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USING TRANSACTIONAL DISTANCE THEORY TO EXPLORE THE
EXPERIENCES OF COMMUNITY COLLEGE STUDENTS IN ONLINE
DEVELOPMENTAL COURSES

by

Brian Gerber

A Dissertation

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Doctor of Education

Major: Adult Education

The University of Memphis

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Dedication

This dissertation is dedicated to my wife, Janine, and to all of my family. Thank you all for everything.

Acknowledgements

I am very grateful to have been given this opportunity to complete my doctoral degree. There are many people I would like to thank for their continued support. It would be hard to imagine completing this dissertation without the support and guidance along the way.

First, I would like to thank God for making this possible. From taking the GRE exam, to getting accepted into the University of Memphis, to the last aspect of the degree, you were with me the entire time. You have blessed me in many ways and I will be eternally grateful. You helped me meet the next person I would like to thank as well; the love of my life, my beautiful wife Janine.

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Abstract

The number of community college students taking online courses has steadily increased, which includes students enrolling in online developmental courses. Community colleges have largely embraced online learning in order to improve student access, but many difficulties (e.g. low passing rates, high withdrawal rates) have been discovered in the area of online learning. Therefore, the purpose of this qualitative study was to explore the experiences of community college students in online developmental courses. The research question that guided this study was:

1. Using Transactional Distance Theory, what is the experience of community college students in online developmental courses?

Data was collected using phenomenological semi-structured interviews. Open coding and thematic analysis were used to determine the common experiences shared by community college students in online developmental courses. Results indicated that the majority of students did not appear to experience great amounts of transactional distance in their online developmental courses. Students also largely spoke of quality dialogue with their instructor, a disconnect from classmates, a well-organized structure, no desire to have autonomy in course content selection, and a desire for autonomy with self-paced online developmental courses. Future research is recommended to understand the experiences of community college students enrolled in online developmental courses.

Keywords: online, developmental, community college, phenomenology

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Chapter 1

Introduction

In the mid-1990s, colleges and universities did not offer many online courses, but in the years since then, the field of online education has evolved from a novel idea to the mainstream (Garrett, Legon, & Fredericksen, 2019). Approximately one out of three students in the U.S. higher education system has taken at least one online course (Seaman, Allen, and Seaman, 2018). With the growing number of students taking online courses, the quality and efficacy of online courses has come into question. Many of these students taking online courses are enrolled at community colleges and as the National Center for Education Statistics (NCES) reported, public two-year colleges had the highest distance education participation (NCES, 2015). These community college students who do not test highly enough on placement tests or standardized tests like the ACT are often required to take developmental courses before being allowed to enroll in the college level course (e.g. developmental writing before English Composition). Many of these students can now take their developmental courses online, which could potentially be problematic, due to the lack of face to face interaction between the students and instructor. Much remains to be understood about how community college students in online developmental courses experience their online developmental courses, as there is limited research in this area.

In the following sections of this chapter, the background of the study topics is introduced, followed by an introduction to the study's purpose, research question, significance, theoretical framework, and a definition of terms.

Background of the Study

Community colleges. Community colleges have been providing education to students for many years and are primarily made up of two-year public institutions that provide lower-

level tertiary education. Academic transfer to universities, occupational education, continuing education, developmental education, and community service are some of the primary ways in which community colleges contribute to our nation's higher education system (Cohen, Brawer, Kisker, 2014). However, community colleges have faced many challenges throughout their history. For example, it has been shown that 39% of degree-seeking community college students complete a degree or certificate within 6 years, which is less than any other institutional pathway (Shapiro, Dundar, Yuan, Harrell, & Wakhungu, 2014). One of the struggles concerning community colleges is the prevalence of community college students who need developmental education.

Developmental education in community colleges. Developmental education courses typically include supporting student skill building in reading, writing, and math (Tomlinson, 1989). These courses are often taken at a community college (Xu & Dadgar, 2018), with approximately 68% of the students who began at a community college taking one or more developmental courses within six years of their entry into the college (Chen, 2016). This is problematic because a high proportion of students assigned to developmental courses drop out of college in their first or second semester (Bailey, Jeong, & Cho, 2010; Jaggars & Hodara, 2011). The evidence is mostly negative for developmental education, as research suggests that community college students who are required to enroll in developmental education are at a disadvantage (Jaggars, 2011; Jaggars, 2013b; Smart & Saxon, 2016). Research has suggested that academically underprepared students may struggle with skills like self-direction, self-discipline, and seeking help; which many college instructors believe are important skills to be successful in online courses (Liu, Gomez, Khan, & Yen, 2007).

Online developmental education challenges. With the increased availability of online courses, students can enroll in online developmental courses at some colleges and universities. One of the challenges surrounding online developmental education is that there is a lack of research on the efficacy of online instruction in community colleges (Ashby, Sadera, & McNary, 2011; Coleman, Skidmore, & Martirosyan, 2017). In regards to online developmental education, the limited amount of research suggests problems. For example, Jaggars (2013b) reported that academically unprepared students taking developmental courses online have been shown to have withdrawal and failure rates more than twice as high as those taking developmental courses face-to-face. Similarly, Smart and Saxon (2016) found that students enrolled in online developmental courses were far more likely to withdraw or attain a non-passing, nontransferable grade than students who took the course in a face-to-face format. Even after completing the online developmental course, students are far less likely to pass their gatekeeper courses (e.g. English Composition I) than students who took their developmental course(s) face-to-face (Jaggars, 2013b).

Transactional Distance Theory. There are several theories which explore online education. One theory that is often used in research is Transactional Distance Theory.

Transactional Distance Theory (TD), proposed by Moore (1993), refers to the degree of psychological distance between the learner and the teacher. TD suggests that, although the separation by space and time is the most noticeable characteristic of distance (online) education, “transactional distance is the actual guiding principle in distance education, influencing the process of teaching and learning” (Weidlich & Bastiaens, 2018, p. 223). Three major dimensions of transactional distance theory were defined by Moore (1993) as the following: dialogue, structure, and learner autonomy. Dialogue concerns the interactions of the instructor

and students, structure refers to the flexibility of the course, and learner autonomy refers to the level of independence the learner has in determining how the course operates (Moore, 1993). Each of the three dimensions is said to influence the transactional distance in online learning environments and the three dimensions are interrelated Moore (1993).

Statement of the Problem

There are several problems when it comes to students in online developmental courses. Students who are assigned to developmental courses drop out of college at a high proportion (Bailey, Jeong, & Cho, 2010; Jaggars & Hodara, 2011; McCann, 2017). These academically unprepared students in online developmental courses have been shown to have withdrawal and failure rates more than twice as high as those taking developmental courses face-to-face (Jaggars, 2013b). The research showing poor performance of developmental students, combined with research showing the difficulties of completing these developmental courses online have sparked much of this advocacy for research into online developmental courses (Bautsch, 2011; Cohen & Brawer, 2014; Jaggars, 2013b; Nawrocki, Baker, and Corash, 2009). Students who do not pass their developmental courses will not be able to graduate from college either, as developmental courses must first be passed before taking the college level course in that subject. Without a college degree, an individual is at several disadvantages. According to the Bureau of Labor Statistics (2018), a college degree holder statistically will have a lower unemployment rate and higher median weekly earnings. This is true for both associate and bachelor degrees. Belfield and Bailey (2017) state that persons who do not complete any type of credential beyond a high school diploma face a dramatically reduced earning potential.

There is also a theoretical rationale for conducting the present study. The current literature does not address the experiences of the students who are enrolled in online

developmental courses. At this time, studies have been focused on quantitative results, such as the passing rates of students and the average GPA (Jaggars, 2013b; Smart & Saxon, 2016). The numbers are discouraging when examining students in online developmental courses and the research is there to confirm that students are struggling in online developmental courses.

However, the current research is missing the “why” behind those numbers. Additionally, the student perspective is almost entirely absent. Online education at community colleges is not a heavily researched area, as a lack of research concerning the efficacy of online instruction in community colleges has been noted (Ashby, Sadera, & McNary, 2011; Coleman, Skidmore, & Martirosyan, 2017). Online developmental courses at community colleges are researched even less. Researchers have identified a need to give online developmental students a voice in order to explore the experiences that may be unique to this specific type of online learner (Howland & Moore, 2002; Yukselturk & Bulut, 2007). Definite statements about online courses are difficult to make and more research needs to be completed (Gregory & Lampley, 2016). This is true of online courses in general, but even more true for online developmental courses and the student experiences in this specific type of course.

Transactional Distance Theory has been used to examine the psychological distance present in online courses between the learner and teacher (Moore, 1993; Weidlich & Bastiaens, 2018). Literature has suggested that the three dimensions of Transactional Distance Theory (dialogue, structure, and autonomy) do contribute to the student perceptions of online course delivery (Bischoff, Bisconer, Kooker & Woods, 1996; Saba & Shearer, 1994). However, Transactional Distance Theory has not been applied specifically to online developmental education at community colleges. As developmental students may experience different challenges than other students, applying Transactional Distance Theory to online developmental

students can provide new and meaningful information. For instance, autonomy is one of the components of Transactional Distance theory, which is “the extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program” (Moore, 1993, p. 31). In other words, autonomy is a characteristic of learners who can control and manage their learning in a self-reliant manner. A student in developmental education is in the course because of low test scores in a certain subject. It is reasonable to predict that an individual with low test scores or knowledge in a certain subject would struggle to be self-reliant in their learning. In fact, the University of Texas, the Gates Foundation, and the National Institute for Staff and Organizational Development suggest that a lack of study skills is the underlining issue with students needing developmental education (Jacobs, 2010). Further, Moore (2013) stated that “highly autonomous learners are able to cope with a lower degree of dialogue but less autonomous learners need a relatively high degree of dialogue” (p. 71). As students taking developmental courses are unlikely to be highly autonomous within the content area, the need for dialogue with the instructor would be high. A negative element of online learning that is commonly reported is a greater feeling of student detachment when compared to face-to face courses (Ekstrand, 2012). This is possibly due to the lack of face-to-face interactions often found in a traditional classroom. Therefore, it could be beneficial from a theoretical rationale to view the transactional distance experienced in online developmental courses by these students, as students in online developmental courses could potentially need more dialogue than students not requiring developmental courses.

Purpose Statement

The purpose of this phenomenological study was to gain insight into the experiences of students taking online developmental courses at a community college. Transactional Distance Theory was used to describe the experiences of online developmental students, with special emphasis on the dialogue dimension of the theory. In essence, the purpose of this study was to explore how students experienced transactional distance in their online developmental course(s). The study was phenomenological and focused on describing the student experience in the online developmental course. Interviews of students who had completed an online developmental course at a community college were conducted in order to gain understanding of the student experience more fully. These interviews took place at a small community college located in a Southeastern state in the United States of America during 2019.

Research Question

1. Using Transactional Distance Theory, what is the experience of community college students in online developmental courses?

Significance of the Study

The topic of community college students in online developmental courses is of great importance. As mentioned, 68% of community college students are taking one or more developmental courses within six years of their entry into the college (Chen, 2016), with a high proportion of students assigned to developmental courses dropping out of college in their first or second semester (Bailey, Jeong, & Cho, 2010; Jaggars & Hodara, 2011). With such a large population taking these courses, research on this specific type of course is essential. Researchers have found that students face more difficulties when taking online developmental courses online vs. face-to-face as well (Jaggars, 2013b; Smart & Saxon, 2016). With online enrollment

increasing (Allen, Seaman, & Allen, 2018), the importance of understanding how academically underprepared students are experiencing their online developmental courses also increases. As many careers require educational credentials beyond a high school diploma, increasing the success of students who struggle from the very beginning of their post-secondary education is important. Earning potential will be increased with increased education, which could result in more opportunities and a better quality of life (Bureau of Labor Statistics, 2018). The present study explored an at risk student population (online developmental community college students) in order to gain an understanding of what the experience is like for these students. This is significant in order to improve these online developmental courses. Improving these courses and the student experiences in these courses could have a major effect on the success of this at risk student population in not only their developmental courses, but on the courses that are taken thereafter.

Theoretical Framework

With qualitative research, the theoretical framework informs the methodology and provides the “context for the process and grounding of its logic and criteria” (Crotty, 1998, p. 3). The theoretical framework used in this study is Transactional Distance Theory. Phenomenology seeks to find truth in humans’ lived experiences so that deeper understanding or meaning of a phenomena can occur (Earle, 2010; Mapp, 2008). As the experiences of the community college students in online developmental courses will be explored in this study, hermeneutic phenomenology will be appropriate. Transactional Distance theory will also be appropriate to use in this study as the theory aims at understanding distance education related subject material; which this study will do. Student experiences will be viewed through the lens of Transactional

Distance Theory. Chapter three expounds on how phenomenology and Transactional Distance Theory influenced the methodology of this study.

Definition of Terms

In order to clearly differentiate the various terms used throughout this research study, the following definitions are presented. The terms without citations were created by the researcher.

- *Autonomy*: “Learner autonomy is the extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program” (Moore, 1993, p. 31).
- *Community college*: Higher education institutions that are primarily made up of two-year public institutions that provide lower-level tertiary education.
- *Dialogue*: “Dialogue is developed by teachers and learners in the course of positive interactions that occur when one gives instruction and the others respond. Each party in a dialogue is a respectful and active listener; each is a contributor, and builds on the contributions of the other party or parties” (Moore, 1993, p. 24).
- *Online course*: A course in which the instructor and students are not physically present for class instruction and that can be completed asynchronously.
- *Phenomenology*: Qualitative research approach which seeks to find the truth in the lived experience of humans so that there can be a deeper understanding or meaning of a phenomena’s experience (Earle, 2010; Mapp, 2008, van Manen, 2014)
- *Structure*: “Structure expresses the rigidity or flexibility of the program’s educational objectives, teaching strategies, and evaluation methods. It describes the extent to which

an educational program can accommodate or be responsive to each learner's individual needs" (Moore, 1993, p. 26).

- *Transactional distance*: the degree of psychological distance between the learner and the teacher (Moore, 1993)

Research Design

This study's research approach used phenomenology, as the study aims to explore the experiences of the community college students in online developmental courses. Purposeful sampling (Patton, 2015) was used, as 8 students were interviewed for this study. The interviews took approximately 30 minutes and each participant was asked to confirm the accuracy of the transcription, as well as to add any additional information. During the interviews, the researcher took field notes to capture the researcher's thoughts and to start the formulation of themes. The syllabi of developmental reading, writing, and math (the syllabi of the participants' online developmental courses) were examined to view inconsistencies from the participant's words and what the syllabus stated. For data analysis, the researcher analyzed the data from the moment it was captured in the interviews and revisited the data multiple times. Bracketing was used to allow the researcher to put aside assumptions and viewpoints about the data. Open coding (Khandkar, 2009) and thematic analysis (Saldaña, 2016) were utilized in this study as well. Holistic coding was used to first capture the essence of what was being said, followed by line by line coding. From these codes, themes were made based on their relation to the three dimensions of Transactional Distance Theory (i.e. dialogue, structure, autonomy).

Assumptions

There were two, core assumptions included in this study. First, there was an assumption that students in developmental education courses are not proficient in that content area. If this

were not the case, the students would be in the college-level courses and not developmental courses. Second, there was an assumption of truthful responses from the students. The researcher assumed that the responses given in the interviews were from students freely discussing their experiences.

Limitations

In this study, there were several limitations. First, there was a limitation of time. This study explored the experiences of students from a limited time range. As years go by, changes (e.g. technology improvements) could affect how this study is interpreted or used. There was also the limitation of geographic area. This study utilized one community college from one state. Because of this geographic limitation, the results may not be generalizable to other areas. Additionally, there was a limitation of participation bias. It is possible that students who did not do well in their online developmental courses would not want to participate in a research study about that topic. Results from this study may have been affected by suggesting a more favorable view of the courses than would otherwise be shown by a more representative participant sample. The validity and reliability are limited in this type of study as well. Wiersma (2009) states that, “Because qualitative research occurs in the natural setting it is extremely difficult to replicate studies” (p. 211).

