede.ca/index.php/jde/article/view/870/1538>
- Seidel, E., & Kutieleh, S. (2017). Using predictive analytics to target and improve first year student attrition. *Australian Journal of Education*, 61(2), 200–218. <https://doi.org/10.1177/0004944117712310>
- Shackelford, J. L., & Maxwell, M. (2012). Sense of community in graduate online education: Contribution of learner to learner interaction. *International Review of Research in Open and Distance Learning*, 13(4), 228–249. <https://doi.org/10.19173/irrodl.v13i4.1339>
- Shaw, M., Burrus, S., & Ferguson, K. (2016). Factors that influence student attrition in online courses. *Online Journal of Distance Learning Administration*, 19(3), 24–31. https://www.westga.edu/~distance/ojdla/fall193/shaw_burrus_ferguson193.html

- Shim, W.-J., & Perez, R. J. (2018). A multi-level examination of first-year students' openness to diversity and challenge. *Journal of Higher Education*, 89(4), 453–477. <https://doi.org/10.1080/00221546.2018.1434277>
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 1–8. http://www.itdl.org/Journal/Jan_05/article01.htm
- Simpson, O. (2013). Student retention in distance education: Are we failing our students? *Open Learning*, 28(2), 105–119. <https://doi.org/10.1080/02680513.2013.847363>
- Sorensen, C., & Donovan, J. (2017). An examination of factors that impact the retention of online students at a for-profit university. *Online Learning*, 21(3), 206–221. <https://doi.org/10.24059/olj.v21i3.935>
- Stoessel, K., Ihme, T. A., Barbarino, M., Fisseler, B., & Stürmer, S. (2015). Sociodemographic diversity and distance education: Who drops out from academic programs and why? *Research in Higher Education*, 56(3), 228–246. <https://doi.org/10.1007/s11162-014-9343-x>
- Sun, A., & Chen, X. (2016). Online education and its effective practice: A research review. *Journal of Information Technology Education*, 15(1), 157–190. <https://doi.org/10.28945/3502>
- Terosky, A. L., & Heasley, C. (2015). Supporting online faculty through a sense of community and collegiality. *Online Learning*, 19(3), 147–161.
- Travers, S. (2016). Supporting online student retention in community colleges. *Quarterly Review of Distance Education*, 17(4), 49–61.

- Trespalacios, J., & Perkins, R. (2016). Sense of community, perceived learning, and achievement relationships in an online graduate course. *Turkish Online Journal of Distance Education*, 17(3), 31–49. <https://files.eric.ed.gov/fulltext/EJ1106347.pdf>
- Valentine, K., Kopcha, T., & Vagle, M. (2018). Phenomenological methodologies in the field of educational communications and technology. *TechTrends*, 62, 1–11. <https://doi.org/10.1007/s11528-018-0317-2>
- Watts, L. (2016). Synchronous and asynchronous communication in distance learning: A review of the literature. *Quarterly Review of Distance Education*, 17(1), 23–32.
- Witzig, L., Spencer, J., & Myers, K. (2017). Social media: Online versus traditional universities and developing communities? *Journal of Higher Education Theory and Practice*, 17(6), 39–52. <https://articlegateway.com/index.php/JHETP/article/view/1524>
- Youngju, L., Jaeho, C., & Taehyun, K. (2013). Discriminating factors between completers of and dropouts from online learning courses. *British Journal of Educational Technology*, 44(2), 328–337. <https://doi.org/10.1111/j.1467-8535.2012.01306.x>
- Zhong, L. (2018). Strategies and practices related to teaching large online classes. *Journal of Higher Education Theory and Practice*, 18(1), 152–166. <https://doi.org/10.33423/jhetp.v18i1.541>

APPENDIX A

CityU Research Participant Informed Consent



School/Division of School of Applied Leadership

CITYU RESEARCH PARTICIPANT INFORMED CONSENT

Title of Study:

The experience of online sense of community of students and how it affects their decision to withdraw from online education.

Name and Title of Researcher(s):

Enrique Bonilla, Doctoral Candidate

For Faculty Researcher(s):

Department: School of Applied Leadership

Telephone: 803.714.3770

City U Email: downingsherri@cityu.edu

Immediate Supervisor: Dr. Joel Domingo

For Student Researcher(s):

Faculty Supervisor: Dr. Sher Downing

Department: School of Applied Leadership

Telephone: 894.841.5195

City U E-mail: ebonilla@cityuniversity.edu.mx

Program Coordinator (or Program Director):

Dr. Joel Domingo

Sponsor, if any:

Key Information About this Research Study

You are being invited to participate in a research study.

The researcher will explain this research study to you before you will be asked to participate in the study and before you sign this consent form.

- You do not have to participate in this research.
- It is your choice whether or not you want to participate in this research.
- Your participation is voluntary and you can decide not to participate or withdraw your participation at any time without penalty or negative consequences.

- You should talk to the researcher(s) about the study and ask them as many questions you need to help you make your decision.