Delimitations

There were also delimitations in this study. The researcher chose to examine the topic of students in online developmental courses because of the researcher’s interest and thoughts on the usefulness of the results. Additionally, the researcher purposely excluded students from participating in this study, if the student dropped their online developmental course(s), in an attempt to ensure students were enrolled the entire semester. Although students who drop out of

their course(s) could provide important information, the purpose of the study was better satisfied by examining students who completed the semester (pass or fail).

Study Overview

This chapter gave an overview of what was included in the dissertation. In chapter two, a literature review on the areas concerning community college students in online developmental courses, as well as a literature review on Transactional Distance theory will be discussed. Chapter three will discuss the methodology that influenced the answering of the study's research questions, with chapter four as a presentation of the findings of the study. Finally, chapter five offers a discussion that relates this research study's findings to the research question, with a section on the implications for future research and practice based on the findings.

Chapter 2

Review of the Literature

In this chapter, a review of the relevant literature is explored. Topics include community colleges, developmental education, online education, the relationship of the three aforementioned topics, and transactional distance theory.

Community Colleges

Community colleges are two-year public institutions providing education for students. It is estimated that around 34% of undergraduate students attend public two-year colleges, where they are more likely to be considered from a low income household (Community College FAQs, 2019). These unique institutions of higher education have been known for many things over the years. Some of the primary ways in which the community college contributes to our nation's higher education system is through academic transfer, occupational education, continuing education, developmental education, and community service (Cohen, Brawer, & Kisker, 2014). Community colleges often include a broad spectrum of educational opportunities leading to credentials, such as diplomas, certificates, and associate degrees (Miller, Grover, Deggs, D'Marco, Katsinas, & Adair, 2016). Being open access and adaptable to change are two qualities that many community colleges have embraced. Part of being accessible is not only allowing academically underprepared students to attend college, but to offer courses which are convenient to students (i.e. evening classes, online courses). Community colleges typically serve a high proportion of students from different marginalized backgrounds, such as students of color and those from low-income backgrounds (National Center for Public Policy and Higher Education, 2011). Additionally, these students are often nontraditional and have fulltime jobs, children, and/or commitments (Hachey et al., 2013). In fact, adult students aged 25 and over

have been shown to make up approximately 44% of students in community colleges (National Center for Education Statistics, 2012). With community colleges enrolling a very diverse group of students, looking for ways to better serve these students is largely beneficial, but has a history of difficulties.

While the majority of community college students enter with the hopes of earning a college degree, the completion rates aren't encouraging (Moore & Shulock, 2010). For example, researchers have found that only 39% of degree-seeking community college students complete a degree or certificate within 6 years, which is less than any other institutional pathway (Shapiro, Dunder, Yuan, Harrell, & Wakhungu, 2014). There could be many reasons for this, but many researchers speculate it is largely due to the underprepared students who often enroll in community colleges. In America, a large number of high school graduates are unprepared to take college-level courses and are placed into developmental (i.e. remedial, learning support) courses when enrolling, and it is often at a community college (Xu & Dadgar, 2018). In a Beginning Postsecondary Students Longitudinal Study (BPS) 6-year follow-up data from 2009, about 68% of students who began at a community college took one or more developmental courses within six years of their entry into the college (Chen, 2016).

Developmental Education

The term “developmental education” has been used interchangeably with “remedial education” (Casazza, 1999), with “developmental education” being the preferred term used by higher education at this time (Attewell, Lavin, Domina, & Levey, 2006). Developmental education courses typically include supporting student skill building in reading, writing, and math (Tomlinson, 1989). Students taking these courses often are required to do so, as scores on tests such as the ACT or placement tests at the higher education institution are not high enough

for students to enter college-level courses. Developmental courses have been researched in order to examine how they affect students, with the success of developmental courses being mixed. Some studies have shown that developmental education has little impact or even negative effects (Attewell et al., 2006; Martorell & McFarlin, 2007). In a study by Complete College America (2011), it was found that students who participated in developmental education were less likely to graduate than students who did not take developmental education courses. However, there are studies that show positive effects of developmental education. For example, persistence, graduation, and grades have been shown to be benefitted by developmental education (Bahr, 2008; Bettinger & Long, 2005; Moss & Yeaton, 2006). In any case, the importance of students passing their developmental education courses is high. As underprepared students must complete developmental courses before progressing into courses at the college level, low completion rates in developmental courses are especially problematic (Jaggars, 2011). A high proportion of students assigned to developmental courses drop out of college in their first or second semester as well (Bailey, Jeong, & Cho, 2010; Jaggars & Hodara, 2011), which emphasizes the need to further explore this area. One of the places where developmental education is common is at community colleges.

Developmental Education at Community Colleges

Developmental education has been seen as a politically contentious issue (Kozeracki, 2002; Soliday, 2002) due to some claiming that the existence of these kinds of courses is evidence that some students are not academically strong enough to be successful in college and should not be admitted in the first place (Harwood, 1997; Marcus, 2000; Trombley, 1998). Because of arguments like these, there has been a move to remove developmental courses from four-year universities and to encourage students in need of developmental courses to enter community

colleges instead (Bettinger & Long, 2004; Kozeracki, 2002; Soliday, 2002). Community colleges often are known for offering developmental education. This is largely because research has indicated that 50% to 80% of students are required to enroll in developmental courses when attending community colleges (Bailey, Jeong. & Cho, 2010; Complete College America, 2012; Hodara, 2015). This large percentage of students has resulted in community colleges being at the forefront of developmental education. Traditional developmental programs at community colleges typically consists of a set of multiple courses that students must enroll in sequentially (Xu & Dadgar, 2018), with students at the lowest levels often being required to complete around three semesters of developmental coursework for the subject area. However, some colleges offer a co-requisite model, where students take a developmental course at the same time as taking a college level course. For example, a student in need of a developmental reading course would take the course during the same semester as the college level English composition course. It is unknown whether shortening the sequence of developmental courses results in less desirable student outcomes (Xu & Dadgar, 2018). Xu and Dadgar (2018) examined transcript data from a state community college system and stated the following:

Despite the excessive amount of time and costs associated with remedial education for both colleges and individuals, **college** completion rates remain low among students who are required to take remedial coursework—Only 20% of students referred to developmental math and 37% of students referred to developmental reading or writing go on to pass the entry-level **college**-level course in the relevant subject (p. 62).

The passage above indicates that there are challenges for students in developmental courses and the passage is addressing developmental courses at community colleges that are delivered in any format. This would include the traditional face-to-face, hybrid (part online and

part face-to-face), and fully online developmental courses. So far, the focus of this review has been on community college students, developmental education, and the relationship among the two. The focus now will shift to online education, with a focus on community colleges.

Online Education Challenges

In an attempt to meet the student demand for convenience and flexible scheduling options and to increase student access, community colleges have been leaders in distance education (Hachey et al., 2013; Parsad & Lewis, 2008). As the number of students taking online courses has steadily increased since online courses were available, and nearly all community colleges offer online courses (Allen & Seaman, 2013), online developmental education at community colleges is increasingly becoming an option at community colleges. The *Encyclopedia of Distance Learning* states that “In America over the past 30 years, community colleges have clearly demonstrated the greatest commitment to the applications of distance education technologies” (Berg, 2005, p. 302). In this section, online education challenges across higher education are examined with possible solutions based on research.

One of the ways community colleges are attempting to serve their population is by offering online courses. In fact, as early as 2008, 97% of community colleges offered online courses, while only 66% of all postsecondary institutions were doing the same (Parsad & Lewis, 2008). The National Center for Education Statistics (NCES) has shown similar findings, as they reported that public two-year colleges had the highest distance education participation (NCES, 2015). This willingness for community colleges to adapt to the unique needs of their students is admirable, but does not come without tremendous challenges.

There have been small-scale studies of online learning in universities that have found few differences in outcomes between online and face-to-face courses (Bailey & Jaggars, 2010).

However, research on community colleges often have found lower persistence rates and course grades in online courses (e.g., Beatty-Guenter, 2003; Carr, 2000; Cox, 2006; Kaupp, 2012; Moore, Bartkovich, Fetzner, & Ison, 2003). Xu and Jaggars (2014) examined an administrative dataset including approximately “500,000 online and face-to-face courses taken by more than 40,000 degree-seeking students who initially enrolled in one of Washington State’s 34 community or technical colleges during the fall term of 2004” (p. 637), and found that all of the types of students performed worse in online courses than they did in face-to-face courses.

One common view is that distance education is speculated to have lower completion rates and higher attrition rates than face-to face courses (Robichaud, 2016). Some studies do confirm these concerns, as Schneider and Yin (2012) state that the *highest* performing public online community colleges have been reported to only have a 42% graduation rate within six years. Many colleges fall well below this number, highlighting the difficulty of persistence in online learning.

The average student has also been found as less likely to continue in the field or earn a degree if s/he takes an online course rather than a comparable face-to-face course (Huntington-Klein, Cowan, & Goldhaber, 2017). This research completed by Huntington-Klein et al. (2017) examined students in the Washington State community college system that chose to enroll in an online course. The researchers concluded that community colleges should consider actively targeting online courses toward those students most likely to do well in them, as the average student did not benefit from taking an online course. Huntington-Klein et al. (2017) also call for more research into specific departments and courses (e.g. developmental courses), as their study suggested that the degree of negative impact depended on which course was being examined.

Additionally, Taylor, Dunn, and Winn (2015) cite lower retention rates for distance education students. Some common speculations for these rates include a student's lack of self-discipline to adhere to deadlines, unfamiliarity with online courses, or an underestimation of the time required to succeed in the courses (Robichaud, 2016). Harrington (2010) suggested that online education may not be the best option for some because those who are on the "educational fringe" (p. 13) might not have the academic and reading skills that are necessary to succeed in online courses. Bork and Rucks-Ahidiana (2013) state some of the challenges as students not being able to manage time, stay organized, or recognizing when and how to ask for help. Also, a negative element of online learning that is commonly reported is a greater feeling of detachment (Ekstrand, 2012) compared to on-campus courses. This stands to reason as online students lack the face to face contact with their classmates and instructor. As higher education stresses the need for student engagement, detachment could be a very negative quality of online courses.

There have been many organizations created for the purpose of improving community colleges over the years. The Community College Research Center (CCRC) has examined online courses in community colleges and has published their findings along with their recommendations for instructors and administrators. CCRC found something that is very troubling when it comes to online learning in community colleges, because it involves some of the most vulnerable students. Academically unprepared students taking developmental courses online have been shown to have withdrawal and failure rates more than twice as high as those taking developmental courses face-to-face (Jaggars, 2013b). Developmental courses often need to be passed before a student can enter another course (e.g. pass developmental math before entering college algebra), so not being able to pass developmental courses would be a barrier to a student completing a degree. Also, there are often cases, such as college level composition

classes needing to be completed before a literature course that would be impossible for students to enroll in if they couldn't pass their developmental courses first.

Gregory and Lampley (2016) found that online students are more likely to withdraw from their course than their on-campus course peers. A trend of students withdrawing from a type of course (i.e. online courses) would require attention in order to find out the reasons for the withdraw rate. There is even some research suggesting that the students who do pass their courses may not be performing as well as their face-to face counterparts (Jaggars & Xu, 2010). This could result in a student's overall GPA dropping, which could affect scholarships or entrance into a future program/graduate school. Furthermore, students who take online courses have been shown to be less likely to attain a degree and achievement gaps between groups (e.g. blacks and whites) have been shown to widen (Xu & Jaggars, 2013). Being less likely to attain a degree could have major implications for community colleges; especially those colleges that rely on how well they perform (e.g. graduation and retention rates) for funding. Also, as community colleges strive to deliver quality education to all groups and have equality, widening achievement gaps between groups could be troublesome for the image of community colleges.

Another one of the challenges is that there is often conflicting research on online courses, which can make it difficult for colleges to make choices on the amount of online courses offered and for which disciplines. In meta-analyses comparing academic outcomes between online and face-to-face courses, several researchers have found that there is no overall difference between the online and face-to-face courses but that there is large variation in effects, with some online courses having much better outcomes than face-to-face courses and other online courses having much worse outcomes (Bernard, Abrami, Borokhovski, Wade, Tamim, Surkes, & Bethel, 2009; Zhao, Lei, Yan, Lai, & Tan, 2005). For example, Aragon & Johnson (2008) found that the types

of students who enroll in distance education courses have characteristics of students at risk for non-completion. If this was generally the case, colleges (especially those funded by performance) would need to try to make sure these at-risk students were taking on-campus courses when possible. However, Xu and Jaggars (2011) found that community college students taking online courses tend to have stronger academic preparation than the average community college student. If this was generally the case, most colleges would promote the implementation of more online courses. Aragon and Johnson (2008) also found that females had higher completion rates than males, but Park and Choi (2009) did not find any significant difference in this area. These researchers did find similar results in that student age had no relationship to completion of online courses (Aragon & Johnson, 2008; Park & Choi, 2009), but Wojciechowski and Palmer (2005) found that older students outperformed younger students in online courses.

In a large study by Atchley, Wingenbach, and Akers (2013), mixed conclusions regarding student persistence and academic performance were found. In their study, completion and academic performance was examined across several disciplines in relation to online and traditional courses. The results indicated significant differences in both academic performance and completion. The students who were enrolled in online courses were found to earn higher grades than students enrolled in traditional classes, but the students enrolled in traditional classes had higher completion rates than the online students. Additionally, significant differences were found in the completion rates between online and traditional students in different course disciplines, suggesting that some disciplines may be more difficult when taken online (Atchley et al., 2013). As one can gather, the research on online courses is mixed. With so many variables in the equation (e.g. characteristics of student, type of course), it can be difficult to make any

definite statement about online courses being beneficial (e.g. helping students graduate, higher GPA) for students and more research needs to be completed (Gregory & Lampley, 2016).

Proposed Strategies to Improve Online Student Success

With many potential obstacles in place for students to succeed in online courses, many scholars, faculty, and administrators have ideas for improving online courses in order to help students succeed. Here is an overview of a variety of strategies given through research from the past ten years. Hart (2012) suggests that expanding support systems (i.e. intervention and advising) and communicating high expectations will help improve attrition and retention rates. By being supportive to the student, problems that arise could potentially be resolved early in the semester. Lorenzo (2011) states that strategies such as the use of Web 2.0 technologies and video conferencing software have shown promise as a way of increasing student engagement and retention in online courses. It's possible that video conferencing can help provide the human interaction element often missing in online courses. Tutty and Ratliff (2012) suggest that community colleges should adopt strategies that have been effective for on-campus classes, such as competency based instruction, and try the strategies in online courses/programs. This could potentially help the students more familiar with how on-campus classes operate and could make the transition to online courses more fluid.

Additionally, mandatory online orientation and the strategic use of technology to increase contact of students with faculty and staff has been suggested, as this could be a way of creating student engagement (Tutty & Ratliff, 2012). Online orientation even has research to back its' effectiveness. Taylor et al. (2015) successfully raised the completion rate of several courses through the use of embedded videos in their learning management system (LMS). These interactive videos included how to get started in the course, some of the basic navigating, how to

use the discussion board, submit assignments, check grades, and see instructor feedback (Taylor et al., 2015). The videos were left up for the entire duration of the course so that students could view them at any time; which Simonson et al. (2012) suggested as a helpful strategy in order to make information available in multiple locations. Cho (2012) designed an online orientation that included how to use the LMS, but also included background information to help set student expectations and a self-assessment that helped students understand the traits needed to succeed in an online course. Both Cho (2012) and Taylor et al. (2015) state that an online orientation should include comprehensive information meant to guide students successfully through the course. Robichaud (2016) recommends a mandatory online orientation for all students before they take their first online course, due to the research showing the potential for increased retention and success. One could see the merit behind this proposal, as online students do not have the formal “syllabus day” during their first week and may find it confusing to figure the course out by themselves. A strategically planned online orientation could potentially drastically reduce the uncertainty many students feel when faced with the start of a new course.

Another area that researchers have examined is the development of technological skills in online learners. Researchers agree that online students tend to be more successful if they frequently use and are comfortable using the technology used (e.g. computer, internet) in the courses (Hachey et al., 2013; Harrell & Bower, 2011). This is logical, because a student who cannot navigate course management software (e.g. Desire2Learn or Blackboard) could have difficulty submitting assignments, finding course documents, and other vital aspects of an online course. Similar to the strategy of online orientation, trying to ensure students have the required skills to navigate an online course could prove to be beneficial. As some on-campus courses have prerequisites, online courses could have a prerequisite of completing a computer skills class

or at least an online orientation. This would be an attempt of getting students to have the fundamental knowledge of how to participate in an online course.

One group of researchers suggested an interesting strategy to improve online success in community colleges. Their suggestion was to try to balance some of the negative results found through research of online courses against the attractive features of online courses, and that community colleges should consider actively targeting online courses toward those students who are most likely to succeed in them (Huntington-Klein, Cowan, & Goldhaber, 2017). In their study, they found that online mathematics had the least harmful effects on graduation and online sociology encouraged students to take a follow-up sociology course (Huntington-Kelin, Cowan, & Goldhaber, 2017, p. 264). These examples could indicate that colleges should be selective in deciding which courses to make available online. These results could vary widely depending on the college, and so each college would need to conduct meaningful data on their online courses to determine if these courses were helping or hurting the students.

Addressing student expectations is another area that could potentially improve online courses. Bork & Rucks-Ahidiana (2013) found that the expectations for online courses can differ widely between students and faculty, and propose that colleges use this data to make online courses more satisfying for both groups. Glenn (2018) says that “asynchronous settings create a disadvantage to students, particularly those who erroneously think that online course work somehow requires less work” (p. 382). In fact, students taking online courses at the undergraduate and graduate levels often fail to understand the time commitment and effort involved (Kamphoff et al., 2006–2007). Informing students of the time commitment required and addressing any incorrect expectations would be a way of making sure that students know what they are getting into when enrolling in an online course.

Jaggars and Edgecombe (2013a) give several strategies to improve online courses. In addition to going over technological requirements for students (as was mentioned in previous strategies), the behaviors and responsibilities needed to succeed would need to be addressed as well. Some of these skills would include time management and reading strategies. Jaggars and Edgecombe (2013a) go as far as stating that colleges could consider requiring students to have a certain GPA to enroll in online classes, due to the research showing low GPA is associated with higher failure and withdraw rates. Some colleges do this already, by limiting or getting rid of online developmental courses because of the research showing low student performance.

Student support through early warning systems, technical support, and tutoring could also help students in online courses, as well as the quality of design by faculty. It is suggested that colleges set up their early warning systems to look for common problems in online courses (e.g. student fails to submit assignment) in order to quickly remedy the problem, and to offer online and non-traditional hour technical support and tutoring services (Jaggars & Edgecombe, 2013a). Since many students take online courses because of their complicated schedules, being able to offer services at times that work for those students is necessary. As for the design of the online course by faculty, it is recommended that faculty go through a process (i.e. training) with a course designer to ensure the class meets the standards for an online course. This is said to assist faculty members in using instructional tools and strategies that would improve student engagement and the interactions between students and faculty. As some research has indicated that the level of interpersonal interaction by faculty members is the most important quality that affects student grades (Jaggars & Xu, 2013), colleges will want to examine ways to improve this area of online courses.

In this section, a review of some of the major challenges faced in online courses, as well as some of the recommended strategies to improve student success in these courses were examined to highlight the complex nature of online courses and the innovative teaching methods being implemented. As the number of students taking online courses increases steadily year after year (Allen & Seaman, 2013), community colleges are becoming more aware of the need for these courses and the possible challenges. The research is mixed on how beneficial or harmful online courses are to students, and it appears that distance learning is an area that needs continued research. If individual colleges identify the students most likely to fail and the students most likely to succeed in an online environment, colleges may be able to implement their online courses in the most beneficial way. In the next section, a very specific type of online course offered at community colleges is examined.

Online Developmental Education at Community Colleges

With community colleges increasing their enrollment at a more rapid pace than four-year universities (Ashby, Sadera, & McNary, 2011) and with the potential of cost savings of online course delivery, some community college administrators have decided to offer some developmental courses online (Coleman, Skidmore, & Martirosyan, 2017). An online developmental course is the same developmental course that is conducted face-to-face, but where the students are primarily completing their course online. Depending on the institution, sometimes developmental courses can be self-paced regardless of the format (i.e. face-to-face, online). An online developmental reading, writing, or math course (the three most common developmental courses taken by students) typically would require the student to read course assignments and submit homework and take quizzes/tests through an online platform. There is a lack of research on the efficacy of online instruction in community colleges (Ashby, Sadera, &

McNary, 2011), and even less research when online developmental education at community colleges is the focus. The limited amount of research on online developmental education at community colleges indicates possible challenges for students taking online developmental courses. For example, research has found that those students who took developmental courses online were far less likely to pass the first-level gatekeeper courses than those students who had taken developmental courses face-to-face, and that Hispanic, Black, and low-income students are more likely to take developmental courses than their White and more affluent peers (McGlynn, 2013). Jaggars (2013b) reported that academically unprepared students taking developmental courses online have been shown to have withdrawal and failure rates more than twice as high as those taking developmental courses face-to-face. Smart and Saxon (2016) found similar results, as students enrolled in the online developmental course were far more likely to withdraw from the course or attain a non-passing, nontransferable grade than their counterparts who chose the face-to-face course format. Additionally, students who took developmental courses online were also found to be significantly less likely to enroll in first-level gatekeeper math and English courses, with the students who did enroll in a gatekeeper course after taking a developmental education online being far less likely to pass than students who had taken the course face-to-face (Jaggars, 2013b). Further, some researchers claim that academically underprepared college students may also struggle with social and psychological skills. These skills could include self-direction, self-discipline, and seeking help, which many colleges believe are important skills to be successful in online courses (Liu, Gomez, Khan, & Yen, 2007). Without these skills, students may be at a significant disadvantage when taking an online course, compared to taking the course in a traditional face-to-face format.

Even though the research on online developmental education at community colleges is quite limited, the majority of the research indicates that these courses are problematic for these underprepared learners. Community Colleges have particular concerns about online course performance among underprepared or traditionally underserved students, who are already at risk for course withdrawal and failure (Bailey & Jaggars, 2010). Because of this research and a general belief that online courses are not optimal for underprepared learners, many colleges have offered a limited amount of online courses in developmental education, where a large proportion of students are academically underprepared (Xu & Jaggars, 2013). However, due to the limited research on online developmental courses in community colleges and the expectation of online enrollment growing (Allen & Seaman, 2013), this is an area worthy of exploration, as there could potentially be an increase in online developmental courses in the future. Therefore, understanding the experiences of those involved with online developmental courses in community colleges is significant.

Transactional Distance Theory

From the very beginning of distance education delivery during the 1840's, instructors and students have experienced challenges from being separated geographically (Huang, Chandra, DePaolo, Cribbs, & Simmons, 2015; Johnson, 2003; Matthews, 1999). Given that enrollment in distance education is still growing annually (Allen & Seaman, 2016), researching this growing area in education is needed. In distance education, many researchers have attempted to describe the interactions that take place in online learning. Transactional Distance Theory (TD), proposed by Moore (1993), refers to the degree of psychological distance between the learner and the teacher. In this section, Transactional Distance Theory will be explored in regards to the

development of the theory, the theory's three constructs, criticisms of the theory, and a review of research conducted using Transactional Distance Theory.

The motivation for Transactional Distance theory development resulted from the combining of Moore's fascination with the independent learning concept in distance education and his inability to locate scholarly literature related to the pedagogy of correspondence education written in English (Bernath, Vidal, Holmberg, Moore, & Peters, 2007). In reality, research related to distance education did exist, but the available research related exclusively to the effectiveness of the distance education delivery method instead of theoretically driven scholarly research (Moore & Kearsley, 2012). Because of this lack of theory in distance education, Moore (1973) reviewed hundreds of research articles concerning correspondence courses to search for "macro-factors" that would appear as crucial elements of distance education. From there, Moore (1973) categorized the courses based on the amounts of dialogue, structure, and autonomy involved. Transactional Distance Theory was largely influenced throughout its developmental phase by a combination of pragmatism and behaviorism; two competing pedagogical ideologies (Moore, 1993). The pragmatism influence was primarily through Dewey (1938), with the focus on instructors needing to provide their learners with productive and meaningful activities in order to keep students engaged in their education (Moore, 1993). However, behaviorism affected Transactional Distance Theory with the suggestion that the external environment could influence the achievement of student learning (Skinner, 1974). For example, Moore (1973) stated that students did not participate in autonomous learning until the student was encouraged by their instructor.

Transactional Distance Theory suggests that, although the separation by space and time is the most noticeable characteristic of distance (online) education, "transactional distance is the

actual guiding principle in distance education, influencing the process of teaching and learning” (Weidlich & Bastiaens, 2018, p. 223). Moore (2013) states that “transactional distance theory provides the broad framework of the pedagogy of distance education” (p. 80) and that “teaching and learning in separate locations is better understood not as an aberration from the classroom, but as a significantly different pedagogical domain.” (p. 67). The three major dimensions of transactional distance theory were defined by Moore (1993) as dialogue, structure, and learner autonomy. Moore (1993) stated that each dimension influenced the transactional distance in online learning environments and could be interrelated. The descriptions for the three dimensions are now discussed, with special emphasis on the dialogue dimension. As mentioned previously, Moore (2013) stated that “highly autonomous learners are able to cope with a lower degree of dialogue but less autonomous learners need a relatively high degree of dialogue” (p. 71). As students taking developmental courses are unlikely to be highly autonomous within the content area, the need for dialogue with the instructor would be high and is of special focus in this study.

Dialogue. “Dialogue is developed by teachers and learners in the course of positive interactions that occur when one gives instruction and the others respond. Each party in a dialogue is a respectful and active listener; each is a contributor, and builds on the contributions of the other party or parties” (Moore, 1993, p. 24). Moore (1993, 2013) suggested that as both the instructor and students contributed to the transaction, each party built on the exchange, and the dialogue direction was focused on the improved understanding by the student. Moore and Kearsley (2012) added that as result of this dialogue exchange, the distance between the two parties would be decreased. Researchers have given examples of dialogue, such as the timely return of encouraging comments that would be used to improve the student’s understanding in

the course (Moore, 1993, 2013; Saba, 2016). Dialogue levels are shaped by many factors, such as the personalities of the instructor and students, the subject of the course, and environmental factors (Moore, 1993). Some instructors are more prone to interact more in online courses, and thus reduce the transactional distance. Some students are hesitant to interact or are consistently communicating with the instructor. As far as the subject matter, English courses generally have several assignments that require feedback from the instructor, whereas a computer applications course could potentially be set up in a way that doesn't require as much feedback on assignments. The point being that some courses may naturally be more likely to encourage dialogue than other courses. For environmental factors, Moore (1993) listed a number of factors that would influence dialogue levels. Some of these environmental factors included the physical environment of the students and teachers, the number of students for the professor to instruct, how many opportunities for communication there are, and the emotional environments of the students and teachers (Moore, 1993).

Within dialogue, Moore (1993) stated that there were three types of interactions that could take place in an online environment. The three interactions are transactional distance between student and content (TDSC), transactional distance between student and teacher (TDST), and Transactional distance between student and student (TDSS). TDSC (Student Content) is described as the relationship the student experienced with the contents of the subject. Additionally, TDSC involves the intellectual development that the student experiences which adds to the understanding of the subject matter. For example, students could involve themselves in student-content dialogue is by reading course materials, writing papers, or studying for an exam. Some distance learning courses are primarily content interactive, where there is limited communication from the instructor. While TDSC concerned the student content dialogue, TDST

concerns the communication between the student and the teacher (Moore, 1993). This communication occurs in many ways, such as through email, video conferencing, discussion boards, or any form in which the student and teacher are interacting. Moore (2013) states that feedback is one of the core components in the TDST interaction. The instructor is seen as valuable because students may not be applying their learning as extensively as desired or aware of the potential areas of application for the learning (Moore, 1989). As Moore (1989) describes the importance of student and teacher dialogue, he states that “it is for reality testing and feedback that interaction with an instructor is likely to be most valuable” (p. 103). TDSS is the next type of dialogue interaction, and this interaction concerns the reciprocal relationships experienced between the students (Moore, 1993). Moreover, this interaction does not consider the educational setting or the instructor, as it is exclusively concerning the student to student dialogue. The interaction among the students in the class can sometimes be valuable, and is “sometimes even essential” (Moore, 1989, p. 103). In online courses, student to student interaction can take several forms. Discussion boards, email, text, peer review of assignments, and video meetings are examples of some common interactions among students in online courses.

After Moore established TDSC, TDST, and TDSS, Hillman, Willis, and Gunawardena (1994) established an additional dialogue interaction. This was called TDSI and concerned the student relationship with the interface (i.e. technology). Specifically, TDSI was described as a “process of manipulating tools to accomplish a task” (Hillman et al., 1994, p. 34). TDSI was created because it was thought that online courses are unique in that the use of technology is typically higher than in face to face courses, and so the interaction between the student and technology would be worth examining. Although this interaction does not pertain to the content,

it is seen as important, as being proficient in technology can affect how well students perform in the course. For example, participating in a discussion board, downloading assignments, uploading homework, and taking quizzes are commonplace in online courses.

Structure. “Structure expresses the rigidity or flexibility of the program’s educational objectives, teaching strategies, and evaluation methods. It describes the extent to which an educational program can accommodate or be responsive to each learner’s individual needs” (Moore, 1993, p. 26). According to Transactional Distance Theory, “as structure increases, transactional distance increases” (Moore, 2013, p. 71). In other words, the more rigid and structured a class, the more distance a student can psychologically feel away from the teacher. At the core, structure refers to the course design elements. For example, the content, quizzes, exams, are part of course structure. Additionally, the structure affects the flexibility of a course, such as the opportunity for students to work ahead or if they have to complete the course in a specific sequence. Structure can be affected by several factors, such as the course subject, teacher philosophy, and the academic level of the learners (Moore & Kearsley, 2012). For example, an instructor could design an online course that has all assignments (with instructions) listed with their due dates, and the ability for the student to work ahead. This would be considered a very structured course and could potentially decrease the need for interaction between the student and teacher, as the needed information is available for viewing.

Autonomy. “Learner autonomy is the extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program” (Moore, 1993, p. 31). For autonomy, Transactional Distance Theory claims that “the level of autonomy required of the learner increases as transactional distance increases (Moore, 2013, p. 74). Moore hypothesized

that more autonomous students would be comfortable in courses with greater transactional distance (Anderson, 2007). Additionally, autonomy is thought of as interactive with the other dimension of dialogue. For example, Moore (2013) stated that “highly autonomous learners are able to cope with a lower degree of dialogue but less autonomous learners need a relatively high degree of dialogue” (p. 71). This stands to reason that an autonomous learner would require less dialogue with their teacher, because the learner would be more independent and self-directed.

Relationships among Dialogue, Structure, and Autonomy. As stated previously, the three variables are stated to be interrelated. When students experience transactional distance, they could potentially be experiencing a combination of different factors (e.g. dialogue and structure). Therefore, describing the relationships between the three variables of transactional distance is important. The following details the relationships among the three variables of Transactional Distance Theory.

1. Dialogue and transactional distance are stated as inversely proportional; meaning as one variable increases, the other decreases. Moore (1993) stated that "one of the major determinants of the extent to which transactional distance will be overcome is whether dialogue between learners and instructors is possible, and the extent to which it is achieved" (p. 26).
2. The increased program structure is said to decrease the extent of dialogue, which results in an increase of transactional distance. Moore (1993) states that "When a program is highly structured and teacher-learner dialogue is non-existent the transactional distance between learners and teachers is high" (p. 27).
3. Transactional distance and learner autonomy are said to be directly proportional. Moore (1993) states that "the greater the structure and the lower the dialogue in a program the more autonomy the learner has to exercise" (p. 27).