What should I know about being a participant in this research study?

This form contains important information that will help you decide whether to join the study. Take the time to carefully review this information.

You are eligible to participate in this study because you are either a former online student or currently enrolled student who has withdrawn from online education.

You will be in this research study for approximately 1 hour.

About 30 individuals will participate in this study.

To make your decision, you must consider all the information below:

- The purpose of the research
- The procedures of the research. That is, what you will be asked to do and how much of your time will be required.
- The risks of participating in the research.
- The benefits of participating in the research and whether participation is worth the risk.

If you decide to join the study, you will be asked to sign this form before you can start study-related activities.

Why is this research being done?

Purpose of Study:

Explore online communication characteristics that contribute to students' specific needs and to a sense of community as perceived by students and how their experience affects their decision to withdraw from online education.

Research Participation:

You will be asked to participate in the following procedures:

I understand I am being asked to participate in this study in one or more of the following ways (initial options below that apply):

Respond to in-person and/or telephone Interview questions; approximate time 60 minutes.

Answer written questionnaire(s); approximate time _____

Participate in other data gathering activities, specifically, _____; approximate time _____

Other, specifically, _____. Approximate time _____

You may refuse to answer any question or any item in verbal interviews, written questionnaires or surveys, and you can stop or withdraw from any audio or visual recording at any time without any penalty or negative consequences.

Are there any risks, stress or discomforts that I will experience as a result of being a participant in this study?

Taking part in this research involves certain risks: This could include:

Will being a participant in this study benefit me in any way?

We cannot promise any benefits to you or others from your participation in this research.

However, possible benefits may include _____.

You will not receive any payment for participation in this study.

Confidentiality

I understand that participation is confidential to the limits of applicable privacy laws. No one except the faculty researcher or student researcher, his/her supervisor and Program Coordinator (or Program Director) will be allowed to view any information or data collected whether by questionnaire, interview and/or other means.

If the student researcher's cooperating classroom teacher will also have access to raw data, the following box will be initialed by the researcher.

Steps will be taken to protect your identity, however, information collected about you can never be 100% secure. Your name and any other identifying information that can directly identify you will be stored separately from data collected as part of the research study. The results of this study will be published as a thesis and potentially published in an academic book or journal, or presented at an academic conference. To protect your privacy no information that could directly identify you will be included.

All data (the questionnaires, audio/video tapes, typed records of the interview, interview notes, informed consent forms, computer discs, any backup of computer discs and any other storage devices) are kept locked and computer files will be encrypted and password protected by the researcher. The research data will be stored for 5 years. At the end of that time all data of whatever nature will be permanently destroyed. The published results of the study will contain data from which no individual participant can be identified.

Signatures

I have carefully reviewed and understand this consent form. I understand the description of the research protocol and consent process provided to me by the researcher. My signature on this form indicates that I understand to my satisfaction the information provided to me about my participation in this research project. My signature also indicates that I have been apprised of the potential risks involved in my participation. Lastly, my signature indicates that I agree to participate as a research subject.

My consent to participate does not waive my legal rights nor release the researchers, sponsors, and/or City University of Seattle from their legal and professional responsibilities with respect to this research. I understand I am free to withdraw from this research study at any time. I further understand that I may ask for clarification or new information throughout my participation at any time during this research.

I have been advised that I may request a copy of the final research study report. Should I request a copy, I understand that I will be asked to pay the costs of photocopy and mailing.

Participant's Name: _____
Please Print

Participant's Signature: _____ Date: _____

Researcher's Name: Enrique Bonilla
Please Print

Researcher's Signature: _____ Date: _____

If I have any questions about this research, I have been advised to contact the researcher and/or his/her supervisor, as listed on page one of this consent form.

Should I have any concerns about the way I have been treated or think that I have been harmed as a research participant, I may contact the following individual(s):

Dr. Joel Domingo, Program Director, City University of Seattle, 21 Wall Street, Suite 100, Seattle, WA 98121. 206-239-4500. info@cityu.edu

This study has been reviewed and has been approved by the Institutional Review Board (IRB) of City University of Seattle. If you have questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the IRB at IRB@Cityu.edu.

APPENDIX B

Research Questions

Research question	Corresponding interview questions
1. What online communication characteristics contribute to a sense of community in an online program?	1. How familiar are you with the concept of sense of community? 2. How is the communication in the online program? 3. What tools are the most used in the online program to communicate? 4. What elements of online communication did you prefer? 5. What does it mean for you to feel part of the online program community? 6. How would you define the online program communication?
2. How does the perceived sense of community in an online program affect student experience?	7. Tell me how is your experience in the online program? 8. Tell me an experience in which you felt part of the community? 9. Feeling part of the community affects your experience in the program. How?
3. How does student experience contribute to the decision to withdraw from an online program?	10. In general, feeling part of the community makes you feel more involved in the online program? 11. Overall what makes you feel less involved in the online program? 12. How does it affect you in your studies to feel part of the online program community?