Critique of Transactional Distance Theory

It wasn't until the mid-1990's that Transactional Distance Theory was tested systematically. Some empirical literature suggested that dialogue, structure, and autonomy did contribute to student perceptions of online course delivery (Bischoff, Bisconer, Kooker & Woods, 1996; Saba & Shearer, 1994). Later, some researchers offered criticisms of the theory. For example, Gorsky and Caspi (2005) reviewed published empirical studies, which attempted to support or validate Transactional Distance Theory. These researchers found that the data only partially supported Transactional Distance Theory or "the studies lacked reliability, construct validity, or both" (Gorsky & Caspi, 2005, p. 1). One of the main concerns was about the lack of operational definitions of dialogue, structure, or autonomy. Gorsky and Caspi (2005) stated the following:

Moore (1993) did not define any of the theory's constructs operationally. This led some researchers to use operational definitions that differed meaningfully from the formal ones, thereby severely compromising construct validity. By Moore's own definitions, dialogue is not the number of verbal interactions that occurred and transactional distance is not a perceived value of "closeness" (p. 7).

These researchers concluded that the "basic propositions of transactional distance theory were neither supported nor validated by empirical research findings" (Gorsky & Caspi, 2005, p. 1). The research on the use of Transactional Distance Theory is mixed, with some researchers stating that there is empirical evidence supporting the theory, whereas other researchers are highly critical of its' empirical use.

Transactional Distance Theory research overview

Transactional Distance Theory has been researched in different ways, in an attempt to establish clear connections between the three variables of dialogue, structure, and autonomy. Chen and Willits (2007) examined the frequency of dialogue, structure in terms of delivery and implementation, and autonomy in terms of self-rated independence by students in a distance learning course. Results indicated that the greater the students perceived transactional distance, the lower the perceived learning outcomes were met, and that greater frequency of discussion was related to higher perceived achievement of learning outcomes. Results supported Moore's (1993) theory; however dialogue was measured by frequency and not the quality of the interactions.

Another study examined student perceptions of transactional distance, structure, and dialogue. Bischoff, Bisconer, Kooker, and Woods (1996) found support for Moore's (1993) theory by showing dialogue and transactional distance as being inversely proportional. Dialogue was measured by only one question on a questionnaire, and similar to the Chen and Willits (2007) study, the quality of the dialogue was not explored.

Transactional Distance theory has also been examined by looking at observable behavior, as opposed to the student perceptions of transactional distance. Bunker, Gayol, Nti, and Reidell (1996) examined the change in structure on the dialogue in an audio-conference course. The study concluded that structure and dialogue were essential to student success and that an increase in structure and dialogue would increase student participation while decreasing the transactional distance. Saba and Shearer (1994) conducted a discourse analysis on 30 instructor-learner interactions in a distance education course. Results indicated that as dialogue increased, transactional distance decreased, and that as structure increased, transactional distance increased.

In all of the aforementioned studies on transactional distance, the researchers pointed out that future research was needed. This is a common suggestion in research, however, all of the authors mentioned a specific type of research to be conducted. It was suggested by these authors that future studies on transactional distance should include interview data (Bischoff et. al, 1996; Bunker et. al, 1996; Chen & Willits, 2007); something that the present study aims to do. Additionally, table 2-1 below was formulated in order to show the need for the present study.

Table 2-1. Literature review research highlighting the need for the present study

Authors	Methodology	Focus	Key Findings
Jaggars, S. S., Edgecombe, N., & Stacey, G. W. (2013a). Creating an effective online environment, Online Learning Practitioner Packet, Part Two. Teachers College, Columbia University, Community College Research Center. March.	Qualitative study Data collected through interviews (using open-ended questions) and observations of online courses Sample: online students and faculty (number not included)	Provide recommendations to administrators looking to improve online learning at their college	A recommendation that colleges should consider making readiness activities a requirement prior to or during registration periods for online courses A recommendation that colleges could consider limiting or eliminating online sections of courses in which a considerable proportion of students have historically performed poorly

Table 2-1 (Continued)

Authors	Methodology	Focus	Key Findings
<p>Jaggars, S. S., Edgecombe, N., & Stacey, G. W. (2013b). What we know about online course outcomes, Online Learning Practitioner Packet, Part One. Teachers College, Columbia University, Community College Research Center. March.</p>	<p>Quantitative study</p> <p>Data collected through examining failure/withdrawal rates in two states</p> <p>Sample: approximately 75,000 students</p>	<p>To help determine the effectiveness of online courses for community college students</p>	<p>Students were more likely to withdraw from online courses than face to face courses</p> <p>Online course completers performed more poorly in online courses than face to face courses</p> <p>Developmental students had up to two times the failure and withdrawal rates in online courses than their face to face counterparts</p>
<p>Yukselturk, E., & Bulut, S. (2007). Predictors for student success in an online course. <i>Educational Technology & Society</i>, 10. 71-83.</p>	<p>Qualitative and Quantitative study</p> <p>Data collected through online questionnaires and semi-structured interviews</p> <p>Sample: Two course instructors and 80 voluntary participants who partook in an online course</p>	<p>Analyzing the factors that affected student success in an online course</p>	<p>Interview results indicated that successful students generally used self-regulated learning strategies in the online course</p> <p>Identified a need to give online developmental students a voice in order to explore the experiences that may be unique to this specific type of online learner</p>

Table 2-1 (Continued).

Authors	Methodology	Focus	Key Findings
<p>Gregory, C. B., & Lampley, J. H. (2016). Community college student success in online versus equivalent face-to-face courses. <i>Journal of Learning in Higher Education, 12</i>(2), 63-72.</p>	<p>Quantitative study</p> <p>Data collected by analysis of quantitative data relevant to students enrolled in course sections taught by instructors who taught both online and face-to-face sections of the same course within the same semester from fall 2012 through spring 2015.</p> <p>Sample: 4,604 students enrolled at a public 2-year community college located in Tennessee.</p>	<p>To determine if significant differences existed in student success at the community college level in online courses as compared to face-to-face courses</p>	<p>Students in online courses were significantly more likely to withdraw from a class than students in face-to-face courses</p> <p>Freshman taking online courses were at a significant disadvantage compared to sophomores</p> <p>Identified the need for additional research concerning the overall success of students in online courses</p>

Chapter 3

Methodology

This study examined the experiences of community college students in online developmental courses to answer the following research question:

1. Using Transactional Distance Theory, what is the experience of community college students in online developmental courses?

The study was qualitative in nature and utilized phenomenology. Qualitative research was appropriate for this study, as qualitative research designs focus on making sense of human experiences (Creswell, 2008; Merriam, 2009). This study aimed to make sense of the experiences of community college students in online developmental courses. Phenomenology is also appropriate for this study, as “a phenomenological study is one that focuses on descriptions of what people experience and how it is that they experience what they experience (Patton, 1990, p. 71).

Research Design

Epistemology. Epistemology is the study of knowledge and justified belief (Steup, 2016). As a branch of philosophy, epistemology concerns the ways in which human beings obtain valid knowledge. Epistemology also focuses on how humans differentiate between truth and falsehood, with common questions such as, what can we know, how can we know it, and how do we acquire knowledge? Epistemology guides research by influencing how researchers will frame research in the attempt to discover knowledge (Moon & Blackman, 2014). In other words, epistemology affects the research design and methods of any study by approaching a subject from a certain perspective. This is why it has been said that “the ability to identify the relationship between the epistemological foundation of research and the methods employed in

conducting it is critical in order for research to be truly meaningful” (Darlaston-Jones, 2007, p. 19).

Pragmatism is a valuable epistemology to use in this study. Pragmatic philosophers, such as John Dewey, recognize that there can be many different ways to interpret the world and undertake research, but that there is no single point of view that can ever give an entire picture and that there may be multiple realities (Saunders & Thornhill, 2012). Biesta and Burbules (2003) state that Dewey’s pragmatic perspective on education is of “crucial importance for education and educational research today, because education is also not simply a technical enterprise where educators simply ‘apply’ the findings of educational research” (p. 22), and that education is a human practice where the questions of “how”, “why”, and “what for” are inseparable. As this study focused on community college students in online developmental courses, the realities of those students were examined in order to better answer the “how” question about how the community college students experience online developmental courses.

Patton (2014) states that a core question that pragmatism attempts to answer about phenomena is: “What are the practical consequences and useful applications of what we can learn about this issue or problem?” (p. 99). Seale (2012) contends that pragmatics posit that “a statement is true if it works” (p. 20) and Patton (2014) says that for pragmatists, “findings that carry no practical value are meaningless precisely because they are useless” (p.152). This study aimed to explore the experiences of community college students in online developmental courses in order to improve the understanding of what it is like for these students in these courses. The information gathered in this study has practical value and use in education, therefore making pragmatism a worthy epistemology to use in this study. The practical value is that there was

information gathered that could be used by those in higher education to improve online developmental courses for community college students.

Approach and Theoretical framework. The research approach for this study utilized phenomenology and the theoretical framework utilized Transactional Distance Theory. Phenomenology was the research approach best suited for this study on exploring the experiences of community college students in online developmental courses. Transactional Distance theory was a well-suited theory to use in this study because the theory aims at understanding distance education related subject material. In this section, phenomenology will be discussed with a brief historical review, followed by what type of phenomenology this study used and why. This will be followed by a brief overview of Transactional Distance theory (Moore, 1993) and how this theory guides research questions, methodology, methods, and the desired uses of this research.

Phenomenology was first advanced by Edmond Husserl (1859-1938), a German philosopher. This study will use Husserl's framework for phenomenology. Husserl believed that human phenomena could not be explained fully by experimental scientific research. Because of this, Husserl helped to create phenomenology, which seeks to find the truth in the lived experience of humans so that there can be a deeper understanding or meaning of a phenomena's experience (Earle, 2010; Mapp, 2008). Phenomenological research "is an attempt to deal with inner experiences unprobed in everyday life" (Merriam, 2002, p. 7). Moustakas (1994) explains that phenomenology is focused more on the participants' shared experiences than the researcher interpretations, and that phenomenological researchers attempt to maintain a fresh perspective as though they were observing the phenomena for the first time. Phenomenology is used extensively in research in various fields, including sociology,

psychology, and education (Creswell, 1998). As this study will concern students in higher education, phenomenology is an appropriate research approach.

Specifically, hermeneutic phenomenology was utilized in this study. Van Manen (2014) is well known for his use of this phenomenological method. A core principle of hermeneutic phenomenology is that our most fundamental and basic experience of the world is already full of meaning (Merleau-Ponty, 2006; van Manen, 2014). When using hermeneutic phenomenology, a researcher applies the skill of reading text (e.g. transcripts) to formulate isolating themes that discover something meaningful about the data (van Manen, 2014). Distinct from other qualitative methodologies, hermeneutic phenomenology does not have a set method, and the “how” must be found on a case by case basis (van Manen, 2014). This is said to make researchers in hermeneutic phenomenology perpetual beginners (Merleau-Ponty, 2006). Hermeneutic phenomenology has been described as a useful way to give voice to experiences and van Manen’s (2014) hermeneutic phenomenology can be used to clarify phenomena in various fields, including education (Sloan & Bowe, 2014). Hermeneutic phenomenology also subscribes to the idea that language reveals being within a specific context, and that experiences are understood through participant and researcher language, such as in an interview (Langdridge, 2007). In the present study, it is important to shed light on the student experience in an under-researched area in education; students in online developmental courses at community colleges. By utilizing hermeneutic phenomenology, the researcher will discover themes specific to the research area through interviews and give voice to the participants’ experiences.

Patton (2015) says that the search for meaning, structure, and the essence of the lived experience of a phenomenon is at the core of phenomenology and that phenomenological research remains true to the experience and context in which the phenomena appears. Therefore,

answering the research questions in this study was an attempt to capture the experiences of the community college students in online developmental courses.

Phenomenology also guided the methods of data collection. This is because phenomenology research primarily uses the data collection method of in-depth, semi-structured and unstructured interviews (Seidman, 2013). Interviews are used in phenomenological research, due to their potential to allow research participants to give a detailed account of their experience, which can lead to an understanding of shared meanings (Mapp, 2008). In phenomenological research, bracketing, or being able to put aside researcher prejudices, assumptions, and viewpoints, is a common technique (Dowling & Cooney, 2012; vanManen, 2014). Interviews were used in the present study with bracketing being utilized. Therefore, phenomenology was an appropriate research approach. The desired uses of this research were also affected by phenomenology, as understanding the experiences of the phenomena affect how the results of this study can be used.

Transactional Distance theory constitutes the theoretical framework. Proposed by Moore (1993), Transactional Distance theory refers to the degree of psychological distance between the learner and the teacher in distance education. Moore (1993) defined the three major dimensions of transactional distance theory as dialogue, structure and learner autonomy. Transactional Distance theory was greatly influenced throughout its developmental phase by pragmatism (Moore, 1993). The pragmatism influence was primarily through Dewey (1938), with his focus on instructors needing to offer their learners productive and meaningful activities in order to keep students involved in their education (Moore, 1993). The epistemology used in this study was pragmatism, making Transactional Distance theory a useful theory in the theoretical framework for this study. Transactional Distance theory guided the research questions in this

study as well. The research question pertained to Transactional Distance theory in asking how community college students experience transactional distance in their online developmental courses. To view how these students experience the phenomena of transactional distance, interviews were utilized, thus showing how the theory influenced the methods in this study. Lastly, by viewing the student experiences through a transactional distance lens, the uses of the research product are for better understanding of what may increase or decrease transactional distance. As educators try to minimize transactional distance, the importance of using the theory to affect uses of the research product is evident.

In summary, this study aimed to explore the experiences of community college students in online courses. By using phenomenology, the focus was on the shared experiences of those students. Transactional Distance theory was used as a lens to view those student experiences through. Both phenomenology and Transactional Distance theory guided the research process by influencing the research questions, methodology, methods, and uses of the research product.

Methodology

Research site. The site of research was located at a public, two-year community college in the southeast region of the United States of America. The community college offers general education courses and is open access; two characteristics that are common to community colleges. This research site is justified, as the community college is well established and has been offering online classes for several years. However, the college's online developmental courses are less than five years old. This presents an opportunity to explore a relatively new type of course (i.e. online developmental) at the college.

Participants. In selecting the participants for this study, purposeful sampling was utilized. Patton (2015) states that purposeful sampling involves selecting information-rich cases

or participants to examine, which can help to explain and clarify the research questions under study (Patton, 2015). Information-rich cases are “those from which one can learn a great deal about issues of central importance to the purpose of the research” (Patton, 2015, p. 53). Within purposeful sampling, there are multiple strategies to select participants. For this study, homogenous sampling was used. Homogenous sampling selects cases that are very similar and studies the characteristics that are in common (Patton, 2015). Describing a subgroup in depth is often the purpose of using homogenous sampling. This type of sampling is useful for the present study, as community college students who had taken an online developmental course were the examined subgroup.

Eight students participated in this study, due to the time being a factor in hermeneutic phenomenology, as is the practical use of the results (Sloan & Bowe, 2014). Capturing the essence of the student experience takes significant time, and therefore the participant number was limited. The students selected were students who completed an online developmental reading, writing, or math course at a community college. Those courses were the only three online developmental courses at the research site. As this study was looking to explore the experiences of these students and how they experienced transactional distance, it was important that the students were enrolled for the entire duration of the course. Students who enrolled but dropped the course could potentially have little to no experience in the course, so those students were not able to be participants in the current study. No letter grade qualification was required when selecting the students. The researcher contacted the institutional research department at his community college and asked them to provide a list of all of the current students who had completed an online developmental course at the college in the past two years. This ensured that students had recently completed the course and could still clearly remember their experiences.

The possible online developmental courses were reading, writing, and math. Once the list was compiled from the institutional research department, potential candidates were asked through email to participate in the research study. The first eight students who replied that they were interested in participating in the study were contacted to arrange a time for an interview.

This study also ensured the protection of human rights, ensured confidentiality, and had the consent of the participants. The researcher got IRB approval for the study. All written and electronic information collected during this study remained secure, only accessible to the researcher. For written information, the notes, transcriptions, and any other written material was locked in a filing cabinet in a locked office. All electronic information, such as the recorded interviews, were located in a password protected recording device and a password protected computer. Any identifiable information was kept confidential and names were changed to pseudonyms. An informed consent form was provided to each participant who agreed to participate in the study to sign. This form explained to the participants what to expect in the interviews and the likely outcomes of the data analysis.

Data Collection

In qualitative research, there are many forms of data collection techniques (Creswell, 2014). Some of the commonly used qualitative data collection methods include in-depth interviews, observations, audiovisuals, and documents, with a study's qualitative methodology determining what methods of data collection are the best to use (Creswell, 2014; Merriam & Tisdell, 2016). More than one method can be employed and is referred to as triangulation. Triangulation involves the use of multiple methods of data collection to substantiate research findings (Merriam & Tisdell, 2016) and increases the credibility and reliability of a study's

findings (Patton, 2015). For this study, in-depth interviews, field notes (i.e. researcher notes), and documents were used for triangulation purposes.

Participant interviews. This study utilized phenomenological interviewing (Seidman, 2013). This type of interview attempts to obtain the participant's personal description of a lived experience in order to describe the phenomenon in as much detail as possible in lived through terms (Patton, 2015). Open-ended questions are primarily, but not exclusively used in phenomenological interviews (Seidman, 2013). In this study, semi-structured interviews with primarily open-ended questions were used. A semi-structured interview has pre-determined questions that get asked to every participant in a study, but they still allow for additional questions to add depth to a study (Patton, 2015). A phenomenological, semi-structured interview was appropriate for this study to ensure that the essential questions were answered by all participants. This allowed for consistency across the various interviews, however, the researcher asked additional questions for clarification purposes.

The participants in this study were interviewed once, with a follow up concerning the transcription and analysis. After gaining the consent of the participants, the researcher contacted each participant individually to set up a time to meet for an initial interview. Interviews were conducted either face to face in an office, or over the phone. The first interview had a duration of approximately 30 minutes long and was focused on asking open-ended, semi-structured interview questions designed around the research questions in the study. The interview questions gathered information about the experiences of the community college students in their online developmental course(s). The interviews were recorded on a password protected audio device, stored on an external flash drive, and locked in a secured office of which only the researcher had access. Next, each recording was transcribed verbatim to be used for data analysis. After the

first round of interviews were completed, the researcher contacted each individual participant again by email to ask the participant if the transcription was accurate and if the participant wanted to change or add any information. This second contact with the participants was used for member checking, which is further explained in the reliability section below. Table 3-1 displays interview questions that will specifically address Transactional Distance theory.

Table 3-1. Interview questions related to Transactional Distance theory

Transactional Distance theory dimensions		
Dialogue questions	Structure questions	Autonomy questions
<p>Tell me about how you communicated with your instructor during the semester you took the developmental course. (1)*Tell me about your communication with other students in the course.</p> <p>(2)*Describe how connected you felt to your instructor and classmates (3)*</p>	<p>How would you describe the structure of the course(e.g. organized, easy to follow, flexible?)? (1)*</p> <p>What do you think would improve the structure of the course? (2)*</p>	<p>“Learner autonomy is the extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program” (Moore, 1993, p.31). How would you describe your autonomy?</p> <p>(1)*Do you wish you had more control over how you learned? (2)*</p>

Field notes. As the interviews took place, the researcher utilized field notes as well. To increase the validity of the study, a researcher can show how data were collected, how the categories were derived from the data, and how decisions were made during the research (Merriam and Tisdell, 2016). To do this, the researcher kept a journal to record notes about what happened during the interviews. These notes contained anything that the interview itself failed to capture, such as body language or tone. Additionally, a summary was made after each interview to capture the main thoughts about the interview and the possible themes discovered. Marriam and Tisdell (2016) suggest taking detailed field notes and typing the notes into a narrative format as soon as possible after an interaction. This advice was followed for the field notes method utilized in this study. Both descriptive and analytic notes were taken during the interviews. Descriptive notes record the details that allow a researcher to recall the moment at a later time, whereas analytic notes are recordings that form part of data analysis that can help to identify patterns and themes (Glesne, 2016).

Documents. The last part of triangulation for this study involved documents. This can involve any written, digital, or physical material that is relevant to a study (Merriam & Tisdell, 2016). For this study, the syllabi of the developmental courses (i.e. reading, writing, and math) were examined. The researcher used the syllabi to formulate some of the questions in the interviews to help students recall their experiences. The syllabi were also used to view any inconsistencies between what the participants said and what was located in the syllabi of the developmental courses. Further, the experiences of the interview participants were compared to what the syllabi said the student was to experience. Overall, viewing the syllabi was a way for the researcher to gain more understanding of the context of the course. The use of documents, interviews, and field notes were a way of triangulating the data in this study.

Reliability

In qualitative research, the reliability of a study is an important indicator of whether the results can be trusted (Lincoln & Guba, 1985). To promote the reliability of this study, the researcher incorporated member checking and peer debriefing. Member checking is a strategy that allows the research participants to determine if the descriptions and themes written by the researcher are accurate (Creswell, 2014). After the researcher interviewed participants, transcribed the interviews, and coded the data, the researcher sent a follow up email to each participant to discuss the transcriptions and interpretations of the data. Participants were then able to make changes or additions to their responses that differed from the researcher's transcriptions and interpretations. The researcher also checked the comments of participants against other participants in the research study. By doing this, the researcher showed replication which can determine normative patterns and increase reliability (Morse, 2015).

For peer debriefing, the main idea is that a viewpoint that is independent from the researcher is provided as an external check on the research process. It is suggested that an impartial individual with experience in qualitative research acts as a reviewer (Krefting, 1990). For this study, the faculty advisor of the researcher acted as the primary peer debriefer to increase the reliability of the research process. The researcher met with his faculty advisor throughout the research process to ensure that the findings and interpretations followed the research study's purpose. Creswell (2014) states that the peer debriefer's review and questions about the study act as a way to increase the reliability and trustworthiness of the study.

Data Analysis

In qualitative research, data analysis is the process in which the researcher makes sense of the data collected in order to formulate meaning and answer the research study's questions

(Glesne, 2016; Merriam & Tisdell, 2016). Data analysis does not always come after data collection, and it is actually preferred that data analysis occurs simultaneously with data collection (Merriam & Tisdell, 2016). The researcher analyzed data as soon as data was starting to be collected. Additionally, data analysis can have many different approaches, but the approach should be connected to the goals, research questions, methodology, and the data collection methods (Glesne, 2016). Further, in a phenomenological study, the researcher must be open to what will be discovered. Therefore, horizontalization was used. Horizontalization is defined as the “process of laying out all the data for examination and treating the data as having equal weight” (Merriam & Tisdell, 2016, p. 27). This was an important element to minimize researcher bias by keeping an open mind.

After the transcription of interviews, it is important to have a plan on how to analyze the text. For this study, open coding and thematic analysis was utilized. Open coding refers to the process of “labeling concepts, defining and developing categories based on their properties and dimensions” (Khandkar, 2009, para. 2). Specifically, holistic coding was the first approach to coding the data from the interviews. Holistic coding uses broad brush-stroke representation to capture the essence of what the interviewees are saying (Saldaña, 2009). Rather than coding line by line, holistic coding helps to uncover basic themes with no length restrictions required for needing a code (Saldaña, 2013). Holistic coding can generate broad themes that can be explored further in depth (Saldaña, 2013). The codes were classified based on the theory of Transactional Distance. The components of Transactional Distance theory (dialogue, structure, and autonomy) were searched for through the interview data. The interview questions were meant to elicit responses that relate to Transactional Distance theory, therefore the components of the theory were not overtly difficult to discover and code. Bazeley (2007) states that holistic coding is

“applicable when the researcher already has a general idea of what to investigate in the data, or “to ‘chunk’ the text into broad topic areas, as a first step to seeing what is there” (Bazeley, 2007, p. 67). As this study was exploring the experiences of community college students in online developmental courses, the researcher did have an idea of what to investigate. Additionally, the student experiences were examined through the lens of Transactional Distance theory, which further added strength to the argument that the researcher knew what to investigate in the data. After holistically coding the data, the researcher reexamined the interview data and codes to combine the codes from the various interview participants that were similar. This was done by examining similar codes line by line to assess whether the codes should be broken down further. Subsequently, these similar codes created the themes generated from the interview data.

A theme in qualitative research refers to a phrase which identifies what the data clusters mean (Saldaña, 2016). Thematic analysis is a general approach that captures the essence of the phenomenon under study (Saldaña, 2016). The process of thematic analysis involves coding the data, analyzing the codes for patterns that can be organized into categories, and finally analyzing categories for the emergent themes (Glesne, 2016). These themes were guided by Transactional Distance Theory in order to best explain how community college students experienced their online developmental courses in relation to transactional distance. The researcher utilized Microsoft Word to organize the codes and grouped similar codes together. Codes were separated by their relation to the transactional distance components (i.e. dialogue, structure, and autonomy). Codes were also color coded based on the participant to keep track of who said what information. Next, the researcher put the names of themes on a separate Microsoft Word document, with the various codes that made up each theme underneath. Each theme was a phrase that captured the essence of the similar codes. The researcher previously used this

method to code and theme qualitative interview data, and was very satisfied, as it was an efficient way to organize codes, generate themes, and keep data organized.

To assist in verifying themes, phenomenological reduction, horizontalization, and imaginative variation were used. Phenomenological reduction refers to the process of repeatedly returning to the essence of an experience, describing the experience again and again, to capture the inner structure or meaning of the experience (Moustakas, 1994). This was done by reexamining the data and field notes of the researcher to ensure that the experience was being described accurately. Horizontalization, as previously stated, is the “process of laying out all the data for examination and treating the data as having equal weight” (Merriam & Tisdell, 2016, p. 27). The researcher abided by this principle by putting aside biases, namely through bracketing the researcher’s thoughts. Imaginative variation refers to the process of seeking the “possible meanings through the utilization of imagination, varying the frames of reference, employing polarities and reversals, and approaching the phenomenon from divergent perspectives, different positions, roles, or functions” (Moustakas, 1994, p. 97). The researcher adhered to imaginative variation by utilizing peer debriefing to assist in the development of different perspectives. Additionally, the researcher examined the data with the mindset of a researcher, student, and instructor by categorizing the bracketing of the researcher’s thoughts based on which mindset was being used.

Subjectivity statement. From the beginning of a research study, the researcher should articulate in writing a subjectivity statement which addresses a researcher’s bias (Creswell, 2014). By addressing issues of subjectivity, the researcher does not eliminate subjectivities, but can help the researcher manage or minimize the impact of subjectivities (Glesne, 2016). A

subjectivity statement also can help the researcher better understand themselves in the research process (Peshkin, 1988).

The topic of community college students in online developmental courses is of particular interest to the researcher in this study. The researcher started his college career as a community college student. The researcher was enrolled in courses for one year and a semester before transferring to a university. During the first semester of his college career, the researcher was required to take a developmental course in mathematics (i.e. intermediate algebra). The course was a face to face class and the researcher required a great amount of assistance from his father and the instructor in completing the course. The perception of the researcher is that if he were to take the course online, it would have been much more difficult to pass the course, and the learning would have been hindered, due to the nature of online courses lacking the quick feedback quality of a face to face course.

The researcher also has worked at a community college for over six years. Although the researcher has not taught developmental courses, he has taught students who were enrolled in developmental courses during the same time as one of his courses. The researcher's primary courses have been fundamentals of speech communication and fundamentals of communication. The former put more emphasis on public speaking, whereas the latter more broadly covers communication topics (e.g. nonverbal, interpersonal, group communication). Additionally, a first-year seminar course has been taught by the researcher, which is an introduction to college type of course. Teaching at a community college has influenced the researcher's views of the students enrolled there by helping the researcher notice the unique qualities that community college students may have. The researcher has taught his fundamentals of speech communication and fundamentals of communication courses online as well. This has influenced

the researcher by showing the challenges of online courses from the instructor perspective. The researcher has noticed that the student grades in his online courses often are lower than in his face-to-face courses, with a higher withdrawal rate as well. Because of his experience teaching in online courses, the researcher has a general view that online courses are more difficult for most students to complete and that the grades may likely be lower when the students do pass.

The researcher has also taken courses online. The first online course that the researcher took as a student was in his doctoral program. In fact, the entire program is online. This has made the researcher understand the differences in class formats of online and face-to-face courses through direct experience. The researcher understands why students would feel disconnected from their instructors and peers, as it was the experience of the researcher at times. Not getting immediate feedback in a classroom setting was something the researcher had to get used to and a feeling of being overwhelmed by content was there for the researcher; especially early in the program. However, the researcher also understands why some students prefer online courses, due to the highly flexible nature of most online courses. The researcher would not have been able to complete a doctorate degree if it were not for the online format available.

As mentioned, the current research topic is of interest to the researcher. From being a community college student, taking a developmental course, teaching an online course, and taking online courses, the researcher has personal knowledge and experience with the topic. Because the researcher feels a connection to the research topic, bracketing the thoughts and opinions was an important way of putting biases aside. The peer debriefing and member checking also allowed the researcher to explore the topic with a broader perspective without bias.

Chapter Summary

This chapter described the study's research design, methodology, and the data collection and analysis methods for a study about the experiences of community college students in online developmental courses. The study used a qualitative phenomenological research design. Data collection included in-depth, semi-structured phenomenological interviews, as well as field notes, and documents. Open coding and thematic analysis were used to analyze and interpret the data, in order to bring forth themes which captured the essence of the participants' experiences. Member checking and peer debriefing were utilized to ensure the trustworthiness and reliability of the study. In the next chapter, the research findings are presented. This will be an explanation of the themes found during the study. Following this will be chapter 5, which is a discussion of the findings, the implications of the study, and an overall conclusion to the dissertation.

Chapter 4

Findings

The purpose of this study was for the researcher to gain an understanding of how community college students experience transactional distance in their online developmental courses. To gain this understanding, phenomenological semi-structured interviews were used as the primary method of data collection.

The focus of this chapter is to present the findings from the study. In this chapter, selected passages and quotes from the interviews are displayed in order to demonstrate how the three components of Transactional Distance theory were experienced by the participants. The quotes are organized in a way to show the shared experiences of the participants, as well as to show the responses that would be considered outliers. The three themes discovered through the analysis of the interviews were the following: (1) Connection, (2) Accessible Organization, and (3) Lack of Control.

Participants completed at least one of the following online developmental courses: reading, writing, or math. The average age of the interview participants was approximately 28 years old, with a range of 19 to 38 years old. Six females and two males were included in this study. Six of the eight participants were Caucasian, with the remaining two participants being Hispanic and African American. Below is a brief description of each interview participant. Pseudonyms were given to the participants in order to protect anonymity.

Eleena is a 22 year old Hispanic female who completed the online developmental reading course. Eleena's major is Medical Assisting.

Trisha is a 19 year old Caucasian female who completed the online developmental reading course and the online developmental writing course. Trisha's major is Allied Health Sciences.

Adam is a 19 year old Caucasian male who completed the online developmental reading course. Adam's major is Exercise Science.

Lucy is a 37 year old Caucasian female who completed the online developmental reading course and the online developmental writing course. Lucy's major is Psychology and she was born in Brazil.

Elijah is a 25 year old African American male who completed the online developmental reading course and the online developmental writing course. Elijah's major is Computer Information Technology.

Judy is a 26 year old Caucasian female who completed the online developmental math course. Judy's major is Education.

Marcy is a 35 year old Caucasian female who completed the online developmental writing course. Marcy's major is Business.

Celine is a 38 year old Caucasian female who completed the online developmental reading course. Celine's major is Allied Health Sciences.

Theme 1: Connection. The first theme, Connection, concerns the first component of Transactional Distance theory: Dialogue. In Transactional distance theory, dialogue consists of the interactions of the instructor and students (Moore, 1993). Participants were asked to explain what the overall communication was like in their online developmental courses and how available their instructors were. There were two elements that contributed to Theme 1: Connection: a) Connected to instructors and b) Disconnected from classmates. All but one participant seemed to have positive experiences and connection to their instructor(s). However, all but one participant seemed to be disconnected from their classmates.

Category: Connected to Instructors

One of the categories under the theme of connection concerned the instructors. Participants were asked to recall their communication with their instructors and to elaborate on how connected the students felt to their instructors for their online developmental courses. Most of the participants had positive things to say about their instructors when it came to communication. Eleena, a student in developmental reading, stated the following about her instructor:

She was so nice. She would always email us. Always on top of things. She was always emailing us every week. “Hey, this is coming up this day”. She would email us constantly and check up on grades. She was just nice. She was patient.... I mean, we had the opportunity to call her too. So there was that option. She was always emailing us... I was always connected with my instructor... Yeah, very connected. I mean I knew she was always there. Yeah, she was just an email away...I liked it.

Celine, another developmental reading student added that her instructor’s availability helped her in the class:

She was amazing. If it wasn't for her to be so available, I probably wouldn't have gotten the grade I received. It wasn't for my lack of knowing what to do. Once I fully understood what they wanted me to do, it was no problem to do it.

Tricia, a student who was in both developmental reading and developmental writing courses spoke positively of her connection with her instructors by mentioning a quick response time of her instructors.

She'd probably respond in less than an hour or two hours. It didn't bother me at all... I didn't care if I got to talk to her or email. It didn't matter to me.

Adam, a student in developmental reading agreed with previous students about how easy it was to contact his instructor, but also added that his reading instructor was very approachable:

She was just very approachable... She posted her office hours on D2L, and she had her email and her phone number, very valuable stuff for students to encounter with their teacher. There's so many options. They were always there to help me. If I needed help on anything they would work on me...If you have questions about anything Miss R will be there...But personally with the instructor, it felt great, because she was always willing to help in any way that she could. She always made time.

Lucy, a student who was in both online developmental reading and writing courses, also spoke highly of her connection with her instructors. In addition to speaking about receiving feedback and the teachers being available, Lucy spoke about the understanding and connection she felt from the teachers when she was going through a difficult time in her life:

I got very sick last semester during these classes. It was a rough time for me just losing my mom and, you know, it was a really bad time. And they were there to help me with anything, you know. If I was not doing good in a test, Mrs. R gave me an extension, you know, in some assignment, and they were really good and understanding right there with you. That's what I like... I feel connected with them for sure. I tried to see if they were in their office to give them a hug, before I came here [for the interview]. Like I told you, there was a time that I found out I was sick and you know things like that, and they were praying for me, you know. I could see they were concerned for me as a student, you know, like these kind of things. About the instructors I would not change anything.

Although the majority of the participants held positive views about the communication with their instructor, there were a few comments which illustrated some possible problems. Elijah, a

student in both online developmental reading and writing courses stated the following about response time:

One thing is that if I had a question, some of the professors would take long before, before they actually say something or reply to your email. And sometimes it's like due on a Sunday and maybe that's when I'm actually in the middle of actually trying to finish my assignment. And of course they don't always work on the weekend and all that. So if I had a question about something that I didn't understand, I'd definitely not get a reply or an answer until the following day, which the assignments were going to be due.

However, when asked how long the student usually had to wait for a response, the student said, "Sometimes it would take a day or a couple of hours." Additionally, Elijah did have mostly positive things to say about the communication with his reading instructor:

She [reading instructor] kept on reminding me and all that. And actually, sometimes she would understand the fact that I'm working. I mean I was constantly training [for the military] and she would open the assignments back for me for a couple hours so that I can finish. So she was motivating. That's how I would put it. She motivated me. Every time that I was doing the assignments, I would start with hers because she gave me that chance, you know, that second chance over and over again [in the reading course].

As for the frequency of communication with the instructor, Elijah stated that it was mostly frequent in the reading course.

Well, with the reading it was often because she kept on checking up on me and all that, so that was frequent. I'd say about twice a week. For the writing one, it was mostly when I had a question. That's about it.

For Judy, the only online developmental math student interviewed in this study, the contact with her instructor was very limited.

Um, I actually don't remember ever contacting my instructor. As a matter of fact, I think I had two emails from her the whole time. The first time was to let me know that the class was starting and then the second time was to congratulate me on finishing the course...

However, when asked how she felt about the lack of communication, Judy replied:

I think if I was having problems with statistics, then it wouldn't have been nearly enough communication. But because I was working two modules ahead of everyone and passed with a 100, to me it was an appropriate amount because I didn't share that I had problems with the course... If I had actually needed help with mathematics, I probably would have failed the class, because I wouldn't have known. Because I didn't know if the teacher would respond because she wouldn't email me [about anything in the course] and I'm not the kind of person who would try and initiate contact, because I don't ask for help easily.

As mentioned previously, the majority of the students seemed to be connected with their instructors. The syllabi of the courses were examined and all syllabi did have instructor contact information, which included the instructor's email, office number, and office phone number.

Whether it was the instructor being available, providing timely feedback, being approachable, or helping a student through personal difficulties, the instructors appeared to have had made connections with their students. For the two students who raised concerns, one of the students thought that waiting 24 hours was a long time for an instructor response (which many students and instructors would argue against), and the other student stated that she didn't need help and thus the connection wasn't necessarily essential. Overall, positive connections with the instructors were made by the students when deemed necessary by the student.

Category: Disconnected from Classmates

Another communication area that participants discussed was the communication with classmates. In this category, participants were asked to elaborate on the quantity and quality of classmate communication in their online developmental courses. Many of the participants shared that the communication was very limited with other classmates and that they didn't know one another. Lucy shared that she did not know her classmates and at times felt lonely.

I didn't know anybody. Besides discussion boards, we didn't [communicate]. Writers Workshop we had a discussion board. I don't remember in Reading having a discussion board. But that would be pretty much, if we had one, that would be it, the discussion board...The classmates I didn't know at all... Sometimes it feels lonely to do it online, you don't know your classmates and you get to know people [in Face to Face courses]. I like to see people. I like to talk. We try to, you know, have some talk [in online courses], but they [students] will just do what they have to, you know. Yeah, and they're like, "Okay, nice, have a good day, you too."

However, many students (including Lucy) expressed that although classmate communication was limited, it did not bother them, as Eleena stated:

Only in the discussion [when there was classmate communication in her reading course], but we never went to exchange emails. I think it was the appropriate amount. You could do it on your own time.

Celine shared her experiences about being disconnected from her reading course classmates, but also added that classmate communication was a waste of time in her opinion.

I kind of feel like that part is a joke honestly, especially with the online class because you don't ever meet any of these people. It just kind of feels like a waste of time. Like it's just

more time consuming on something that I feel nobody really wants to do... Yeah, I don't feel like people really, really care. They care about the grade. They're doing their work, and yes, contact with the teacher. But ultimately, I don't feel like most people are there to try to make friends that they're not even going to see on an online class... You don't meet any of these people but yet it's part of your grade but you must reply and respond and, like I see what they are, or whoever set that up is attempting to do. But in reality, it's just not working... But like most people, I feel they're in college to do what they need to do. Do the homework, learn, get the knowledge and get the grade.

Judy was also used to being disconnected from her online classmates, but spoke about a potential problem with being disconnected as she stated:

I think the only way we could communicate with each other was through email, and I didn't really email anyone in that course and no one emailed me. I found that with most online courses that's the way it goes, unless they have a mandatory discussion board. So for me that was kind of like normal, because all my other classes were the same way. If I needed help, I would not have been happy with that because fellow students would probably be the easiest way of getting help in the course.

Adam was one of the only participants who spoke about how he did participate in some classmate communication and wished there was more of a connection with his classmates in his online developmental reading course:

And so there was one time whenever I emailed a student, about dates and stuff like that and he actually helped me. I think it was great, because I think everyone works differently in the classroom. We all learn in different ways. I wish there was more of

checking in on each other for dates and things that they have observed that is really critical to our studies.

Eleena differed from many participants in that although she experienced limited communication, she did not feel that as a disconnection from other classmates.

Maybe the classmates [feel disconnected]. But, I don't know. I know they were there. I knew who was there. I didn't feel disconnected from it, because every time I would get an email, it would all be together. So I knew she [instructor] was talking to everybody. Not just me. Not picking on me or something.

Elijah also spoke of limited communication with classmates, but that he still felt connected.

The only time we were actually communicating is just whenever we were posting something on the discussion group and that was it. But other than that we did not communicate with any students. Yeah it was good. Well, because it was like after every unit or something like that there's an assignment that actually required you to discuss on the discussion boards. Yeah, I felt connected with both the instructor and classmates. Especially in the discussion board, and especially in the introduction. That's where everybody posts about what they do and everything like that. So after that and then later on, you could see if we're posting something on the discussion board, you could see somebody over here mentioning you and all that, so I'd say it was good. At the end you felt like there was like a barrier that was actually broken. The only thing is, you can't put a face to the name online.

Marcy and Adam were the only two participants to directly call for more classmate communication. In her brief statement, Marcy stated, "We had some discussion boards that we

did. But other than the discussion boards, no there was no communication...More communication with classmates is better.”

In essence, communication between classmates was limited overall. A review of the syllabi indicated that only the online developmental writing course had a mandatory discussion board. Many students spoke of how limited the communication was. However, most students had no problem with this. Several students viewed the classmate communication as unnecessary. Some students even viewed the limited communication as not being disconnected in the first place because they knew other students were taking the course. The value of classmate communication seemed notably less than instructor communication.

Theme 2: Accessible Organization. The second theme, Accessible Organization, concerns the second dimension of Transactional Distance theory: Structure. In Transactional Distance theory, structure concerns the rigidity of the program’s educational objectives, teaching strategies, and evaluation methods (Moore, 1993). Participants were asked to explain how organized their online developmental courses were, any problems that arose, and anything that they would improve when it came to the organization of the course. There were two categories that emerged from Theme 2: Accessible Organization: a) Easy to follow and b) Student suggested improvements

Category: Easy to Follow

Online courses typically utilize an online learning management software platform, such as Desire2Learn (D2L) to set up the structure of the course. In this area, most of the students spoke positively about the organization of their online developmental courses and that the courses were easy to follow. Some students also encountered minor setbacks that they seemed to overcome. Several students, such as Eleena, spoke of the organization in a positive manner.

Kind of like everything is in the same place, like the content, the quizzes, the Dropbox, the discussions, like you kind of know where to go, and how to work the system actually...Everything was up. The content, you would go to your content for your assignment. It would say week one, week two, what you had to turn in. And then you could go to your, to where it says Dropbox. And those are your assignments, and it has the dates, when it's due and what's due. And it's organized all over the place. Our grades are right there. The homepage if anything is new that she might put.

In addition to speaking warmly about the organization of the course, some students complimented an online program used and the instructors in their efforts to organize the course, as Lucy stated:

My Labs Plus [computer program] is pretty easy to use. So it was a program that Mrs. W used for Writer's Workshop. And it is pretty explanatory, the videos and exercises. If I had questions, it was right there. One thing interesting for me was the way that we use punctuation in Portuguese is different than in English. So I actually learned a little bit more, like I put a comma here and things like that, and those videos I could watch over and over and understand. It was pretty well organized for sure, not only on the programs like My Labs Plus and the other one, but also on their content, syllabus, and everything.

Our professors were really organized and professionals.

Judy's online developmental math course's organization was similar to the other students' online developmental reading and writing courses in that the course was easy to follow:

From my recollection, it was very easy to follow because it had the modules on one side and then you just have to go in order. It would have the videos on top and then you'd have the homework right underneath that and then you have the test right underneath that,

so it is literally a module one do it all, model two do it all. I think that's a great way of having it structured so you know where you're at and where you need to be at.

A few students spoke of some early confusion, but that it quickly improved, as Adam stated:

It was very smooth. There were a few parts where I didn't know where things were at and when the due dates were. And that was a little bit confusing since it was my first year of college. And so I had to get used to that. But, I did my research and stuff, found out where I needed to go, what I needed to do, and by the end it all flowed together... D2L [Desire2Learn Learning Management Software] is a great tool because it had everything that I needed to do for the week right there on one page. And so I went through that, and it really helped me out.

Celine also spoke of some early difficulties but that she sought help and the problems got much better:

It was a lot of reading and trying to answer the different types of questions that they had. Some of it I felt was a little hard to follow and I would get in contact with the instructor and meet with her, and she would go over it with me, and then of course it was easy. But I guess it's the way it's worded in the book, or just the way you would jump from like one paragraph and then skip down to two paragraphs and then read 1.2 and then over here to 2.A. It was a little bouncing around and so a little hard to follow. But after of course always getting in contact with the instructor and having her show me, it was much easier for me...

Elijah was the only student who directly had a complaint, but he also spoke of how easy the course was to follow.

They [the courses] were actually easy to follow. The only problem was just, it was too much information. So, just following that and then going back. Following that, that was

the confusing part about it. But after you just sat down, took your time, and had the patience, it was pretty straightforward, even though it's too much information...The structure and the units and all that was just perfect.

Marcy spoke of how easy it was to follow, but that checking for updates was necessary:

It was pretty easy to follow once you get, you know, where everything is at. It was pretty easy to follow as long as you are checking that, and then another thing is when you're doing online versus in class, you try to make sure that you're checking often on your page to see if there's any updates.

Category: Student suggested improvements

Another area that was discussed by the participants was suggestions for improving the structure of their online developmental courses. As the previous section illustrates, most students were satisfied with the organization of their courses. The following comments from students are some of their suggestions that could make the organization more student friendly in online developmental courses.

Missing an assignment was a fear by some students. In order to prevent missing an assignment, Eleena suggested the following: “Sometimes it’s easy to miss anything. Maybe you could tell me like, by color code when the assignments are due and color code the grades.”

Similarly, to prevent missing an assignment, Lucy suggested the use of email.

One of the main things, you know, doing online courses, is also important to keep up with the dates that you have assignments due. Some courses will not give you a reminder, even you know, I tried to do the calendar and all of that. If you have an email, you know, or something coming to let me know that you have a test or that an assignment is due will help us, you know, to remind you.

Tricia just wanted a way to find the professor's email by stating: "I would probably make it easier for you to find the email button to email your professor. That's what I would change."

Taking it a step further than just finding a professor's email, Judy thought it would be beneficial to have additional help in online developmental math in the form of YouTube videos:

I would probably say the only way to probably make it easier I guess would be to have like a little link on the bottom for people who need more help, like YouTube videos that specifically go over what they're trying to teach for that module, because I've talked to people who have taken statistics and they would watch the video that we were given and still have absolutely no clue what they were supposed to be doing.

Although Judy wanted help in the form of videos, Adam had a complaint about the videos that were shown in his developmental reading course and gave a suggestion for how the problem could be alleviated with the help of the teacher.

The videos that they provided really were confusing to go along with some of the stuff. I like having everything there direct instead of watching a video for 30 minutes where I could learn all that stuff on my own without the video within five to 10 minutes, and just go back and review it...I would put instructions instead of videos. Things that you need to practice for a test for example. I think you should do all the things that you need to study for the test, instead of giving 100 things that you need to practice and only 12 of them be on the exam. And definitely like more personal assignments, instead of the book, going by the book, through the book. I think it should be the teacher providing the things that need to be done. They create it, because they know what's going to be on that test.

As previously stated, students overwhelmingly were satisfied with the organization of their online developmental courses. A review of the syllabi indicated that

the courses were structured on a week-by-week basis, mostly having one topic per week. Suggestions consisted primarily of ways to be reminded of assignments, a quicker way to find the instructor's email, and additional help in the form of videos. No major changes were suggested by students, such as using a different learning management platform, or completely getting rid of parts of the course.

Theme 3: Lack of Control. The third theme, Lack of Control, concerns the third dimension of Transactional Distance theory: Autonomy. "Learner autonomy is the extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program" (Moore, 1993, p. 31). Participants were asked to explain how much influence they had as a student in shaping the course, as well as how much flexibility they had in the course. Students overwhelmingly stated that they had limited input in the choices in the course, but that it did not matter to the student. What did matter to the students was the ability to work at his or her own pace. There were two categories that emerged from Theme 3: Lack of Control: a) Content choice unwanted and b) Self-paced control appreciated.

Category: Content choice unwanted

In this area, students discussed their level of input in their online developmental courses and if the level was satisfactory. For example, students were asked if they got to choose assignment types or if the courses were set up in a way that did not allow for these types of choices. Almost without exception, students stated that there were not many opportunities for students to choose their assignment types or how the students met the learning objectives. As Tricia stated, "Yeah, we didn't get to determine anything. We couldn't control what we wanted to write about or anything." However, when asked about her thoughts on the lack of choice,

Tricia stated, “I liked how it was set up.” This was a similar throughout the students, as limited input was not seen as a problem. For example, a similar statement was made by Lucy as she stated, “It [the homework] was all presented to me and I had to do it.” This student also voiced no complaints about the lack of choice when asked. Almost identically to the previous two students, Marcy described the lack of choice as the following: “Here’s your assignments. This is what you got to do. This is when it’s due.” When asked if this bothered her, Marcy replied, “It was fine the way it was.” The online developmental math course was similar, as Judy stated, “For the most part, it's all completely laid out. You don't really have a choice and with my degree I had even fewer options”, while also refraining from voicing any complaints about the lack of choice.

Celine seemed confused about why she would have input in an online developmental course:

You didn't really have a choice like for picking different topics. The class wasn't really about that. It was reading a lot of different little chapters and then picking out pieces of what they wanted you to find...[When asked if they wanted choices] No, for that type of class, no. I mean, I don't feel there was anything that you really needed to choose.

Only Elijah stated that he was sometimes given choices in his specific coursework and liked having choices, as he stated:

Sometimes it was this is what we had to do, but sometimes they would give us topics to pick. They would provide them for us and then we would pick from them...[When asked if they liked the options] Yeah, I like to have some options, because I would only pick something that I felt confident with.

As one can tell, students were not majorly concerned with how much control over the content they had. Students were satisfied with their level of input, even if it was little to none.

Category: Self-paced Control Appreciated

In this area, students described the level of flexibility in the course when it came to concepts like deadlines and how the students fit their coursework into their personal schedules. Overwhelmingly, students shared experiences which highlighted the appreciation for the amount of flexibility given to students when it came to the ability to work at their own pace. Tricia was one of many students who discussed how she liked her online course due to this flexibility:

Didn't have to do the drive. That's one reason I liked that it was online. I also liked because it was my own pace. There were no due dates. That was helpful. There was a due date on the course itself, but it was all on your own pace. I really liked that part of it.

Working at one's own pace was a common experience, indicated by several other thankful students. Adam appreciated the self-paced nature in his online developmental reading course.

I chose the online course because it really fit in my schedule. I can do it whenever I wanted...At the end, I felt like that I accomplished more online than what I would do in the classroom, because I would work at my own pace...It really went as a flow thing where I could work ahead and just work ahead really. It's really good to know that you have all the stuff right there. Instead of just waiting for the next assignment, you can just go ahead and work ahead.

Lucy also expressed her gratitude and added that she liked that she could do online classes at any time.

I could learn on my own. If I had questions, I could go back and do that. In online you can do anytime. Middle of the night you can study...Especially on reading, we had several topics that in the beginning we had the test, so we could have worked ahead on those topics. Some topics, you know, I remember there was, I think, let's say eight in

total. I didn't pass a couple ones. So once I got into those topics that I passed, she [reading instructor] allowed me to work ahead and complete it. It's always good when you can work ahead. You never know what can happen.

Judy's online developmental math course was self-paced as well, which helped in her work life too.

I enjoyed the fact that it was more of a self-paced course because I love math. So for me, going through it was super easy and I love how I can work ahead a few modules. And then I also enjoy the fact that I could take the test at home whenever I could, instead of having to call off work to go take tests.

Finally, Elijah stated that he liked how it was up to the individual how fast he or she completed the course:

It's how all of the assignments are there, and all the material is there. So, it was just a matter of you wanting to finish early. I mean if you can finish everything as early as possible. You can. It's up to you. That's the one thing I like about that.

For the lack of control theme, students did not have much control over content decisions in the course, but the students did have the ability to work at one's own pace. Students largely did not seem concerned about the lack of control over the content, but did appreciate the opportunity to work at one's own pace. A review of the syllabi indicated that students did not have choice in how to complete assignments and self-paced control was not mentioned either.

Chapter Summary

This chapter described the experiences of eight students taking online developmental courses at a community college. There were three themes which emerged from the participants' interviews: (1) Connection, (2) Accessible Organization, and (3) Lack of Control. Using a

phenomenological approach in this study, the essence of the eight participants' experiences was captured with the use of themes and thematic categories. Participant experiences were described with the use of passages and quotes taken directly from the interviews. Chapter five concludes the study by including a summary of the study's findings, a discussion of the study, the implications for practice, and closing remarks.

Chapter 5

Discussion, Implications, and Conclusions

In this study, a phenomenological methodological approach was used to explore the experiences of community college students enrolled in online developmental courses. Through this research, the focus was on how these students experience this specific type of course in relationship to Transactional Distance Theory. In this final chapter, a brief summary of the study is given, followed by a restating of the study's problem, purpose, research questions, and the methodology used. After these sections have been discussed, the findings from chapter 4 will be summarized. Finally, the chapter will explore the implications of this research study, recommendations for future research, and will end with closing remarks.

Summary of the Study

In the present study, eight community college students who recently (within two years) completed at least one online developmental course were interviewed about their experiences in online developmental courses. The participants' ages were from 19-38 years old, with six females and two males, and a racial breakdown of six Caucasians, one Hispanic, and one African American. All participants were current students at the research site at the time of this study. To capture the essence of the lived experiences of the community college students in online developmental courses, each participant was interviewed once, with a follow-up email or call to ensure accuracy of the findings. Semi-structured phenomenologically based interviews were conducted face-to-face, as well as over the phone. In these interviews, predetermined questions were used in order to get students to discuss how they experienced (or did not experience) Transactional Distance Theory's three components; dialogue, structure, and autonomy. After the interviews were completed, the interviews were transcribed verbatim, coded, and then themes

emerged by utilizing thematic analysis. Three themes emerged from the interviews, which included the following: (1) Connection, (2) Accessible Organization, and (3) Lack of Control. This study added to literature on Transactional Distance Theory, while suggesting several areas for future research.

Overview of the problem. The problem that is addressed by the present research concerns two key areas. First, the majority of research concerning online developmental courses seems to point in a negative direction for the outcomes of students enrolled in these courses (and most online courses in general). Whether it is students in developmental courses dropping out of college at a high proportion (Bailey, Jeong, & Cho, 2010; Jaggars & Hodara, 2011; McCann, 2017) or online developmental students having withdrawal and failure rates more than twice as high as those taking developmental courses face-to-face (Jaggars, 2013b), the research points to students enrolled in online developmental courses being at a high risk for failure. Failing college is very problematic, as the Bureau of Labor Statistics (2018) states that a college degree holder statistically will have a lower unemployment rate and higher median weekly earnings, and Belfield and Bailey (2017) state that persons who do not complete any type of credential beyond a high school diploma face a dramatically reduced earning potential.

Second, there is a lack of research about the experiences of community college students in online developmental courses. In fact, a lack of research concerning the efficacy of online instruction in community colleges has been noted by several scholars (Ashby, Sadera, & McNary, 2011; Coleman, Skidmore, & Martirosyan, 2017). Researchers have also identified a need to give online developmental students a voice in order to explore the experiences that may be unique to this specific type of online learner (Howland & Moore, 2002; Yukselturk & Bulut, 2007). The present study attempted to fill in that gap in the literature by exploring the

experiences of this at-risk student population. Also, by using Transactional Distance Theory as a lens, this research attempted to examine an under-researched area (community college students in online developmental courses) from a perspective that has yet to thoroughly be applied.

Purpose of the study and research question. The purpose of this research was to explore the experiences of community college students enrolled in online developmental courses. More specifically, this study attempted to use Transactional Distance Theory as a lens through which to view their experiences. This was a way to better understand the experiences of the community college students enrolled in online developmental courses in order to improve these courses in the future. In this study, the following research question guided the study:

- 1) Using Transactional Distance Theory, what is the experience of community college students in online developmental courses?

Methodology. The present study used a phenomenological approach in order to capture the essence of the participants' experiences and thus, guided the research question. The study utilized phenomenological semi-structured interviews, researcher notes, and documents (course syllabi) for triangulation purposes. To capture the essence of the participants' experiences, interviews were conducted and resulted in rich descriptions of the participants' experiences in their online developmental course(s). Researcher notes were made to help the researcher identify commonalities during interviews, to summarize thoughts, and to include elements that the audio-recorded interviews missed (e.g. nonverbal communication). Course syllabi were examined to search for any inconsistencies between what was said by the participants and what the syllabi stated for the online developmental courses. The data from the interviews were transcribed verbatim, coded by using open coding, analyzed for similarities that would be turned into thematic categories, and then sorted into central themes.

Findings. The data were broken down into three themes and six thematic categories. The following are the three overarching themes in the present study: (1) Connection, (2) Accessible Organization, and (3) Lack of Control. These three themes were chosen to most accurately capture the experiences of the community college students in their online developmental courses. In the subsequent discussion sections, a more thorough examination of the research question and themes is discussed.

Discussion

In the following subsections of discussion, the research question (Using Transactional Distance Theory, what is the experience of community college students in online developmental courses?) is answered. The sections are organized by the three dimensions of Transactional Distance Theory; dialogue, structure, and autonomy. This study used Transactional Distance Theory as a lens to view the experiences of community college students in online developmental courses. Transactional Distance Theory refers to the degree of psychological distance between the learner and the teacher (Moore, 1993). Each theme from this study coincided with a dimension of Transactional Distance Theory in the following way, with the dimension of Transactional Distance Theory in parentheses: (1) Connection (dialogue), (2) Accessible Organization (structure), and (3) Lack of Control (autonomy). In the discussion of the study's findings, previous research literature is compared to the experiences of the community college students in online developmental courses.

Discussion of dialogue. The dialogue dimension of Transactional Distance Theory consists of the interactions of the instructor and students (Moore, 1993). The theme in this study that related to dialogue was theme (1) Connection. Within this theme, two thematic categories emerged: a) Connected to instructors and b) Disconnected from classmates. It was found in this

study that students largely felt connected to their instructors. This connection with the instructor was for various reasons. Moore (2013) states that feedback is one of the core components in the student and teacher interaction within the dialogue dimension of Transactional Distance Theory. Researchers have also given similar examples of dialogue, such as the timely return of encouraging comments that would be used to improve the student's understanding in the course (Moore, 1993, 2013; Saba, 2016). Multiple students in the current study spoke of that sort of dialogue occurring in their experiences and how it made the student feel connected. Other reasons for feeling connected included having an available instructor, an understanding instructor, a helpful instructor, as well as a feeling that the instructors cared. Moore and Kearsley (2012) state that as a result of dialogue exchange in online courses, the distance between the two parties (instructor and student) would be decreased. The six students in this study who did express that they were in dialogue with their online instructors did appear to have lower Transactional Distance than the two students who talked about a lack of communication at times in their online developmental courses.

Judy, the online developmental math student who only heard from her instructor at the beginning and end of her course also stated that she was good at math and did not need help. Although it appeared as if she did not feel connected to her instructor, Moore (2013) stated that “highly autonomous learners are able to cope with a lower degree of dialogue but less autonomous learners need a relatively high degree of dialogue” (p. 71). This was true for Judy, as she stated that she did not exactly need much communication. In essence, in this study, dialogue with the instructor was largely appreciated by the students, but when there was a lack of dialogue (which was rarely found through the interviews), these students did not seem overly concerned.

Next, is the second thematic category that came out of the Connection theme: b) Disconnected from classmates. As was illustrated through chapter four, students largely felt disconnected from their classmates. A negative element of online learning that is commonly reported is a greater feeling of student detachment when compared to face-to face courses (Ekstrand, 2012). Several of the students expressed that they did not know anyone in the course, the communication was severely limited, and some called the communication with classmates a waste of time. Moore (1989) stated that the interaction among the students in the class can sometimes be valuable, and is "sometimes even essential" (p. 103). Although two of the students said that they valued classmate communication and would have liked more, the remaining six students did not appear to think that the classmate communication was essential. This seems to contradict the limited previous research on the classmate communication in online courses, as students generally did not come across as caring deeply about communication with their online classmates. In fact, all of the students seemed to value instructor communication significantly more than student communication. Moore (1993) stated that "one of the major determinants of the extent to which transactional distance will be overcome is whether dialogue between learners and instructors is possible, and the extent to which it is achieved" (p. 26). It would appear that this study would support this notion, as students placed a great amount of emphasis on the importance of communication with their instructor and overwhelmingly spoke positively about their instructor to student communication.

Discussion of structure. In Transactional Distance Theory, structure expresses the rigidity or flexibility of the program's educational objectives, teaching strategies, and evaluation methods. It describes the extent to which an educational program can accommodate or be responsive to each learner's individual needs" (Moore, 1993, p. 26). The theme in this study that

related to structure was (2) Accessible Organization. Within this theme, two thematic categories emerged: a) Easy to follow and b) Student suggested improvements. Students largely spoke of their online developmental courses positively when it came to the structure, and found that the courses were generally very structured and easy to follow. According to Transactional Distance Theory, “as structure increases, transactional distance increases” (Moore, 2013, p. 71). The increased program structure is said to decrease the extent of dialogue, which results in an increase of transactional distance. In fact, Moore (1993) stated that "When a program is highly structured and teacher-learner dialogue is non-existent the transactional distance between learners and teachers is high" (p. 27). As stated in the previous discussion section about dialogue, this study found that students largely felt connected with their instructor. This same group of students was also largely satisfied with the structure of their courses. Therefore, a relationship between increased structure and increased transactional distance was difficult to find through the present study. However, in Bunker, Gayol, Nti, and Reidell's (1996) study, the researchers examined the change in structure on dialogue in an audio-conference course. It was concluded that structure and dialogue were essential to student success and that an increase in structure and dialogue would increase student participation while decreasing the transactional distance. The present study would more closely align to the findings from the latter study, as students generally spoke positively of dialogue and structure, as well as speaking of a feeling connected in their class (low transactional distance).

Although all of the students generally found their online developmental courses easy to follow, some students offered ways to improve the structure, which concerns the second thematic category under the Accessible Organization theme: b) Student suggested improvements. Suggestions consisted primarily of ways to be reminded of assignments, a quicker way to find

the instructor's email, and additional help in the form of videos. Bork and Rucks-Ahidiana (2013) state some of the challenges in online courses are that students have a hard time staying organized or recognizing when and how to ask for help. In this study, participants seemed to not have a problem staying organized. However, the student suggestions for improvements indicated that little changes could make their courses easier and more helpful.

It should be noted that no major changes were suggested by students, such as using a different learning management platform, or completely getting rid of any parts of the course. Moore and Kearsley (2012) state that structure can be affected by several factors, such as the course subject, teacher philosophy, and the academic level of the learners. All of the students in this study were in developmental courses, therefore suggesting a lower academic level for these students in reading, writing, or math. It is possible that online developmental students would benefit from a structure that is easy to follow, as the academic content would potentially be challenging enough, let alone having to navigate a hard to follow structure in an online course.

In essence, this study's participants were highly complementary of the structure of their online developmental courses. Minor issues with the structure were addressed by the student him/herself or with the help from the instructor. Changes that were suggested would largely be considered minor and simple fixes for the instructor to make. Overall, the online developmental courses' structure did not seem to contribute to an increased transactional distance, and students appreciated having an easy to follow structure.

Discussion of autonomy. In Transactional Distance Theory, autonomy is the “extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program” (Moore, 1993, p.31). The theme in this study most related to the autonomy dimension

of Transactional Distance Theory would be (3) Lack of Control. Within this theme, two thematic categories emerged: a) Content choice unwanted b) Self-paced control appreciated.

It was largely discovered that students did not have much autonomy in their online developmental courses. One student mentioned getting to pick a topic in his writing course, but otherwise, all other participants spoke of how assignments and evaluative decisions were exclusively made by the instructor. This lack of control when it came to content choice was not seen as problematic though. Students expressed that there was no problem with the lack of control over the content and some students seemed confused about why they would have much input. It is very possible that this would be due to the nature of the courses being developmental. If a student is in a developmental course, it is because of testing poorly on a standardized test (e.g. ACT) or a placement test. It stands to reason that a student testing poorly would have a more difficult time deciding what, when, and how to learn course content, compared to a student who is proficient in that subject.

Additionally, Moore hypothesized that more autonomous students would be comfortable in courses with greater transactional distance (Anderson, 2007). In this study, Judy's online developmental math course would support that hypothesis. Judy talked about how she had a lack of communication with her instructor but that it did not affect her successfully completing the course. In her opinion, her course was organized well and easy to follow, and she completed it without any help from her instructor along the way. Moore (1993) states that "the greater the structure and the lower the dialogue in a program the more autonomy the learner has to exercise" (p. 27). Judy's experiences would be a prime example of this, as her class was highly structured and the dialogue with her instructor and classmates was almost nonexistent.

Although students spoke of having almost no control over the content, self-paced control did occur and was greatly appreciated by the students. In this study, students spoke of the ability to work at one's own pace and work ahead. This was a positive characteristic of online courses that students brought up in the interviews. Research has suggested that academically underprepared students (e.g. students in developmental courses) may struggle with skills like self-direction and self-discipline (Liu, Gomez, Khan, & Yen, 2007). However, through this study, students were pleased to have the ability to have control and be self-directed. In Yukselturk & Bulut's (2007) study, interview results indicated that successful online students generally used self-regulated learning strategies. In the present study, it did not appear through the interviews that students were lacking self-direction skills or self-discipline, however there were no direct questions concerning these skills.

Through the previous discussion sections, the three components of Transactional Distance Theory (dialogue, structure, autonomy) have been compared to the three themes of (1) Connection, (2) Accessible Organization, and (3) Lack of Control. By doing this, one can better understand the experiences of the community college students in online developmental courses from this study. Dialogue was largely positive with the instructor but not with the classmates, the structure was largely easy to follow with minor suggestions noted, and the autonomy of students was lacking when it came to content choice in the courses but students appreciated the autonomy when it came to the self-controlled aspect of their online developmental courses. The subsequent section concerns the implications of this research.

Implications

After analyzing the data and discussing the findings, several implications have arisen. Using the same organization as in previous sections, the implications from this study are broken

down into sections based on the three dimensions of Transactional Distance Theory: dialogue, structure, and autonomy. This section reveals that community college students enrolled in online developmental courses may have specific needs and wants in their online developmental courses that could differ from other community college students enrolled in online courses.

Dialogue implications. Through this study, dialogue between the student and instructor appeared to be the most important predictor of a student feeling transactional distance. The students who were satisfied with the amount of dialogue with their instructor also felt connected with the course. Students have been shown to have higher levels of detachment in online courses than to face-to face courses (Ekstrand, 2012). This present study would suggest that instructors in online developmental courses must be in communication with their students on a regular basis to avoid students feeling disconnected. As was revealed in the study, students largely appreciated how available their instructors were, as emails and phone calls were common between students and instructors. It would be recommended that instructors would be available for students and have multiple communication channels (email, phone, video conference) for students to choose from. However, as the study illustrated through Judy's example in her online developmental math course, some students are not always in need of as much communication with their instructor as other students. This study would suggest that instructors take the time to learn about the communication needs and preferences of their online developmental students in order to maximize the amount of effective communication for students who need assistance. Research has indicated that the level of interpersonal interaction between faculty members and students in online classes is the most important quality that affects student grades (Jaggars & Xu, 2013). This just further exemplifies the importance of quality instructor-student dialogue.

Additionally, this study would suggest that classmate communication is not a high value for online developmental students. Instructors could use this information to implement more effective and desirable assignments in online developmental courses. If instructors require weekly discussion board postings, it is possible that students are not getting benefit from this and instead, view the required discussion board postings as tedious and unnecessary. This is not to say that discussion board postings should never be used in online developmental courses, but instructors should use communication with their students and potentially look at data to gauge whether required classmate communication helps students meet the learning objectives in the course. It might be possible that students would rather have a discussion board that is set up to ask questions and receive feedback if the student feels it is needed, rather than having mandatory discussion board postings.

Structure implications. The main thing that was discovered in this study when it came to structure was that an easy to follow organization was much appreciated. Students largely praised the structure of their online developmental courses and liked how the content was organized. According to Transactional Distance Theory, “as structure increases, transactional distance increases” (Moore, 2013, p. 71). However, this did not appear to be the case in this study, as the same students who had positive things to say about the structure also spoke about feeling connected (i.e. low transactional distance). This could imply that highly structured developmental classes are not necessarily going to lead to high transactional distance. In fact, the present study would suggest that dialogue with the instructor is a better predictor of transactional distance than structure. Additionally, as long as the instructor is effectively communicating with their students in their class, a highly structured class may not be detrimental to online developmental students. It is possible that online developmental students want and

need a highly structured class so that the focus can be on learning the content and not figuring out how to navigate a learning management platform (e.g. D2L or Blackboard).

Autonomy implications. Through this study, it was found that students largely did not want autonomy when it came to deciding how the student would meet the learning objectives in the class. The students did appreciate the autonomy in that there were elements of self-paced control in the online developmental course though. This implies that instructors may not want to give many choices to students in how to complete assignments, as the student may not feel comfortable making decisions in a class that the student tested poorly in. Instructors may be better off spending time on helping the student increase the knowledge and skills for the course on a very controlled assignment, instead of generating multiple ways for a student to complete an assignment.

As for the student appreciation for having self-paced control over their online developmental courses, this could have possible implications. As was mentioned previously, research has suggested that academically underprepared students (e.g. students in developmental courses) may struggle with skills such as self-direction and self-discipline (Liu, Gomez, Khan, & Yen, 2007). Some common speculations for low retention rates in online course include a student's lack of self-discipline to adhere to deadlines or an underestimation of the time required to succeed in the courses (Robichaud, 2016). As students pointed out in this study, there were many opportunities to work ahead and practice skills like self-direction and self-discipline. As previously noted, Yukselturk & Bulut (2007) suggested that self-regulated learning strategies led to successful students in online courses, so researching if this is true in online developmental courses would be an area to explore as well. It may be beneficial to allow online developmental students to be self-paced in order to improve these important learning skills.

Community college implications. In the prior three sections, the dialogue, structure, and autonomy implications were discussed. This study also highlights implications at a broader level; the community college. As many students entering community colleges are required to take at least one developmental course, the use of this study could benefit many students in community colleges. This study implies that quality instructor dialogue, an easy to follow structure, and a self-paced ability are important for online developmental students. Community colleges can potentially benefit from stressing these factors when designing their online developmental courses. As has been highlighted multiple times in this dissertation, research has indicated that students in online developmental courses struggle. Specifically, self-paced courses may allow students to finish their developmental courses early so that they can focus more time on their college-level courses. With many adults attending community colleges, self-paced courses may be beneficial to courses outside of developmental courses as well. Overall, with community colleges utilizing the findings in this study, success rates can potentially be improved, which will allow students a higher chance of earning a credential (e.g. certificate or degree).

Limitations

As this study was conducted at one community college in the southeast region of the United States of America, the results may not reflect the experiences of other community college students in online developmental courses. Additionally, this study was limited to the experiences of eight students who completed their online developmental courses and did not include any students who failed the courses or any instructor experiences. Due to time constraints, the participants were only interviewed once, with a follow-up email exchange for reliability

purposes. It is possible that more information could have been gathered face to face or over the phone through a second interview.

Recommendations for Future Research

Based on the findings from this study, there are several areas where future research could be beneficial. As was discussed previously, increased structure did not appear to increase transactional distance or decrease dialogue in this study, but Transactional Distance Theory stated that it would. Because of this contradictory finding in the present study, a more thorough examination of the structure dimension of Transactional Distance Theory may be needed. Specifically, the potential benefits of highly structured online developmental courses with appropriate amounts of student-teacher dialogue would be an area for future research to explore.

This study found that quality dialogue between students and teachers, an organized and easy to follow structure, and the potential for the course content (selected by the instructor) to be self-paced were the main indicators of students feeling connected and pleased with their courses. Using these findings, future research could explore if those indicators are generally true for the success of community college students enrolled in online developmental courses and for online students in general. It would be useful to try to pinpoint what typically leads to student success in different types of online courses as well. For example, do highly structured online courses benefit students the same in a developmental reading, writing, or math course? Some disciplines may want to encourage autonomous learners as well, so future research into what aspects of Transactional Distance Theory apply the most to reduce the transactional distance across the multiple academic disciplines could be very beneficial.

Lastly, this study did not explore the experiences of students who failed their online developmental course(s). Because of this, future research into the failing student experience

could potentially point to barriers in course completion. It is possible that failing students would experience different levels of transactional distance in their online developmental course(s) and would require a different instructor approach.

Final Thoughts and Conclusions

This phenomenological study sought to shed light on a under researched topic; community college students enrolled in online developmental courses. Transactional Distance Theory was used as a theoretical lens to view the experiences of these students in their courses. Through phenomenological semi-structured interviews, the essence of the participants' experiences was captured. Previous literature highlighted the significance of this study, as the limited research has suggested that online students face unique challenges in their online courses, and that students do worse in online developmental courses when compared to the face-to-face counterpart (Gregory & Lampley, 2016; Jaggars, Edgecombe, & Stacey, 2013b).

The majority of students in this study appeared to have instructors who were very available, responsive, and helpful in the course. This seemed to contribute to the students feeling connected to their instructor and thus, the course. In previous research, online courses have been associated with feelings of detachment (Ekstrand, 2012). However, through the interviews with the students, it did not appear that detachment was a common feeling. In the rare case that a student spoke about a lack of a strong connection, it was not a major concern or priority to the student. Additionally, the structure of the courses seemed to work well for students, as no major problems were identified by students. This suggests that highly structured online developmental courses may be beneficial for students. For autonomy, online developmental students may be likely to benefit from a self-paced course, as the students in this study spoke highly of that quality of their online developmental courses. In essence, out of the eight participants, none of

them seemed to experience transactional distance to a point that negatively affected their experience or grade. It appears as if the instructors of the online developmental courses have largely created strong instructor-student dialogue, highly structured, and low autonomy (except for ability to work on own pace) courses. As this seemed to please and work for the students in this study, it will be interesting to see if this approach is repeated and used by other online developmental courses across the globe.

However, a one-size fits all approach to online courses may not be effective, and even in a specific type of online course (i.e. developmental reading, writing, or math) students will have different wants and needs. More calls for research into online learning have been made (Gregory & Lampley, 2016; Jaggars, Edgecombe, & Stacey, 2013a; Yukselturk, & Bulut, 2007). More research is essential if colleges want to help an at-risk student population. Online developmental students have been shown to have more than twice the withdrawal and failure rates as those students taking their developmental courses face to face, and are less likely to pass gatekeeper courses (e.g. English Composition I) even after completing the online developmental course (Jaggars, 2013b). It should be highly alarming that just the format of a type of course can possibly be hindering students from achieving a credential that can help the student have a better quality of life. Because of the projected increase in online education courses, the calls for more research into online developmental courses, and the implications of not acting when there are staggering statistics of the possible problems in online developmental courses, we must examine this topic with urgency. By helping these at-risk students early, we can improve retention and graduation rates. More importantly, we can help to foster societies with more lifelong learners.

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Appendix A
Interview Questions

RQ #1: What is the experience of community college students in online developmental courses?

Interview questions

1. Tell me about your decision to enroll in an online developmental course.
2. How did you feel about taking a developmental course?
3. Tell me how the course went and anything that stood out to you.
4. What did you like about the course being online?
5. What did you not like about the course being online?
6. If you had to do it over again, would you take the course face to face if you could? Why?
7. Was it challenging taking a developmental course online? Why or why not?

RQ #2: How do community college students experience Transactional Distance in their online developmental courses?

Interview questions

1. Tell me about how you communicated with your instructor during the semester you took the developmental course.
2. Tell me about your communication with other students in the course.
3. How would you describe the structure of the course? (e.g. organized, easy to follow, flexible?)
4. “Learner autonomy is the extent to which in the teaching/learning relationship, it is the learner rather than the teacher who determines the goals, the learning experiences, and the evaluation decisions of the learning program” (Moore, 1993, p.31). How would you describe your autonomy?
5. Describe how connected you felt to your instructor and classmates.

Appendix B: Consent Form

Community College student experiences in online developmental courses

WHY ARE YOU BEING INVITED TO TAKE PART IN THIS RESEARCH?

You are being invited to take part in a research study about online learning in community colleges. You are being invited to take part in this research study because you have been identified as either a student who has completed at least one online course. If you volunteer to take part in this study, you will be one of about eight people to do so.

WHO IS DOING THE STUDY?

The person in charge of this study is the Lead Investigator and a doctoral student of the University of Memphis Department of Leadership. He is being guided in this research by his advisor, Wendy Griswold (wgrswold@memphis.edu). There may be other people on the research team assisting at different times during the study.

WHAT IS THE PURPOSE OF THIS STUDY?

The purpose of this study is to improve the educational experiences for students at community colleges in regards to online developmental courses. By doing this study, we hope to learn about the experiences of students in online developmental courses at community colleges in order to gain understanding in an under-researched area.

ARE THERE REASONS WHY YOU SHOULD NOT TAKE PART IN THIS STUDY?

If you are under 18 years of age, you should not take part in this study.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The research procedures will be conducted at Cleveland State Community College. You will need to meet with the researcher one time during the study. This visit will take about one hour. A follow-up call will be initiated by the researcher to go over the information from the first meeting. The total amount of time you will be asked to volunteer for this study is approximately 1-2 hours over the next month.

WHAT WILL YOU BE ASKED TO DO?

Participants will be asked to answer several questions about their experiences concerning their online developmental course(s). Interviews will last around one hour and participants will be encouraged to give detailed responses. The interviews will only be audio recorded. Your responses will be recorded in an audio file that will only be used for this study. No visual recording will occur.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

You may find some questions we ask you to be upsetting or stressful. If so, we can tell you about some people who may be able to help you with these feelings.

In addition to the risks listed above, you may experience a previously unknown risk or side effect.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

There is no guarantee that you will get any benefit from taking part in this study. Your willingness to take part, however, may, in the future, help society as a whole better understand this research topic.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering. As a student, if you decide not to take part in this study, your choice will have no effect on your academic status or grade in the class.

IF YOU DON'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If you do not want to be in the study, there are no other choices except not to take part in the study.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in the study, as participants are already typically on campus.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

You will not receive any rewards or payment for taking part in the study.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

We will make every effort to keep private all research records that identify you to the extent allowed by law.

Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be personally identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. Any personally identifiable information given in the interview will be changed to pseudonyms and interview information will be located in a password protected recording device and computer.

We will keep private all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or to tell authorities if you report information about a child being abused or if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Memphis.

CAN YOUR TAKING PART IN THE STUDY END EARLY?

If you decide to take part in the study you still have the right to decide at any time that you no longer want to continue. You will not be treated differently if you decide to stop taking part in the study.

The individuals conducting the study may need to withdraw you from the study. This may occur if you are not able to follow the directions they give you, or if they find that your being in the study is more risk than benefit to you.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Brian Gerber at bgerber@clevelandstateecc.edu and his advisor Wendy Griswold at wgrswold@memphis.edu . If you have any questions about your rights as a volunteer in this research, contact the Institutional Review Board staff at the University of Memphis at 901-678-2705. We will give you a signed copy of this consent form to take with you.

What happens to my privacy if I am interviewed?

Your responses will be separated from any identifying information. Any names you give, phone numbers, addresses, or any other identifying information will be changed to code numbers and pseudonyms. Participant names will be coded to prevent any information being traced back to a participant and any data will be destroyed after completion of the study. Your interview that is audio recorded will be in a password protected device that will not be shared.

Signature of person agreeing to take part in the study

Date

Printed name of person agreeing to take part in the study

Name of [authorized] person obtaining informed consent

Date

Appendix C:
Recruitment Correspondence

Hello,

My name is Brian Gerber and I am a faculty member at Cleveland State Community College. I am conducting research into community college student experiences in online developmental courses and I'd greatly appreciate your help! Participants will be asked to answer interview questions that will last about one hour. A follow-up phone call will be made to go over information from the first interview. Your participation can help to improve future online developmental courses. Interviews will take place in September.

Participants must be:

- 1. Students who completed (pass or fail) an online developmental reading, writing, or math course at a community college in the last two years**

Cleveland State Community College (Both Cleveland and Athens campuses) will be the location of the study. To learn more about this research, contact me at bgerber@clevelandstatecc.edu. This research is conducted under the direction of Wendy Griswold, Department of Leadership at the University of Memphis.

I appreciate your consideration!

Brian Gerber

Associate Professor of Communication

Cleveland State Community College

Athens: 120, Cleveland: Humanities-203 A